YORBA VILLAS RESIDENTIAL PROJECT

DRAFT ENVIRONMENTAL IMPACT REPORT

COUNTY OF SAN BERNARDINO, CALIFORNIA

385 N. Arrowhead Avenue

San Bernardino, CA 92415

DECEMBER 2021

STATE CLEARINGHOUSE NO. 2020120545

PUBLIC REVIEW DRAFT

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ACRONYMS AND ABBREVIATIONS

°C	degrees celsius
µg/m³	micrograms per cubic meter
AB 52	California Assembly Bill 52
ACM	asbestos-containing material
AF	acre-feet
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
AQIA	Air Quality Impact Analyses
AQMP	Air Quality Management Plan
APN	Assessor's Parcel Number
ATCM	airborne toxic control measure
BAAQMD	Bay Area Air Quality Management District
BACM	best available control measure
BACT	best available control technology
Basin	South Coast Air Quality Basin
BAU	business as usual
BFE	base flood elevation
bgs	below ground surface
BMPs	Best Management Practices
CAA	Clean Air Act of 1970
CAAA	CAA Amendments of 1990
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan of 2013
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act of 1988
CDFW	California Department of Fish and Wildlife
CC&Rs	Covenants, Conditions, and Restrictions
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGEU	California Gas and Electric Utilities 2016 California Gas Report
CGS	California Geological Survey
CH_4	methane
CHAPIS	Community Health Air Pollution Information System (CARB)
CHRIS	California Historical Resources Inventory System
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CTP	Clean Truck Program
CUP	Conditional Use Permit
dB	decibel

dBA	A-weighted decibels
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMS	Emergency Medical Services
ESA	Environmental Site Assessment
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FMMP	Farmland Mapping and Monitoring Program
gal/day	gallons per day
GHG	greenhouse gas
GWP	global warming potential
Handbook	Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005)
HAPs	hazardous air pollutants
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HDT	Heavy Duty Trucks
HFCs	hydroflourocarbons
Hot Spots Act	Air Toxics Hot Spots Information and Assessment Act of 1987
HP	horsepower
HPLV	High Pressure Low Volume
HVAC	heating, ventilating, and air conditioning
ICU	intersection capacity utilization
I	Interstate
I-5	Santa Ana Freeway
LBP	lead-based paint
LCFS	Low Carbon Fuel Standard
LEED	Leadership in Energy and Environmental Design
LEV	Low Emission Vehicle
LID	low impact development
LOS	level of service
LSTs	localized significance thresholds
MACT	maximum available control technology
MBTA	Migratory Bird Treaty Act of 1918
MCC	Material Culture Consulting
mgd	million gallons per day
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MPO	metropolitan planning organization
MT	metric tons
MT CO_2e	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NALs	numeric action levels
NCCP	Natural Community Conservation Plan
NESHAP	national emissions standards for HAPs
NH_3	ammonia
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic and Safety Administration
NMC	New Model Colony

NOP	Notice of Preparation
NO_2	nitrogen oxide
NO_x	nitrogen oxide
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	U.A. Department of Agriculture Natural Resources Conservation Service
O_3	ozone
ODC	Ontario Development Code
ONT	Ontario International Airport
PA	Planning Area
Pb	lead
PDF	project design feature
PFCs	perflourocarbons
$PM_{2.5}$	particulate matter less than 2.5 micrometers in aerodynamic diameter
PM_{10}	particulate matter less than 10 micrometers in aerodynamic diameter
ppb	parts per billion
PPP	Plans, Programs, and Policies
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Plan
PWS	public water supplier
REC	recognized environmental conditions
ROG	reactive organic gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SB 18	California Senate Bill 18, Ch. 905 (2004)
SC	Standard Condition
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SCS	Sustainable Communities Strategy
SF	square feet
SF_6	sulfur hexaflouride
SIP	state implementation plan
SO_2	sulfur dioxide
SO_3	sulfur trioxide
SO_4	sulfates
SoCalGas	Southern California Gas Company
SO_x	sulfur oxides
SP	Specific Plan
SR	State Route
SR-60	Pomona Freeway
SR-83	Euclid Avenue
SRA	Source Receptor Area
SWPPP	Storm Water Pollution Prevention Plan
SWQMP	Storm Water Quality Management Plan
SWRCB	Storm Water Resources Control Board
TACs	toxic air contaminants
TIA	Traffic Impact Analysis
tpy	tons per year
TTCP	traditional tribal cultural places

TUA	traditional use area
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UTRs	utility tractors
UWMP	Urban Water Management Plan
VdB	velocity levels expressed in decibel notation
VMT	vehicle miles travelled
VOC	volatile organic compounds
WDR	Waste Discharge Requirements
WFA	Water Facilities Authority
Williamson Act	California Land Conservation Act of 1965
WQC	Water Quality Certification

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1. Executive Summary

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction and operation of the proposed Yorba Villas Residential Project (proposed Project). This EIR has been prepared in conformance with State and County of San Bernardino environmental policy guidelines for implementation of the California Environmental Quality Act (CEQA).

The EIR is being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR will be available for public review at the County's website (http://cms.sbcounty.gov/lus/Planning/Environmental/Valley.aspx).

Written comments related to environmental issues in the Draft EIR should be addressed to:

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A Notice of Availability of the Draft EIR was published concurrently with distribution of this document.

1.1 PROJECT LOCATION

The site is 13.35 acres of vacant and disturbed land, located at 4570 Francis Avenue, Chino, CA (APN: 1013-211-21 and 1013-211-22) in the unincorporated area of San Bernardino County. The site is directly northwest of the intersection of Yorba Avenue and Francis Avenue (Project Site). The Project Site is currently vacant but was previously developed with various residential and agricultural uses.

The Project area is adjacent to the City of Chino to the southeast and unincorporated San Bernardino County borders all other sides of the Project site. The City of Montclair is approximately ¼ mile to the north. As shown on Figure 3-1, *Regional Location*, Regional access is provided via State Route 60 (SR-60) which is located approximately 0.8 mile south and State Route 71 (SR-71), approximately 3.7 miles west. Local access is provided by Francis Avenue, as shown in Figure 3-2, *Local Vicinity Map*.

1.2 PROJECT DESCRIPTION SUMMARY

The applicant, Borstein Enterprises, has submitted Applications to the County of San Bernardino for a General Plan Amendment (GPA), a Zone Change (ZC), a Planned Development Permit (PDP), and a Tentative Tract Map (TTM) for the Project referred to as the Yorba Villas Residential Project. The GPA would amend the Countywide Policy Plan category from Very Low Density Residential (VLDR) which allows for a maximum of 2 dwelling units per acre to Low Density Residential (LDR) which allows for a maximum of 5 dwelling units per acre. The Zone Change would be from Single Residential 1-acre Minimum (RS-1) to Single Residential (RS) which allows for 4 units per acres. The TTM is to develop 45 single-family homes, new private streets, a small private park, street improvements (along Francis and Yorba Avenue), and on-site stormwater infrastructure. The PDP allows for flexibility in the application of Development Code standards. The purpose is to allow for innovation in site planning and other aspects of project design, and more effective design responses to site features, uses on adjoining properties, and environmental impacts than the Development Code standards would produce without adjustment. The County expects

each Planned Development Permit project to be of obvious, significantly higher quality than would be achieved through conventional design practices and development standards.

The proposed Project would have a density of 3.75 dwelling units per acre. A total of 225 parking spaces would be provided on site for the proposed residences and guest parking. Figure 3-4, *Conceptual Site Plan* illustrates the proposed development.

The Project proposes single-family residences on approximately 7,861 to 13,285 square foot lots, with private driveways and outdoor areas. All lots would have landscaping and driveways accessed from the Project's proposed internal, private streets, as depicted in Figure 3-4, *Conceptual Site Plan*. In addition, the Project would include one detention and water quality basin ("Lot A") near the southeast corner of the site and landscaping which is further described below and shown in Figure 3-7, *Conceptual Landscape Plan*.

Architecture. The residences would range in size from approximately 2,820 square feet to 3,062 square feet for the design footprints. The one-story design would consist of three different floor plans.

Landscaping. Landscaping proposed as part of the Project would consist of water-conserving trees, shrubs, and groundcover as required in the County Development Code. The Project includes street trees and landscaping along parkways. Additional landscaping would be provided at the detention and water quality basin ("stormwater basin garden") in the southeastern portion of the site, and along Francis Avenue and Yorba Avenue.

Open Space. The conceptual open space plan includes a 6,791 square foot park ("Lot C") in the southeastern portion of the Project site that includes a turf play area, tot-lot, seating, barbecue area, bike racks, and park benches. The stormwater basin garden would be adjacent to the west of the park. The proposed stormwater basin garden are shown in Figure 3-8, *Conceptual Open Space Plan*.

Site Access. Vehicular access to the Project would be provided by a gated driveway from Francis Avenue, located near the southwest corner of the Project site. Three new streets would be constructed to provide internal circulation. These streets would feature parallel parking spaces for guests. The Project would provide internal sidewalks and construction of a new sidewalk along the Francis Avenue and Yorba Avenue rights-of-way.

Infrastructure. The Project would construct new internal private streets, curb, gutter, sidewalks, and storm drain improvements, wet and dry utilities, and related infrastructure improvements. The Project would connect to the existing water and sewer infrastructure in the Yorba Avenue right-of-way. Stormwater would be collected onsite and percolate into the ground with a drywell system. The Project would construct 8-inch public domestic water lines onsite that would connect to an existing 8-inch water main in Yorba Avenue. In addition, the Project would install new 8-inch public sewer lines and a lift station onsite that would connect to the existing Inland Empire Utilities Agency 21-inch sewer line in Yorba Avenue.

1.3 PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide for additional market-rate housing opportunities consistent with the County's Housing Element and State housing goals.
- Facilitate high-quality development, through the use of Planned Development Permit, that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development.

- Provide a new single-story single-family neighborhood that is scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods consistent with Countywide Plan Policy LU-2.1.
- Provide new sidewalks along Yorba Avenue westerly right-of-way and Francis Avenue northerly right-of-way to increase pedestrian facilities and create a walkable and bikeable environment.
- Ensure new residential development includes adequate open space and high-quality recreational amenities onsite for future residents.

1.4 SUMMARY OF ALTERNATIVES

Section 6.0, *Alternatives*, of this EIR analyzes a range of reasonable alternatives to the proposed Project. The alternatives that are analyzed in detail in Section 6.0 are summarized below.

Alternative 1: No Project/No Build. Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the Draft EIR is required to "discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services."

Therefore, under this alternative, no development would occur on the Project site, and it would remain in its existing condition with concrete slabs (associated with prior use as a rabbit farm) and scattered trees throughout the site. Thus, this alternative compares impacts of the proposed Project with the existing vacant conditions.

Alternative 2: Reduced Project Alternative/Buildout of Existing Land Use and Zoning. Under this alternative, the proposed Project would not be built, and the site is assumed to be developed according to the current land use and zoning designations. Under this alternative a reduction in the number of residential units would be built, which would result in increased setbacks and larger lots. The Project site has a Countywide Plan Land Use designation of Very Low Density Residential (VLDR) and is zoned Single Residential 1-Acre Minimum. This would allow fora maximum of 13 single-family residences to be built. This Alternative assumes the development would be similar to the proposed Project and the residences would consist of 19-foot high, single-story residences consisting of the three architectural designs including Spanish Colonial, California Ranch, and Hacienda Ranch. The buildout of the site per the existing Countywide Plan designation and zoning would result in 32 fewer units than the proposed Project.

Under the Reduced Project Alternative, parking spaces would be provided at the rate of 5 spaces per residential unit. The Reduced Project Alternative is also assumed to include a pocket park, consistent with that proposed by the Project.

This alternative would not require a General Plan Amendment or Zone Change and would be consistent with the Land Use Designation of Very Low Density Residential (VLDR) and Zoning Designation of Single Residential 1-Acre Minimum (RS-1).

1.5 SUMMARY OF IMPACTS

Table 1-1 summarizes the conclusions of the environmental analysis contained in this EIR. The June 1, 2021 Initial Study prepared for the proposed Project established that the proposed Project would not result in impacts related to certain thresholds from CEQA Appendix G no further assessment of those impacts was

required in the Draft EIR. The County determined through the initial review process that impacts related to the following topics are not potentially significant and are not required to be analyzed in this Draft EIR:

- Agriculture & Forest Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Mineral Resources
- Population and Housing
- Public Services
- Transportation
- Utilities
- Wildfire

Therefore, the numbering of impacts shown in Table 1-1 reflects the omission of further evaluation for certain thresholds.

Relevant standard conditions of approval are identified, and where applicable, plans, programs, and policies (PPPs) are listed to show their effect in reducing potential environmental impacts. Mitigation measures are provided for all potentially significant impacts. The County will include these PPPs and mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for the Project to ensure their implementation The level of significance of impacts after the proposed mitigation measures are applied are identified as either significant and unavoidable, less than significant, or no impact.

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Table 1-1: Summary of Impacts, Mitigation Measures, and Level of Significance

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
5.1 Aesthetics				
Impact AE-3: Would the Project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the 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
Impact AE-4: Would the Project create a new source of substantial light or glare that would adversely affect day and nighttime views in the area**?**		Less than significant	None required	Less than significant
Cumulative		Less than significant	None required	Less than significant
5.2 Biological				
Impact BIO-1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?.	**PPP BIO-1** The Project shall comply with Chapter 88.01 Plant Protection and Management of the County's Development Code prior to removing any trees located on the Project site.	Less than significant	None required	Less than significant
Impact BIO-2: Would the Project have a substantial adverse effect on any		No Impact	None required	No Impact

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				
Impact BIO-3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		No Impact	None required	Less than significant
Impact BIO-4: 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?		Potentially Significant	**Mitigation Measure BIO-1: Nesting Birds:** To the extent possible, construction activities (i.e., demolition, earthwork, clearing, and grubbing) within the Project site and offsite infrastructure areas, shall occur outside of the general bird nesting season for migratory birds, which is March 15 through August 31 for songbirds and January 1 through August 31 for raptors. If construction activities (i.e., earthwork, clearing, and grubbing) must occur during the general bird nesting season for migratory songbirds (March 15 through August 31) and raptors (January 1 to August 31), a qualified biologist shall perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the MBTA and California Fish & Game Code. The pre-construction survey shall be performed no more than three days prior to the commencement of construction activities. The results of the pre-construction survey shall be documented by the qualified biologist. If construction is	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			inactive for more than seven days, an additional survey shall be conducted. If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no impacts within 300 feet (500 feet for raptors) of the active nest shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The biological monitor may modify the buffer or propose other recommendations in order to minimize disturbance to nesting birds	
Impact BIO-5: 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
Cumulative		Less than Significant	None required.	Less than significant
5.3 Cultural Resources				
Impact CUL-2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?.		Potentially Significant	**Mitigation Measure CUL-1: Archaeological Resources.** Prior to the issuance of the first grading permit, the Applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, from a qualified professional archeologist meeting the Secretary of Interior's Professional Qualifications for Archaeology as defined at 36 CFR Part 61, Appendix A stating that the archeologist has been retained to provide on-call services in the event archeological resources are discovered. The archeologist shall be present at the pregrading conference to establish	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			procedures for archeological resource surveillance. In the event a previously unrecorded archaeological deposit is encountered during construction, all activity within 50 feet of the area of discovery shall cease and the County shall be immediately notified. The archeologist shall be contacted to flag the area in the field and shall determine, in consultation with the County and the Gabrieleño Band of Mission Indians Kizh-Nation, if the archaeological deposits meet the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique archaeological resource (Public Resources Code 21083.2(g)). If the find is considered a "resource" the archaeologist shall pursue either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with the County and the Gabrieleño Band of Mission Indians Kizh-Nation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C). If unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage and treatment shall be required at the developer/applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the archaeologist. Resources shall be identified and curated into an established accredited professional repository. The archaeologist shall have a repository agreement in hand prior to initiating	

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			recovery of the resource. Excavation as a treatment option will be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.	
Cumulative		Less than significant	None required	Less than significant
5.4 Geology and Soils				
Impact GEO-6: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		Potentially significant	**Mitigation Measure GEO-1: Paleontological Resources** Prior to the issuance of the first grading permit, the applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, from a paleontologist selected from the roll of qualified paleontologists maintained by the County, stating that the paleontologist has been retained to provide services for the Project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the County. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. The PRIMP shall also require periodic paleontological spot checks if excavation reaches or exceeds depths of five feet in areas mapped as Quaternary alluvium. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by Project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.	
Cumulative	**PPP GEO-1:** CBC Compliance. The Project is required to comply with the California Building Standards Code (CBC) as included in the County's Code as Chapter 63.01, to preclude significant adverse effects associated with seismic and soils hazards. As part of CBC compliance, CBC related and geologist and/or civil engineer specifications for proposed development on the Project site shall be incorporated into grading plans and building specifications as a	Less than significant	None required	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
	condition of construction permit approval. **PPP GEO-2**: Prior to grading permit issuance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) pursuant to the County's Development Code Section 85.11.030. The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other County requirements to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance. **PPP GEO-3**: Prior to grading permit issuance, the project developer shall have a Water Quality Management Plan (WQMP) approved by the County for implementation. The project shall comply with the County's Development Code Section 85.11.030 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control			

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
	discharges of sediments and other pollutants during operations of the project.			
5.5 Hazards and Hazardous Materials				
Impact HAZ-1: Would the Project create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?		Potentially Significant	**Mitigation Measure HAZ-1:** Prior to issuance of a grading permit, a Site Management Plan (SMP) shall be prepared by a qualified hazardous materials consultant and shall detail procedures and protocols for excavation and disposal of onsite hazardous materials, including: A certified hazardous waste hauler shall remove all potentially hazardous soils. Excavation of contaminated soils shall be to the depth of approximately 5 feet below the existing ground surface in areas identified in the Phase I and Phase II Environmental Site Assessment (Tetra Tech 2016). In addition, sampling of soil shall be conducted during excavation in the southern and western portions of the site, in areas identified in the Phase I and Phase II Environmental Site Assessment (Tetra Tech 2016), to ensure residential Regional Screening Levels are not exceeded. Excavated materials shall be transported per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. Any subsurface materials exposed during construction activities that appear suspect of contamination, either from visual staining or suspect odors, shall require immediate cessation of excavation activities. Soils suspected of contamination shall be segregated from other soils to be tested for potential contamination. If contamination is found to be present per Environmental Screening Levels (ESLs), any further proposed groundbreaking activities within areas of	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			identified or suspected contamination shall be conducted according to California Hazardous Waste Regulations. A Health and Safety Plan (HSP) shall be prepared for each contractor that addresses potential safety and health hazards and includes the requirements and procedures for employee protection. The HSP shall also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction. All SMP measures shall be printed on the construction documents, contracts, and Project plans prior to issuance of grading permits.	
Impact HAZ-2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment?		Potentially Significant	**Mitigation Measure HAZ-1**, listed above	Less than significant
Cumulative		Less than significant	None required	Less than significant
5.6 Hydrology and Water Quality				
Impact WQ-1: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	**PPP HYD-1 National Pollutant Discharge Elimination System (NPDES).** Projects will be constructed in accordance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, NPDES No. CAS000002. Compliance requires a risk assessment, a SWPPP, and associated BMPs. **PPP HYD-2 Santa Ana RWQCB MS4 Permit.** Projects will be constructed and operated in accordance with the Santa Ana	Less than significant	None required	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
	RWQCB Municipal Stormwater (MS4) Permit for the part of the Santa Ana Basin in San Bernardino County in 2010 (Order No. R8-2010-0036). The MS4 Permit requires new development and redevelopment projects to adopt a WQMP to: • Control contaminants into storm drain systems • Educate the public about stormwater impacts • Detect and eliminate illicit discharges • Control runoff from construction sites • Implement BMPs and site-specific runoff controls and treatments			
Impact WQ-2: 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
Impact WQ-3: 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 addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?	**PPP HYD-1:** NPDES/SWPPP, listed above **PPP HYD-2:** Santa Ana RWQCB MS4 Permit/WQMP, listed above	Less than significant	None required	Less than significant
Impact WQ-4: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a	**PPP HYD-1:** NPDES/SWPPP, listed above	Less than significant	None required	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
stream or river or through addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	**PPP HYD-2:** Santa Ana RWQCB MS4 Permit/WQMP, listed above			
Impact WQ-5: 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 addition of impervious surfaces, in a manner which would 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?	**PPP HYD-1:** NPDES/SWPPP, listed above **PPP HYD-2:** Santa Ana RWQCB MS4 Permit/WQMP, listed above	Less than significant	None required	Less than significant
Impact WQ-8: 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
Cumulative	**PPP HYD-1:** NPDES/SWPPP, listed above **PPP HYD-2:** Santa Ana RWQCB MS4 Permit/WQMP, listed above	Less than significant	None required	Less than significant
5.9 Land Use and Planning				
Impact LU-2: Would the Project cause significant environmental impacts due to conflicts with 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
Cumulative		Less than significant	None required	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
5.10 Noise				
Impact NOI-1: 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?		Less than significant	None required	Less than significant
Impact NOI-2: Would the Project result in generation of excessive groundborne vibration or groundborne noise levels? .		Less than significant	None required	Less than significant
Cumulative		Less than significant	None required	Less than significant
5.15 Tribal Cultural Resources				
Impact TCR-1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		No Impact	None required	No Impact
Impact TCR-2: 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		Potentially significant	**Mitigation Measure CUL-1: Archaeological Resources,** listed previously. **Mitigation Measure TCR-1:** Prior to commencement of any excavation activities, or the issuance of a grading permit and/or action that would permit site disturbance	Less than significant

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 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?			(whichever occurs first), the Project developer/applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, and retain a Native American Monitor from the Gabrieleño Band of Mission Indians Kizh-Nation to: • Provide on-call services to address unanticipated prehistoric or tribal resources. The Native American Monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance. • Conduct a Native American Indian Sensitivity Training for construction personnel. The training session shall include a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered, the duties of the Native American Monitor of Gabrieleño Ancestry, and the general steps the Monitor would follow in conducting a salvage investigation. • Monitor all Project-related, ground-disturbing construction activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, trenching, and grubbing) of previously undisturbed native soils. The Native American Monitor(s) shall be present on-site during the construction phases that involve ground disturbing previously undisturbed native soils and shall complete monitoring logs on a daily basis. The logs shall provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The monitor(s) shall possess Hazardous Waste Operations and Emergency	

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			Response (HAZWOPER) certification. The on-site monitoring shall end when the Project site grading and excavation activities of previously undisturbed native soils are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for tribal cultural resources. (**HAZWOPER certification is needed only if the site has hazardous concerns related to Mitigation Measure H-1). • Consult on unanticipated discovery of human remains and associated funerary objects: o Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe). o As specified by California Health and Safety Code Section 7050.5, if human remains are found on the	

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			Project site during construction or during archaeological work, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98 The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside of working hours. If the remains are Native American, the Tribe shall make every effort to	

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			recommend diverting the Project and keeping the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials shall be removed and the Project applicant/developer shall arrange a designated site location within the footprint of the Project for the respectful reburial of the human remains and/or ceremonial objects, if possible. The Tribe shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes 4 or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The Project applicant/developer shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities shall be submitted to	

Impact	Applicable Standard Conditions or Plan, Program, Policy (PPP)	Level of Significance before Mitigation	Mitigation Measures	Significance after Mitigation
			the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains. o Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container on site if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the Project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.	
Cumulative		Potentially significant	Mitigation Measure TCR-1, listed above.	Less than significant

2. Introduction

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction and operation of the proposed Project. This EIR has been prepared by the County of San Bernardino in its capacity as Lead Agency, as that term is defined in Section 15367 of the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.) and in conformance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.). This EIR has been prepared to identify, analyze, and mitigate the significant environmental effects of the proposed Project.

CEQA requires each EIR to reflect the independent judgment of the Lead Agency, including but not limited to the thresholds of significance used to analyze Project impacts, analyses and conclusions regarding the level of significance of impacts both before and after mitigation, the identification and application of mitigation measures to avoid or reduce Project-related impacts, and the consideration of alternatives to the proposed Project. In preparing this EIR, the County of San Bernardino has employed CEQA and environmental technical specialists; however, the analyses and conclusions set forth in this EIR reflect the independent judgment of the County as Lead Agency.

2.1 PURPOSE OF AN EIR

CEQA requires that all state and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority prior to taking action on those projects. Pursuant to the provisions of CEQA Guidelines Section 15121(a), this EIR is intended as an informational document to inform public agency decision makers and the general public of the significant environmental effects of the proposed Project, identify possible ways to avoid or minimize those significant effects, and describe reasonable alternatives to the Project that might avoid or lessen significant environmental effects. Thus, this EIR is intended to aid the review and decision-making process.

The CEQA Guidelines provide the following information regarding the purpose of an EIR:

- Project Information and Environmental Effects. An EIR is an informational document that will inform public agency decision-makers and the public generally of the significant environmental effect(s) of a Project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the Project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (CEQA Guidelines Section 15121(a)).
- Standards for Adequacy of an EIR. An EIR should be prepared with a sufficient degree of analysis to enable decision makers to make an intelligent decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed Project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (CEQA Guidelines Section 15151).

As a public disclosure document, the purpose of an EIR is not to recommend either approval or denial of a Project, but to provide information regarding the physical environmental changes that would result from an action being considered by a public agency to aid in the agency's decision-making process.

2.2 EIR SCOPE AND CONTENT

Impacts Found to Be Potentially Significant. The County determined that an EIR should be prepared for the Yorba Villas Residential Project. As a result, a Notice of Preparation (NOP) was prepared and circulated between June 1, 2021 and July 5, 2021 for the required 30-day review period. The purpose of the NOP was to solicit early comments from public agencies with expertise in subjects that are discussed in this Draft EIR. The NOP and written responses to the NOP are contained in Appendix A of this Draft EIR. The County of San Bernardino also held a scoping meeting for the Project to solicit oral and written comments from the public and public agencies. The public scoping meeting was held on June 16, 2021. Comments received at the meeting are contained in Appendix A of this Draft EIR. Topics requiring a detailed level of analysis evaluated in this Draft EIR have been identified based upon the responses to both the NOP and a review of the Project by the County of San Bernardino. The County determined through the initial review process that impacts related to the following topics are potentially significant and require a detailed level of analysis in this Draft EIR:

- Aesthetics
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Tribal Cultural Resources

Impacts Found Not to Be Significant. CEQA Guidelines Section 15126.2(a) states that "[a]n EIR shall identify and focus on the significant effects on the environment". Topics that have been determined not to be significant and are therefore not discussed in detail in the Draft EIR were identified based upon the responses to the NOP and a review of the Project by the County of San Bernardino. The County determined through the initial review process that impacts related to the following topics are not potentially significant and are not required to be analyzed in this Draft EIR:

- Agriculture & Forest Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Mineral Resources
- Population and Housing
- Public Services
- Transportation
- Utilities
- Wildfire

2.3 IMPACTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15126.2(a) states that "[a]n EIR shall identify and focus on the significant effects on the environment". However, CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons that various possible effects of a Project were determined not to be significant and were therefore not discussed in detail in the EIR. The following environmental issue areas would not be potentially impacted or be significantly impacted by the proposed Project, as detailed below and further explained in Appendix A.

Agriculture and Forestry Resources

The Project site is zoned Single Residential (RS-1) and is located in an area that is developed for urban uses. The Project is not in a Williamson Act contract and is identified as Urban and Built-Up Land based on the California Department of Conservation Farmland Mapping and Monitoring Program. No areas of Prime

Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by the Project or converted to a non-agricultural use. In addition, the Project site and vicinity is void of forest land or timberland. As the Project site and vicinity do not include these resources, no other changes to the existing environment would occur from implementation of the proposed Project that could result in conversion of farmland to nonagricultural use or forest/timberland land to non-forest or non-timberland use. Thus, impacts related to agriculture and forestry resources would not occur.

Air Quality

The Project is located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As described in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993), for purposes of analyzing consistency with the Air Quality Management Plan (AQMP), if a proposed Project would result in growth that is *substantially* greater than what was anticipated, then the proposed Project would conflict with the AQMP. On the other hand, if a Project's density is within the anticipated growth of a jurisdiction, its emissions would be consistent with the assumptions in the AQMP, and the Project would not conflict with SCAQMD's attainment plans. In addition, the SCAQMD considers projects consistent with the AQMP if the Project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.

The Project site has an existing Countywide Plan land use designation of Very Low Density Residential (VLDR) that allows a maximum of 2 units per acre. Implementation of the proposed Project would redesignate the Project site to Low Density Residential (LDR) (5 du/ac maximum) and redevelop the site with 45 single-family residences, which would result in 3.37 du/ac. The Project is located in an area that is surrounded by residential housing. The proposed Project would redevelop the site with 45 single-family residences, which is an increase of 18 residences beyond the maximum allowable units under the existing land use designation. As shown below in Table 2-1, the Project would result in a slight increase of emissions compared to the existing Countywide Plan and Zoning Designation but would not exceed the SCAQMD significance thresholds.

Table 2-1: Regional Emissions Comparison Of Existing And Proposed Countywide Plan And Zoning Designation

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Total Existing Zoning (1 DU/AC 13 UNITS) Operational Emissions	1.1	0.9	5.4	0.0	0.9	0.3
Total Existing General Plan (2 DU/AC 27 UNITS) Operational Emissions	2.2	1.9	11.3	0.0	1.9	0.6
Total Proposed Zoning (4 DU/AC 54 UNITS) Operational Emissions	4.2	3.7	22.2	0.0	3.8	1.1
Total Proposed General Plan (5 DU/AC 67 UNITS) Operational Emissions	5.2	4.7	28.0	0.1	4.8	1.4
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Total Net Increase in Zoning Operational Emissions	**3.1**	**2.8**	**16.8**	**0.0**	**2.9**	**0.8**
Total Net Increase in General Plan Operational Emissions	**3.0**	**2.8**	**16.7**	**0.1**	**2.9**	**0.8**

Source: CalEEMod Runs (Appendix L)

The proposed Project is an infill Project on a site that has been previously developed with 29 single-family residences. The site was historically used for housing; 28 residences existed on the western portion of the site prior to demolition, and one single-family residence remained but was demolished in 2018. The Project would result in an increase of 16 units over what previously existed on the 13.35-acre site. As detailed below in the Population and Housing discussion, the proposed increase in housing units and population as a result of the proposed Project is within the growth forecast for the County by the Southern California Association of Governments' (SCAG) 2019-2045 projections. Thus, the Project would not result in growth that is substantially greater than what was anticipated. Also, as detailed in the Initial Study, the construction and operational emissions from the Project would not exceed thresholds and impacts would be less than significant. Therefore, Project impacts related to conflict with or obstruction of the AQMP would be less than significant.

Due to the lack of significant stationary source emissions, no localized significance threshold for the proposed Project's operation is needed and impacts would be less than significant. The proposed Project does not include heavy industrial, agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding, or other land uses that typically result in emissions associated with odor complaints, based on the SCAQMD CEQA Air Quality Handbook. Potential emissions that may lead to odors during construction activities include equipment exhaust. However, these emissions and any associated odors would be localized and temporary in nature and would not be sufficient to affect a substantial number of people or result in a nuisance as defined by SCAQMD Rule 402. Thus, impacts related to air quality would be less than significant.

Energy

Construction and operation activities from development pursuant to the proposed Project would include the use of energy through electricity provide by Southern California Edison and petroleum-based fuel sources and natural gas provided by Southern California Gas Company. Based on the uses of energy during construction activities including petroleum-based fuels, electricity, and energy used in the production of construction materials, the proposed buildings and the associated infrastructure would not be expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in Southern California. Construction does not involve any unusual or increased need for energy. In addition, the extent of construction activities that would occur is limited to an 18-month period, and the demand for construction-related electricity and fuels would be limited to that time frame. Overall, construction activities would comply with all existing regulations, and would therefore not be expected to use fuel in a wasteful, inefficient, and unnecessary manner. Once operational, the Project would generate demand for electricity, natural gas, as well as gasoline for motor vehicle trips. Operational use of energy includes the heating, cooling, and lighting of the residences, water heating, operation of electrical systems and plug-in appliances, and outdoor lighting, and the transport of electricity, natural gas, and water to the residences where they would be consumed. This use of energy is typical for urban development, no additional energy infrastructure would be required to be built to operate the Project, and no operational activities would occur that would result in extraordinary energy consumption.

In addition, the proposed Project would be required to comply with the building energy efficiency standards outlined by Title 24, Part 6, and CAL Green Title 24, Part 11 and included in the County development standards as section 63.0501. Thus, impacts related to energy would be less than significant.

Greenhouse Gas Emissions

Implementation of the Project would generate greenhouse gas (GHG) emissions during both construction and operation of the Project. During construction, sources of GHG emissions include construction equipment and worker commutes to and from the Project site. During operation, the Project would generate GHG emissions from vehicle trips; water, natural gas, and electricity consumption; and solid waste generation. The County of San Bernardino Greenhouse Gas Emissions Reduction Plan requires that any Project that emits greater than 3,000 MTCO2e per year of GHG emissions is required to prepare a greenhouse gas impact analysis to determine a significance finding. The estimated operational GHG emissions would be generated from implementation of the proposed Project were determined using the California Emissions Estimator Model (CalEEMod Version 2016.3.2) in the Initial Study and resulted in approximately 821 MTCO2e per year which would be below the threshold of 3,000 MTCO2e per year. As the proposed Project meets the current interim emissions targets/thresholds established by SCAQMD, it would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030, as mandated by the State. Thus, impacts related to greenhouse gas emissions would be less than significant.

Mineral Resources

The San Bernardino County Countywide Plan designates the Project site as being located within MRZ-3. The site was previously used for residential uses and was not used for mineral extraction. As such, the proposed Project would not result in the loss of availability of a known mineral resource as the mineral resource was not previously available for extraction. Thus, implementation of the Project would not cause the loss of availability of mineral resources valuable to the region or state, and no impact would occur.

Population/Housing

Based on the California Department of Finance data, with an estimate of 3.37 persons per household within San Bernardino County (CDF 2020), the proposed Project would result in a net increase of approximately 152 new persons. Overall, the Southern California Association of Governments' (SCAG) 2019-2045 Population, Households, and Employment Projections household growth forecast from 2019 through 2045 for the County envisions an increase of 218,300 households yielding an approximately 33% growth rate in households. The proposed Project would increase housing by approximately 0.02 percent of the projected increase in households for the County. Thus, the proposed increase in housing units and population as a result of the proposed Project is within the growth forecast. In addition, the proposed Project would not create employment opportunities that could induce population growth. Therefore, the proposed Project would not induce substantial population growth in the area and impacts would be less than significant.

The Project site does not currently contain any housing on site; prior uses were demolished by 2018. The proposed Project would redevelop the Project site with 45 single-family residences. The proposed Project would not displace a substantial number of existing people or housing and would not necessitate construction of housing elsewhere. Thus, there would be no impacts related to displacing substantial numbers of existing people or housing.

Public Services

The Chino Valley Independent Fire District provides contracted fire services to the Cities of Chino and Chino Hills, and the surrounding unincorporated areas of San Bernardino County. The proposed Project would be required to comply with the provisions of the County of San Bernardino Fire Protection District Fee Ordinance (Ordinance No. FPD-01), which requires a fee payment that the County applies to the funding of fire protection facilities. Due to the small increase in onsite people that would occur from implementation of the Project, an incremental increase in demand for fire protection and emergency medical services would occur. However, the increase in residents onsite would be limited and would not increase demands such that the existing two fire stations within 3 miles of the Project site would not be able to accommodate servicing the Project in addition to its existing commitments, and provision of a new or physically altered fire station would be required that could cause environmental impacts.

Although an incremental increase could result from implementation of the Project, the need for law enforcement services from the proposed Project would not be significant when compared to the current service levels of the San Bernardino County Sheriff Department and the small residential nature of the proposed Project. The additional 152 residents that are anticipated to be generated from full occupancy of the proposed Project would not require the construction or expansion of the police facilities. Therefore, impacts related to police services from the proposed Project would be less than significant

Development of the 45 single-family residences would increase the population of school-age children within the Project site. To determine future enrollment, Chino Valley Unified School District applies student yield factor of 0.4497 for single-family detached houses. Using this factor, the proposed Project would result in approximately 20 new students that would range in age from elementary through high school. Based on the school capacities identified in the Initial Study, the students generated by the proposed Project would be accommodated by existing school facilities, and provision of a new or physically altered schools would not be required.

A slight increase in demand on the existing parks could occur from the additional 152 residents that would be generated from the proposed Project. However, impacts from the proposed Project are anticipated to be minimal due to the 152 residents that would be generated by the Project and due to the existing amount of park facilities that are within three miles of the Project site. The slight increase in demand for park facilities that could occur from the 152 residents would be met by the proposed onsite park in addition to the 8 existing park facilities in the vicinity of the Project site. Therefore, the proposed Project would not increase demands such that provision of a new or physically altered parks would be required that could cause environmental impacts.

The proposed Project is not expected to result in significant demand for other public facilities or services, including post offices and public health offices, among others. As such, the Project would not significantly adversely affect other public facilities or services, and therefore would not require the construction of new or modified public facilities. Thus, impacts related to public services would be less than significant.

Recreation

According to the San Bernardino County Profile, there are 2.5 million acres of recreational land in San Bernardino County, and six acres of parkland per 1,000 residents. The 152 residents generated by the Project would require 39,824-square feet of parkland. The Project would provide a 6,791-square foot park for 152 residents. In addition, there are 8 existing park facilities that provide 35.3 acres of parkland within three miles of the Project site.

Development of the onsite park would not have any potentially significant impacts outside of those analyzed for the whole of the proposed Project within the Initial Study and this Draft EIR. In addition, due to the onsite and nearby recreational facilities, the proposed Project would not require the construction or expansion of recreational facilities. Therefore, the proposed Project would not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. Thus, impacts related to recreation would be less than significant.

Transportation

The San Bernardino County Transportation Guidelines (July 9, 2019) states that a Traffic Impact Analysis would be required if a Project adds more than 50 trips to any intersection during the AM and PM peak hours. If a Project is estimated to generate more than 100 trips during the AM and PM peak hours, a VMT analysis would be required. The proposed Project would result in 33 AM peak hour trips and 45 PM peak hour trips. As a result, the Project would not add more than 50 trips to any intersection during the AM and PM peak hour and generates less than 100 trips during the AM and PM peak hour. Thus, a Transportation Impact Study was not required and impacts related to conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities would be less than significant.

As mentioned in the Initial Study prepared for the Project, the traffic analysis zone (TAZ) Vehicle Miles Traveled (VMT) noted for the proposed Project site as per the SBCTA VMT Screening Tool was 17.2 VMT per population. The jurisdictional VMT of the area was noted as 24.4 per population. Given the TAZ VMT is lower than that of the Jurisdiction, a VMT analysis was not required. Thus, the proposed Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3(b).

Project implementation would not add incompatible uses to area roadways. The San Bernardino County Department of Public Works Transportation Division reviews traffic control plans for development projects in unincorporated County areas. The Transportation Division does not permit staging of vehicles or construction equipment or materials on County-maintained roads that would block emergency access. In addition, no roadway improvements are required and any construction near the, such as sidewalk improvements or utilities in the right ow way, would be reviewed by the Transportation Division to ensure that required improvements would not create hazardous conditions. Thus, impacts would be less than significant.

Project development would not result in inadequate emergency access. Direct access to the Project site would be provided by a new private driveway intersecting with Francis Avenue. The Project would also be required to construct internal access and provide fire suppression facilities (e.g. hydrants) in conformance with the County Code Title 2, Division 3. The San Bernardino County Fire Department would review the development plans as part of the construction permitting process to ensure that emergency access is provided pursuant to the requirements of the Uniform Code and Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9). Overall, impacts related to transportation would be less than significant.

Utilities/Service Systems

Domestic water services are provided to the Project site by the MVWD and wastewater treatment services are provided to the area by the Inland Empire Utilities Agency (IEUA) Regional Water Recycling Plant No. 1. Upon approval, the Project would install new water and sewer infrastructure on the site and connect to the existing 8-inch water main in Yorba Avenue and 21-inch sewer main in Yorba Avenue. Currently, the City of Chino operates and maintains the local sewer collection system that includes the sewer mains within the

Yorba Avenue right-of-way. The sewer infrastructure is being annexed into the MVWD which requires a separate approval. The annexation is in process and is being reviewed by the Local Agency Formation Commission (LAFCO) for San Bernardino County. Proof of annexation into MVWD would be a condition of approval for the proposed Project prior to issuance of grading permits. In addition, the Project would construct onsite storm water drainage infrastructure that would capture, convey, and/or infiltrate runoff from the Project site. The Project would also connect to existing electric power, natural gas, and telecommunication facilities. Therefore, the Project would not result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities that could cause environmental effects.

The MVWD is responsible for supplying potable water to the Project site and its region. Water supplies consist of local groundwater and imported water. MVWD's service area includes the City of Montclair, portions of the City of Chino, and unincorporated county areas (UWMP 2015). The 2015 MVWD Urban Water Management Plan (UWMP) details that adequate supplies are available to serve MVWD customers during normal, dry year, and multiple dry year conditions through 2040 considering both projected population increases and accompanying increases in water demand. Furthermore, MVWD forecasts for Project water demand are based on population projections of SCAG, which rely on adopted land use designations contained within the general plans that cover the geographic area. Implementation of the Project would increase the allowed residential density resulting in 152 new residents. Under the current zoning, the proposed Project would generate 44 new residents. Thus, the proposed Project would result in a delta of 88 new residents in comparison to the MVWD estimates. The Monte Vista Water District's 2015 UWMP estimates a 2020 demand rate of 167 gallons per capita per day. Thus, 88 new residents would generate an additional water demand of 14,696 gallons per day or 16.5 acre-feet per year in the Project opening year of 2021 which is within the anticipated increased demand and supply for water. Redevelopment of the Project site would also be required to be compliant with CalGreen/Title 24 requirements for low flow plumbing fixtures and irrigation, which contribute to efficient water use.

Upon annexation to MVWD and approval of the District by IEUA to be a sewer collection agency, wastewater generated from the Project site would be treated by the Inland Empire Utilities Agency, which conveys wastewater from the Project site to the Regional Water Recycling Plant No. 1. The Regional Water Recycling Plant No.1 provides primary, secondary, and tertiary treatment for a design capacity of 44 million gallons of wastewater per day (mgd) (IEUA). The Regional Water Recycling Plant currently processes an average flow of 28 mgd of wastewater, resulting in a remaining capacity of approximately 16 mgd of wastewater. This remaining capacity is adequate to serve the Project and the Project would not result in a determination by IEUA that it does not have adequate capacity to serve the Project's projected demand in addition to existing commitments.

The solid waste from the Project site would be disposed at the Mid-Valley Sanitary Landfill in Rialto. The Mid-Valley Sanitary Landfill is permitted to accept 7,500 tons per day of solid waste and is permitted to operate through April 2033. In December 2019, the facility received an average of 5,000 tons per day. Thus, the facility had additional capacity of 2,500 tons per day. Operation of the Project includes development of 45 residential units, which is anticipated to result in approximately 152 residents, as described previously in the population and housing discussion. Based on the default CalEEMod solid waste generation rate of 0.41 ton per year per resident, the 152 residents are estimated to generate 62.32 tons of solid waste per year (or 1.2 tons per week). This equates to 0.0068 percent of the landfill daily capacity remaining as of 2019.

Pursuant to AB 341, at least 75 percent of the solid waste generated in California is required to be recycled, which would reduce the volume of landfilled solid waste to approximately 0.3 tons (600 pounds) per week.

As the Mid-Valley Sanitary Landfill had additional capacity of 2,500 tons per day tons per day, the facility would be able to accommodate the addition of 0.3 tons of solid waste per week from operation of the proposed Project (CalRecycle). Thus, impacts related to solid waste generation and landfill capacity would be less than significant. Overall, impacts related to utilities and service systems would be less than significant.

Wildfire

According to the HZ-5 Fire Hazard Severity Zone Map within the Countywide Plan, the Project site is not within an area identified as a Fire Hazard Severity Zone that may contain substantial fire risk or a Very High Fire Hazard Severity Zone (CWP 2020). The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles via Project roadways as required by the County. Furthermore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Therefore, implementation of the Project would not result in any impacts related to wildfire.

2.4 EIR PROCESS

Notice of Preparation/Initial Study

Pursuant to the requirements of CEQA, the County of San Bernardino, as Lead Agency, prepared an Initial Study and Notice of Preparation (NOP) for the proposed Project included as Appendix A, which was distributed on June 1, 2021 for a 30-day public review and comment period that ended on July 5, 2021. The NOP requested members of the public and public agencies to provide input on the scope and content of environmental impacts that should be included in the Draft EIR being prepared. Comments received on the NOP are included in Appendix A and summarized in Table 2-2, which also includes a reference to the Draft EIR section(s) in which issues raised in the comment letters are addressed.

Table 2-2: Summary of NOP/Initial Study Comment Letters

Comment Letter and Comment	Relevant EIR Section
State Agencies	
California Department of Fish and Wildlife, June 22, 2021	
This letter discusses that the California Department of Fish and Wildlife (CDFW) is submitting comments as a Responsible Agency under CEQA. CDFW recommends that the EIR include a discussion and complete assessment of the flora and fauna within and adjacent to the Project site, with emphasis on identifying rare, threatened, endangered, or other sensitive species and their habitats. CDFW recommends the inclusion of a general biological assessment, habitat mapping, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint. Additionally, the letter states that the site has the potential to provide suitable foraging and/or nesting habitat for burrowing owl. CDFW recommends that the County of San Bernardino follow the recommendations and guidelines provided in the *Staff Report on Burrowing Owl Mitigation*.	Biological Resources

Comment Letter and Comment	Relevant EIR Section
The comment states that the EIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project; the EIR should provide alternatives; and should identify mitigation measures and alternatives that are appropriate and adequate to avoid or minimize potential impacts, to the extent feasible. CDFW recommends that the DEIR specify mitigation that is roughly proportional to the level of impacts and the comment letter provides multiple forms of mitigation. CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the Project; unless this Project is proposed to be a covered activity under the MSHCP. The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.	
Native American Heritage Commission, June 8, 2021	
This letter discusses Project compliance with AB 52 and SB 18. The letter recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the proposed Project as early as possible. The letter also outlines the AB 52 requirements.	Cultural Resources, Tribal Cultural Resources
Local Agencies	
City of Chino, July 2, 2021	
This letter provides information regarding the Project's location in the City of Chino's sphere of influence. Within the City's sphere of influence, the site has a City of Chino General Plan designation of Residential/Agricultural (RD2), which allows up to two dwelling units per acre. The comment states that the Project is not consistent with the density assumed for the site by the City General Plan and City Municipal Code. The comment states that the IS does not adequately analyze drainage and that a drainage study should be included in the EIR. Additionally, the comment states that the City of Chino is the sole provider of sewer service to the City's sphere of influence and that, since the Project is inconsistent with the designation for the site, it would not be allowed to obtain sewer service from the City. Furthermore, the comment states that the IS is misleading in its analysis of sewer infrastructure. The comment states that the 21-inch sewer main is operated by the Inland Empire Utilities Agency. Furthermore, the comment states that the IS does not analyze potential transportation impacts under the City of Chino's criteria. The comment states that the City has an interest in ensuring the Project is compatible with City standards and guidelines if the site will one day be annexed into the City.	Hydrology & Water Quality, Land Use & Planning, Initial Study pages 67-69
Inland Empire Utilities Agency, July 5, 2021	
This comment requests an extension for submittal of a comment letter to July 9th for the agency as they did not receive the NOP. The comment requests that the County ensure that Inland Empire Utilities Agency's Strategic Planning & Resources Department be notified of any projects under consideration through the County that mention services provided by Inland Empire Utilities Agency.	Initial Study pages 70-73
Inland Empire Utilities Agency, July 9, 2021	

Comment Letter and Comment	Relevant EIR Section
This letter references the connection to the existing 21-inch IEUA Regional Sewage System interceptor in Yorba Avenue and advises that any connection must follow certain procedures which require review and approval. The letter states that MVWD will be required to undergo an approval process to become a wastewater contracting agency per the terms of the Regional Contract. The letter also addresses the Regional Water Recycling Plant No.1, which the Yorba Villas Project is tributary to, and advises that a hydraulic study will be part of the approval process to ensure there is sufficient capacity in the Regional Sewage System interceptor to accommodate the flows for Yorba Villas.	Initial Study pages 70-73
Individuals	
Joanne Ford, June 7, 2021	
This comment supports the Project and notes that they like the quality of the Project, improvements being proposed to the streets and parkways along Francis and Yorba and like the single-story architecture. This comment also urges the planner to approve the project.	N/A
Donna Marchesi, June 21, 2021	
This letter provides the commenter's opposition to the Project. The comment states traffic concerns related to Yorba and Francis Avenue. The commenter states that the traffic from the homes would leave on the Francis exit and go to Ramona and the County shall improve Ramona to give residents and drivers a safer, convenient driving experience. The comment also discusses the issue with flooding on Yorba Avenue and mentions that the catch basin would not be able to absorb all the rain from a storm. The comment also addresses concerns of water use for 45 residences as we are in a drought. The comment also addresses safety and neighborhood quality concerns.	Hydrology & Water Quality, Initial Study pages 70-73
Tyra Weis, June 27, 2021	
This letter provides the commenter's opposition to the Project. The comment states that the Project was formerly called the Chino Francis Estates and was denied by the City of Chino on two occasions. The comment states that the Project applicant is attempting to utilize Monte Vista Water for sewer services, and that Lead Agency is now the County of San Bernardino. The comment states that the Project will lead to traffic on Yorba Avenue due to the fact that Ramona Avenue is congested. It also states that the County should increase traffic flow on Ramona Avenue. The comment also discusses the issue with flooding in the area and states that the Project will increase impervious areas, which will lead to additional flooding if the proposed catch basin does not work. The comment states that the Project site is planned for 26 homes, but the Project proposes 43 and these homes will utilize too much water. The commenter requests that the County deny the Project.	Hydrology & Water Quality, Land Use
Melissa Daly, June 28, 2021	
The comment states that the commenter approved of the 26 residences originally proposed, but they do not want additional homes.	Land Use & Planning
Margaret Hernandez, June 28, 2021	

Comment Letter and Comment	Relevant EIR Section
The comment states that the commenter does not want 46 homes built at the corner of Yorba Avenue and Francis Avenue. Additionally, the comment states that the Project will contribute to traffic and asks if the developer will build an additional street.	Initial Study pages 67-69
George Ross, June 29, 2021	
This comment questions how many times the developer can propose a Project and be denied. The comment states that the commenter is opposed to the Project.	N/A
Tony Melendez, June 30, 2021	
This comment states that the Project does not fit in to the neighborhood and that the 45 proposed residences would have a negative environmental impact. The commenter requests that supervisors are informed that San Bernardino County residents oppose the Project.	Land Use & Planning
J Wolff, July 5, 2021	
This comment states that the commenter bought their property 40 years ago and that horse properties are now a thing of the past. The comment states that Rowland Heights can be used as an example for poor residential development planning. The comment states it could discuss traffic, narrow streets, and lack of planning, but that the commenter does not trust the developer or the County. The comment mentions multiple other developments with Code violations. The comment states that the Project will connect to Monte Vista Water District sewer lines and that they are opposed to the Project.	Land Use & Planning, Utilities & Service Systems, Initial Study pages 67-69
Priscilla Velasquez, July 5, 2021	
This letter provides the commenter's opposition to the Project. The comment states that the Project would not be compatible with the area. Additionally, flooding occurs along Yorba Avenue and Francis Avenue. The commenter raises concerns over vehicles and traffic from the Project. The comment states that the proposed housing would lead to individuals who are not used to animals in the surrounding area, such as horses. The commenter is concerned that new residents would complain about smells from the use of horses. The comment urges the County not to approve the Project.	Initial Study pages 35-41, Hydrology & Water Quality, Land Use & Planning

Public Scoping Meeting

Pursuant to Section 15082(c)(1) of the CEQA Guidelines, the County of San Bernardino hosted a public scoping meeting for members of the public and public agencies to provide input as to the scope and content of the environmental information and analysis to be included in the Draft EIR for the proposed Project. The scoping meeting was held on June 16, 2021 at 6:00 p.m. online through Zoom.

Public Review of the Draft EIR

The County of San Bernardino filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that this Draft EIR has been completed and is available for review. A Notice of Availability of the Draft EIR was published concurrently with distribution of this document. The Draft EIR is being circulated for review and comment by the public and other interested parties, agencies and organizations for 45 days in accordance with Section 15087 and Section 15105 of the CEQA Guidelines. During the 45-day review period, the Draft EIR is available for public review digitally on the County's website:(http://cms.sbcounty.gov/lus/Planning/Environmental/Valley.aspx)

Written comments related to environmental issues in the Draft EIR should be addressed to:

Steven Valdez, Senior Planner
County of San Bernardino Land Use Services Department
385 N. Arrowhead Ave

San Bernardino, CA 92415

Email: Steven.Valdez@lus.sbcounty.gov

Final EIR

Upon completion of the 45-day review period, written responses to all comments related to the environmental issues in the Draft EIR will be prepared and incorporated into a Final EIR. The written responses to comments will be made available at least 10 days prior to the public hearing at which the certification of the Final EIR will be considered. These comments, and their responses, will be included in the Final EIR for consideration by the County, as well as other responsible agencies per CEQA. The Final EIR may also contain corrections and additions to the Draft EIR, and other information relevant to the environmental issues associated with the Project. The Final EIR will be available for public review prior to its certification by the County. Notice of the availability of the Final EIR will be sent to all who commented on the Draft EIR.

2.3 ORGANIZATION OF THIS DRAFT EIR

The Draft EIR is organized into the following Sections. To help the reader locate information of interest, a brief summary of the contents of each chapter of this Draft EIR is provided.

- **Section 1 Executive Summary:** This section provides a brief summary of the Project area, the proposed Project, and alternatives. The section also provides a summary of environmental impacts and mitigation measures that lists each identified environmental impact, applicable Project design features, standard conditions, proposed mitigation measure(s) (if any), and the level of significance after implementation of the mitigation measure. The level of significance after implementation of the proposed mitigation measure(s) will be characterized as either less than significant or significant and unavoidable.
- **Section 2 Introduction:** This section provides an overview of the purpose and use of the EIR, the scope of this EIR, a summary of the legal authority for the EIR, a summary of the environmental review process, and the general format of the document.
- **Section 3 Project Description:** This section provides a detailed description of the proposed Project, its objectives, and a list of Project-related discretionary actions.
- **Section 4 Environmental Setting:** This section provides a discussion of the existing conditions within the Project area.
- **Section 5 Environmental Impact Analysis:** This section includes a summary of the existing statutes, ordinances and regulations that apply to the environmental impact area being discussed; the analysis of the Project's direct and indirect environmental impacts on the environment, including potential cumulative impacts that could result from the proposed Project; any applicable Project design features; standard conditions and plans, policies, and programs that could reduce potential impacts; and the feasible mitigation measures that would reduce or eliminate the significant adverse impacts identified. Impacts that cannot be mitigated to less than significant are identified as significant and unavoidable.

  This section also summarizes the significant and unavoidable impacts that would occur from implementation of the proposed Project and provides a summary of the environmental effects of the implementation of the proposed Project that were found not to be significant. Additionally, this section provides a discussion of various CEQA-mandated considerations including growth-inducing

impacts and the identification of significant irreversible changes that would occur from implementation of the proposed Project.

- **Section 6 Alternatives:** This section describes and analyzes a reasonable range of alternatives to the proposed Project. The CEQA-mandated No Project Alternative is included along with alternatives that would reduce one or more significant effects of the proposed Project. As required by the CEQA Guidelines, the environmentally superior alternative is also identified.
- **Section 7 Report Preparation and Persons Contacted:** This section lists authors of the Draft EIR and County staff that assisted with the preparation and review of this document. This section also lists other people that were contacted for information that is included in this EIR document.

2.4 INCORPORATION BY REFERENCE

State CEQA Guidelines Section 15150 allows for the incorporation "by reference all or portions of another document…[and is] most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of a problem at hand." The purpose of incorporation by reference is to assist the Lead Agency in limiting the length of this Draft EIR. Where this EIR incorporates a document by reference, the document is identified in the body of the Draft EIR, citing the appropriate section(s) of the incorporated document and describing the relationship between the incorporated part of the referenced document and this Draft EIR.

The Project is within the geographical limits of the County of San Bernardino and is covered by its Countywide Plan. The Countywide Plan was approved by the County on October 27, 2020, and provides the fundamental basis for the County's land use and development policies. The Countywide Plan was the subject of an environmental review under CEQA; a Program EIR for the Countywide Plan was certified by the County in 2020 (State Clearinghouse Number 2017101033). The Program EIR contains information relevant to the Project. Accordingly, the Program EIR for the Countywide Plan is herein incorporated by reference in accordance with State CEQA Guidelines Section 15150. The documents are available at https://countywideplan.com and the County of San Bernardino, Planning Department, 385 North Arrowhead Avenue, First Floor, San Bernardino, CA 92415.

3. Project Description

3.1 PROJECT LOCATION

The Project site is located at 4570 Francis Avenue (APNs 1013-211-21 and 1013-211-22) in unincorporated San Bernardino County within the City of Chino Sphere of Influence. The site is located at the northwest corner of the intersection of Francis Avenue and Yorba Avenue. Regional access to the Project site is generally provided via State Route 60 (SR-60) at the Ramona Avenue exit. The regional location of the Project site is shown in Figure 3-1, *Regional Location*. Local access to the Project site is provided by Francis Avenue as shown in Figure 3-2, *Local Vicinity*.

The Project site is located within the southernmost portion of the unincorporated area of the County of San Bernardino. Areas across from Francis Avenue (to the south) are within the City of Chino. Areas across from Yorba Avenue (to the east) are within unincorporated San Bernardino County.

3.2 SITE CHARACTERISTICS

The Project site consists of two parcels totaling 13.35-acres. The parcel on the corner of Francis and Yorba Avenue (the southeastern most portion of the Project site) was developed with a single-family residence; a guest cottage, swimming pool, storage shed, mobile home, bird cage area, and a horse stable, but in 2018 the owner demolished all structures, and the site is currently an empty lot.

The second parcel is coterminous with the first and is roughly divided into three sections: 1) the western section, 2) the middle section, and 3) the eastern section. The western portion of the site was developed with approximately 28 small single-family residences between 1938 and 1997. The structures in this area were demolished in 1997 (Tetra Tech 2016); however, some of the concrete slabs remain onsite. An aerial view of the Project site is shown as Figure 3-3, *Aerial View*.

In 1960, the central portion of the site was developed into a rabbit farm that operated until 2002. Since the closure of the rabbit farm in 2002, the vacant portion of the site has been utilized as grazing land for goats raised on a nearby site. The middle section also contains numerous elongated slabs. The eastern section of the vacant parcel is undeveloped vacant land that was used for goat grazing.

The Project site has a Countywide Plan Land Use designation of Very Low Density Residential (VLDR) and is zoned Single Residential 1-Acre Minimum (RS-1).

3.3 DESCRIPTION OF ADJACENT AREAS

The Project site is located within an urban area that is either fully developed or planned for urban development.

North: The site is bound to the north by two homes on large unkept lots improved with butler buildings and storage areas within unincorporated San Bernardino County, designated as Very Low Density Residential and zoned Single Residential 1-Acre Minimum (RS-1).

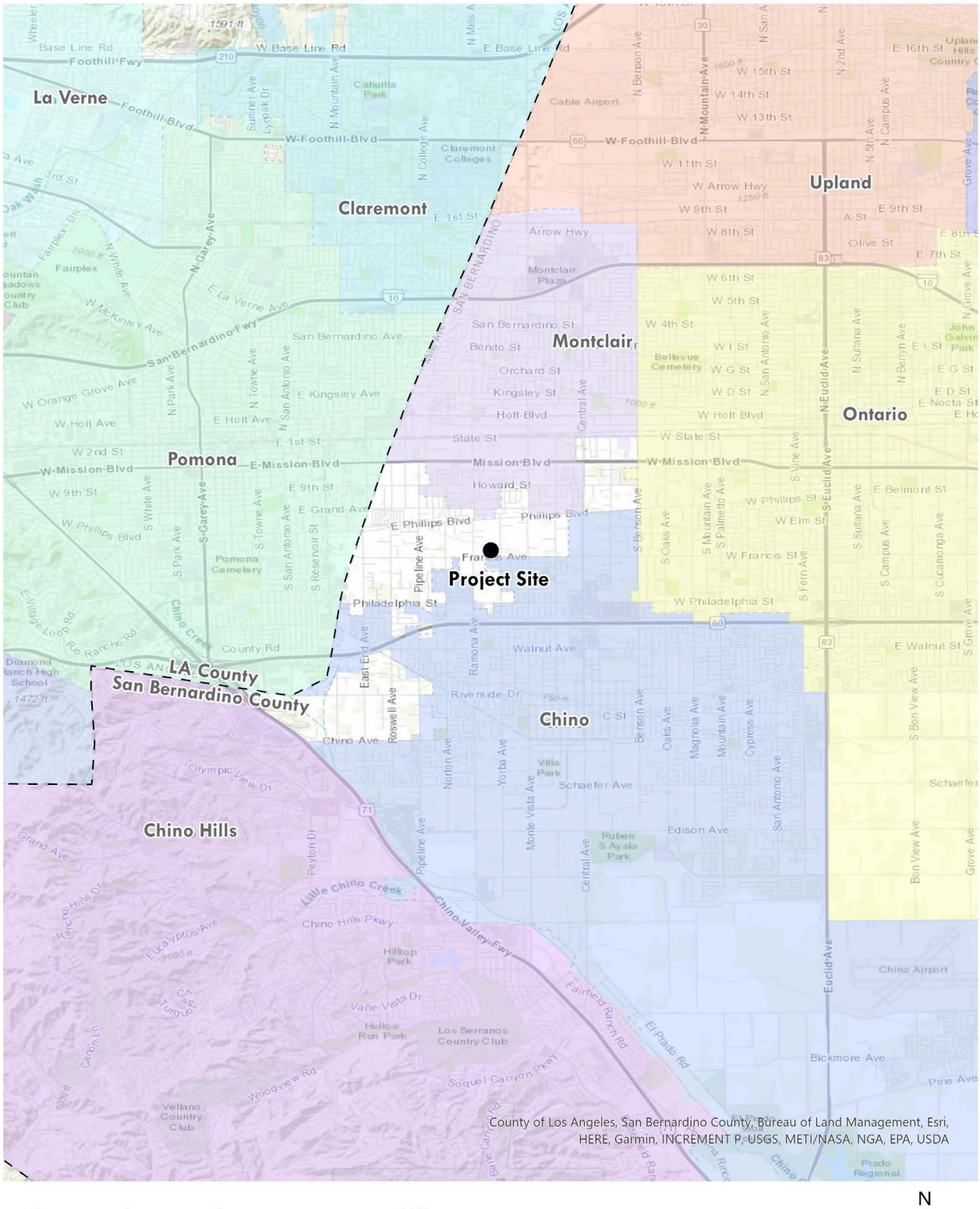
South: The site is bound to the south by Francis Avenue followed by single-story residential housing. The western portion of the street is within unincorporated San Bernardino County, designated as Very Low Density Residential and zoned Single Residential 1-Acre Minimum (RS-1). The easterly portion is within the City of Chino and zoned Residential two dwelling units per acre (RD 2) with homes on approximately 16,000 square foot lots.

West: The site is bound to the west by several deep lots that have a mix of commercial storage, truck storage, goat keeping, and residences within unincorporated San Bernardino County, designated as Very Low Density Residential and zoned Single Residential 20,000 square foot (RS-20M).

East: The site is bound to the east by Yorba Avenue followed by single-story residential housing within unincorporated San Bernardino County, designated as Very Low Density Residential and zoned Single Residential 1-Acre Minimum (RS-1).

Southeast: Residential housing within the City of Chino lies Southeast of the Project site, designated as Residential 4.5 units per acre (RD 4.5) with minimum 7,100 square foot lots.

Regional Location



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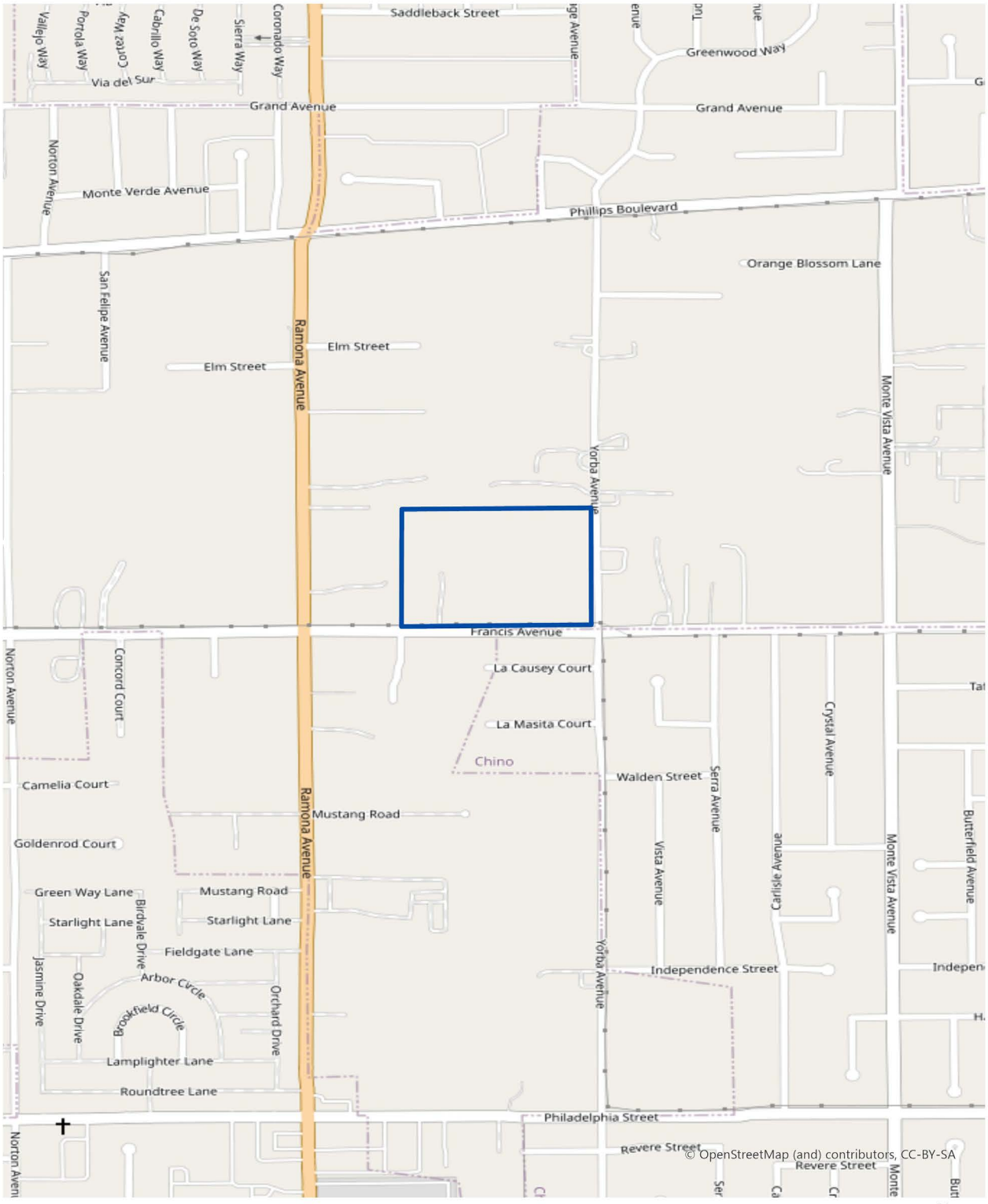
Local Vicinity



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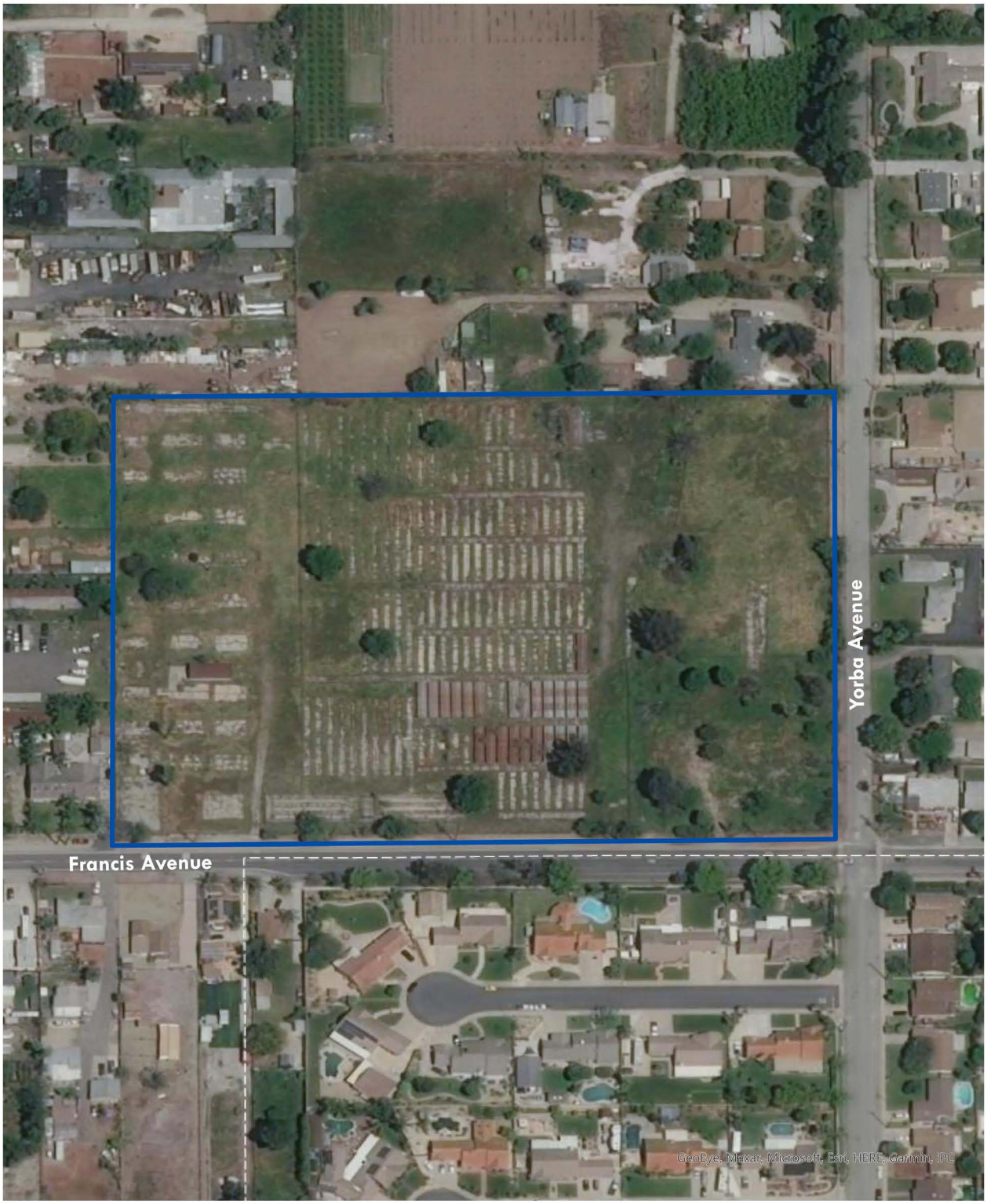
Aerial View


Yorba Avenue
Francis Avenue
GeoEye, Maxar, Microsoft, Esri, HERE, Garmin, IPC
Project Site
N

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3.3. PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide for additional market-rate housing opportunities consistent with the County's Housing Element and State housing goals.
- Facilitate high-quality development through the use of Planned Development Permit, that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development.
- Provide a new single-story single-family neighborhood that is scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods consistent with Countywide Plan Policy LU-2.1.
- Provide new sidewalks along Yorba Avenue westerly right-of-way and Francis Avenue northerly right-of-way to increase pedestrian facilities and create a walkable and bikeable environment.
- Ensure new residential development includes adequate open space and high-quality recreational amenities onsite for future residents.

3.4 PROJECT CHARACTERISTICS

"Project," as defined by the State CEQA Guidelines, means:

> the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (1) enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100–65700." (14 Cal. Code of Reg. § 15378(a).)

The Project analyzed in this Draft EIR is the adoption of the Project that would be developed in a single phase. The Draft EIR analyzes buildout at a Project level of detail, based upon the entitlement applications that are being considered by the County, compared to the existing conditions.

3.5 DESCRIPTION OF THE PROJECT

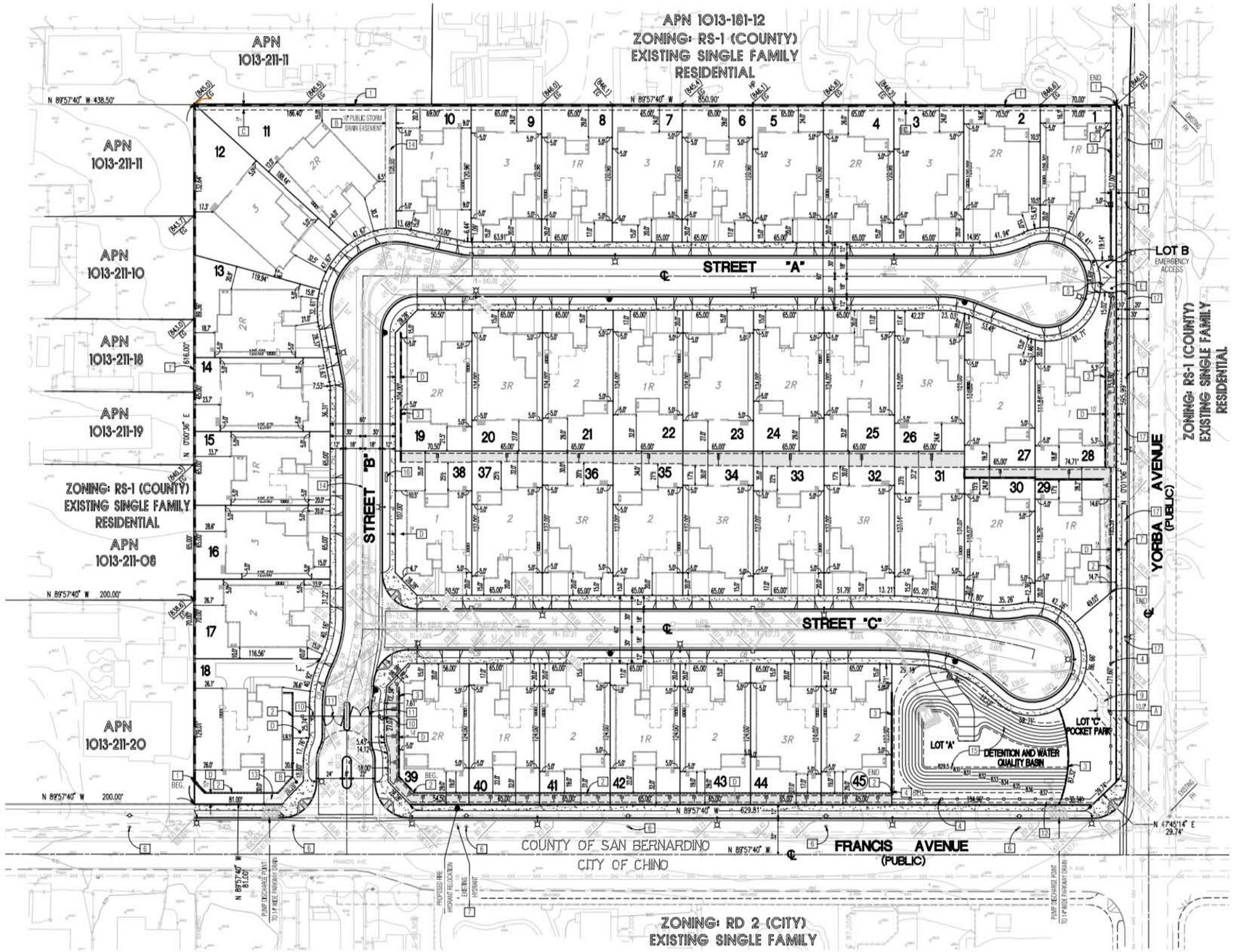
Project Overview

The applicant, Borstein Enterprises, has submitted Applications to the County of San Bernardino for a General Plan Amendment (GPA), a Zone Change (ZC), a Planned Development Permit (PDP), and a Tentative Tract Map (TTM) for the Project referred to as the Yorba Villas Residential Project. The GPA would amend the Countywide Policy Plan category from Very Low Density Residential (VLDR) which allows for a maximum of 2 dwelling units per acre to Low Density Residential (LDR) which allows for a maximum of 5 dwelling units per acre. The Zone Change would be from Single Residential 1-acre Minimum (RS-1) to Single Residential (RS) which allows for 4 units per acre. The TTM is to develop 45 single-family homes, new private streets, a small private park, street improvements (along Francis and Yorba Avenue), and on-site stormwater infrastructure. The PDP allows for flexibility in the application of Development Code standards. The purpose is to allow for innovation in site planning and other aspects of Project design, and more effective design responses to site features, uses on adjoining properties, and environmental impacts than the Development Code standards would produce without adjustment. The County expects

each Planned Development Permit Project to be of obvious, significantly higher quality than would be achieved through conventional design practices and development standards.

The TTM is proposed for 45 residential lots and two lettered lots. The proposed lot sizes would range from 7,861 square feet to 13,838 square feet, which would result in a density of 3.37 dwelling units per acre. All lots would have front and backyard landscaping, and driveways accessed from the Project's proposed internal, private streets, as depicted in Figure 3-4, C*onceptual Site Plan*.

Conceptual Site Plan



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Architectural Design

The residences would consist of three different single-story floorplans, which include attached garages, as shown in Table 3-1, below. The residences would range in size from approximately 2,820 square feet to 3,100 square feet would provide 4 to 5 bedrooms and between 3 to 3.5 bathrooms. All homes would have single story floor plans as displayed in Figures 6a through 6c.

Table 3-1: Proposed Residential Units

Floor Plan	Total Square Footage	Bedrooms	Bathrooms
Plan 1	2,820	4	3
Plan 2	3,062	4	3
Plan 3	3,100	5	3.5

The Project would provide three different architectural designs for each plan that include: Spanish Colonial, California Ranch, and Hacienda Ranch. Although the architectural features would be different for the three plans, each residence would include: concrete roof tiles, stucco finishing, shutters, over hangs, and columns.

Access and Circulation

The proposed Project would develop three private streets that would connect to Francis Avenue. The proposed onsite roadways would have a 60-foot right-of-way that would include 5-foot wide sidewalk, landscaped parkway, curb, and gutter. The Project would also construct new sidewalks along the gated Francis Avenue frontage and gated Yorba Avenue frontage.

Parking

Parking would be provided in garages, driveways, and as on-street parking. Each residence includes a minimum two-car garage (optional third car tandem available) and provides additional driveway spaces. The County requires two parking spaces, one covered parking space and one open parking space for each single-family residence. The proposed Project would exceed the parking requirements outlined in the County Development Code Section 83.11.040 and 84.18.040 and are displayed in Table 3-2 below.

Table 3-2: Proposed Parking

Type of Parking	Required	Provided[1]
Garage Spaces	1 full size garage spaces	90
Total Parking Spaces	**112.5**	**225**
Parking to Unit Ratio	**2.5/dwelling unit**	**5/dwelling unit**

[1]All provided garages have 2 full size garage spaces and one compact space; only the full-size spaces are counted

Landscaping

Landscaping proposed as part of the Project would consist of drought-tolerant trees, shrubs, and groundcover as required in the County Development Code. The Project includes street trees and landscaping along parkways. Landscaping would also be provided along Francis Avenue and Yorba Avenue.

Open Space

The conceptual open space plan includes a 6,791-square foot park in the southeast corner of the Project site that includes a turf play area, tot-lot, seating, barbecue area, bike racks, and park benches. A stormwater basin garden would be adjacent to the park. The proposed park and stormwater basin garden are shown in Figure 3-8, *Conceptual Open Space Plan*.

Walls

The proposed Project includes construction of 6-foot-high block walls on top of occasional 2 to 3-foot slopes and occasional 3-foot-high retaining walls along the Project boundaries. Backyards for the single-family residences would also be separated by 6-foot-high block walls and 6-foot-high block walls on top of 3-foot retaining walls in some rear yards. In addition, the southeast perimeters of the Project site, adjacent to the water detention area, would have 5-foot 6-inch-high tubular steel fencing.

Lighting

The Project proposes street lighting throughout the interior of the site as well as along the perimeter including the Project's street frontage along Francis Yorba Avenue. Additional residential security lighting, walkway lighting, and interior lighting would be included.

Infrastructure Improvements

The proposed Project would construct onsite infrastructure including new internal streets, curb, gutter, sidewalk, new drainage infrastructure, wet and dry utilities, and related infrastructure improvements, as follows:

Drainage

Storm water runoff in the Project vicinity currently flows from north to south. The Project would install new drainage infrastructure that would capture, convey, and/or infiltrate runoff, such that storm water runoff would not increase with implementation of the proposed Project. The Project would also install a series of grate inlets along the north property line that would route the offsite tributary storm water that flows toward the Project site from the north, into a drop grate inlet that would convey the runoff around the Project site. Runoff from onsite areas would be directed to onsite catch basins or onsite landscaped areas. The Project would include one detention and water quality basin near the southeast corner of the site. There are two alternatives that provide similar water quality and stormwater detention systems. Alternative one would include at least three feet of bio filtration soil media at the bottom of the basin and a trench filled with gravel that would result in uniform infiltration. Additional storm water storage is available in the storm drain pipe system for larger storms. Alternative two would also include at least three feet of bio filtration soil that is underlain by a system of 10-inch diameter metal pipes which would allow for a uniform distribution of water below the bio filtration soil. Either alternative would retain a 2-year 24-hour onsite storm flow and detain a 100-year 24-our storm flow.

Water Infrastructure

The Project would construct 8-inch private domestic water lines onsite to connect with existing 8-inch water mains in Yorba Avenue. The new onsite water system would be compliant with the California Plumbing Code (Title 24) for efficient use of water.

Wastewater Infrastructure

The proposed development would install new 8-inch private sewer line onsite that would connect to the existing 21-inch Inland Empire Utility Agency Regional Sewage System interceptor in Yorba Avenue. Upon annexation of the Yorba Avenue sewer collection system to the Monte Vista Water District and approval of the MVWD by the IEUA as a sewer collection agency, wastewater generated from the site would be treated by the Inland Empire Utilities Agency.

Offsite Roadway Improvements

The proposed Project would include improvements to both Yorba Avenue and Francis Avenue, as described below:

- The Yorba Avenue westerly right-of-way would be improved with installation of new pavement, a curb and gutter, a 4.5-foot wide greenspace, and a 5.0-foot wide sidewalk.
- The Francis Avenue northerly right-of-way would be improved with installation of new pavement, a curb and gutter, a 6.5-foot wide greenspace, and a 5.0-foot wide sidewalk.
- Relocating 34.5 Kilovolt electrical lines and poles along Francis Avenue and relocating and upgrading dry utility lines (electricity and telephone) along Yorba Avenue.
- Adding streetlights and handicap accessible ramps at appropriate points along sidewalk.

Construction and Phasing

Construction activities include demolition of the existing rectangular concrete pads; removal of the residential utility infrastructure; grubbing, grading, excavation and re-compaction of soils; utility and infrastructure installation; building and internal roadway construction; and architectural coatings. The excavation and grading of the Project site would result in cut and fill depths of approximately four to five feet. Grading would require an import of approximately 19,500 cubic yards of soil.

Construction activities are anticipated to last approximately 18 months and would occur within the hours allowable by the County Code Section 83.01.080, which states that construction shall occur only between the hours of 7 a.m. and 7 p.m. Monday through Saturday, with no construction allowed on Sundays and Federal holidays.

General Plan and Zoning

The Project site has an existing Countywide Plan land use designation of Very Low Density Residential (VLDR) which allows for a maximum of 2 units per acre and is zoned Single Residential 1-Acre Minimum (RS-1) that allows 1 dwelling unit per acre. Implementation of the proposed Project would require approval of a General Plan Amendment and a Zoning Map Amendment. The General Plan Amendment would redesignate the Project site from Very Low Density Residential (VLDR) to Low Density Residential (LDR). The Zoning Map Amendment would change the zoning of the Project site from Single Residential 1-Acre Minimum (RS-1) to Single Residential (RS).

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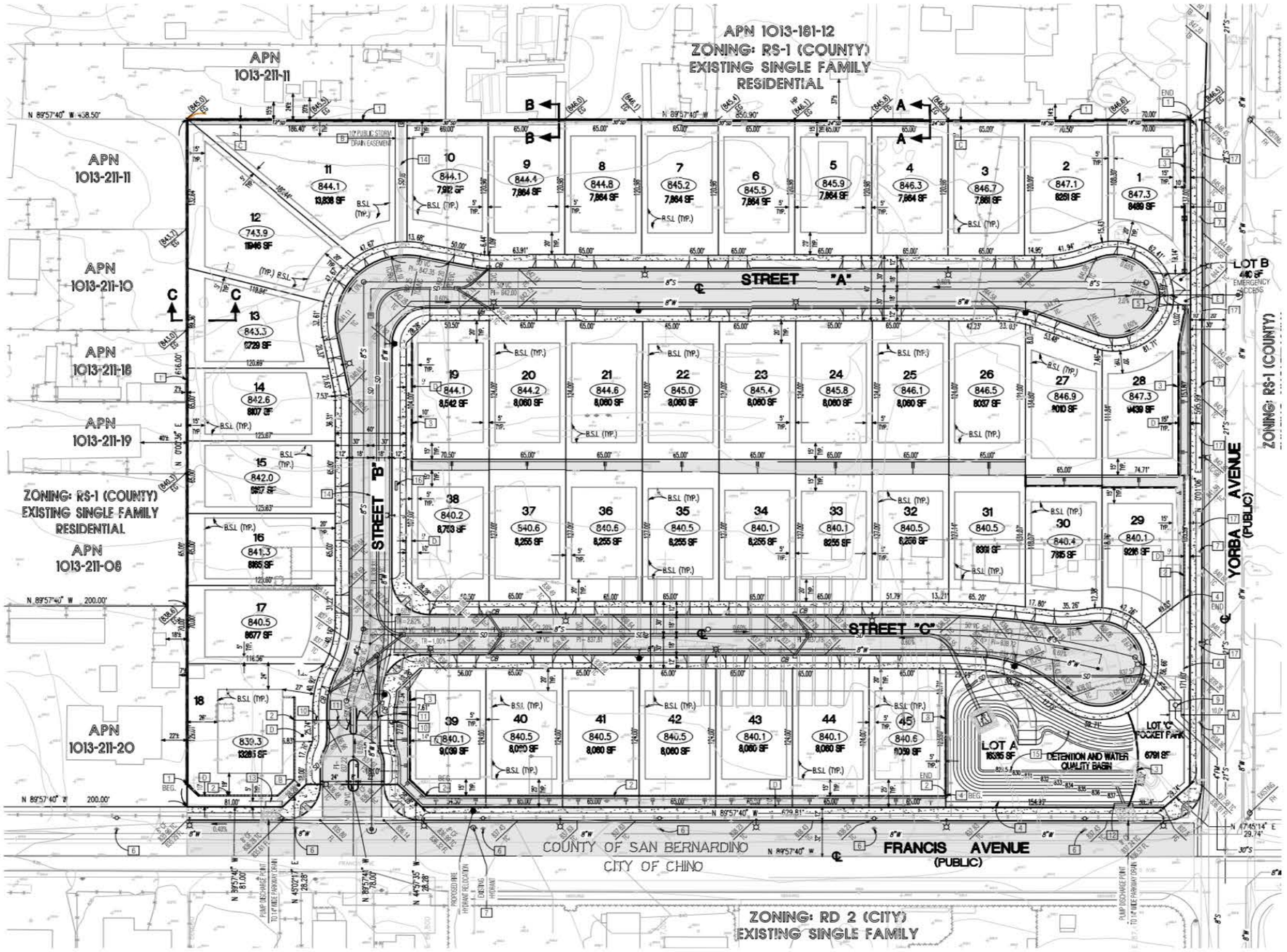
Tentative Tract Map



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REAR

FRONT

PLAN 1
'A' -SPANISH COLONIAL ELEVATIONS

REAR

FRONT

PLAN 1
'B' -CALIFORNIA RANCH ELEVATIONS

REAR

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PLAN 1
'C' -HACIENDA RANCH ELEVATIONS

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REAR

FRONT

PLAN 2
'A' -SPANISH COLONIAL ELEVATIONS

REAR

FRONT

PLAN 2
'B' -CALIFORNIA RANCH ELEVATIONS

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PLAN 2
'C' -HACIENDA RANCH ELEVATIONS

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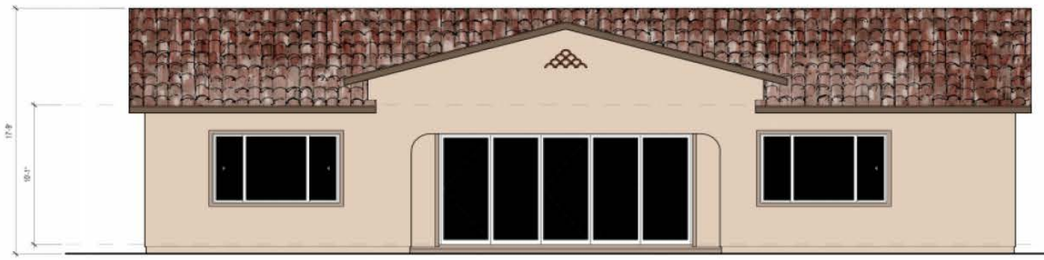

REAR

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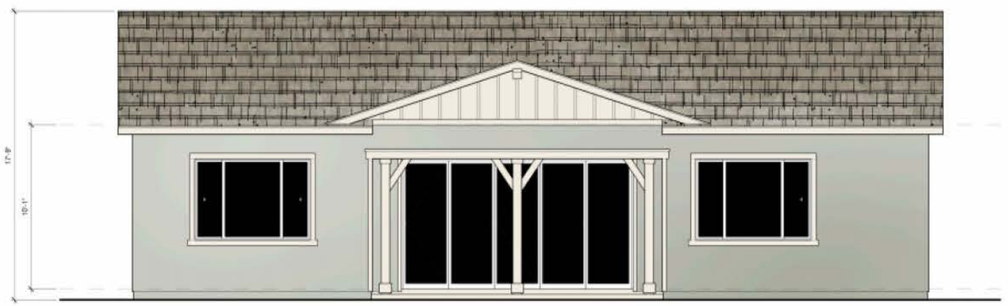
PLAN 3
'A' -SPANISH COLONIAL ELEVATIONS



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PLAN 3
'B' -CALIFORNIA RANCH ELEVATIONS

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PLAN 3
'C' -HACIENDA RANCH ELEVATIONS

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Conceptual Landscape Plan

Lot A : Stormwater Basin Garden

N

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Conceptual Open Space Plan

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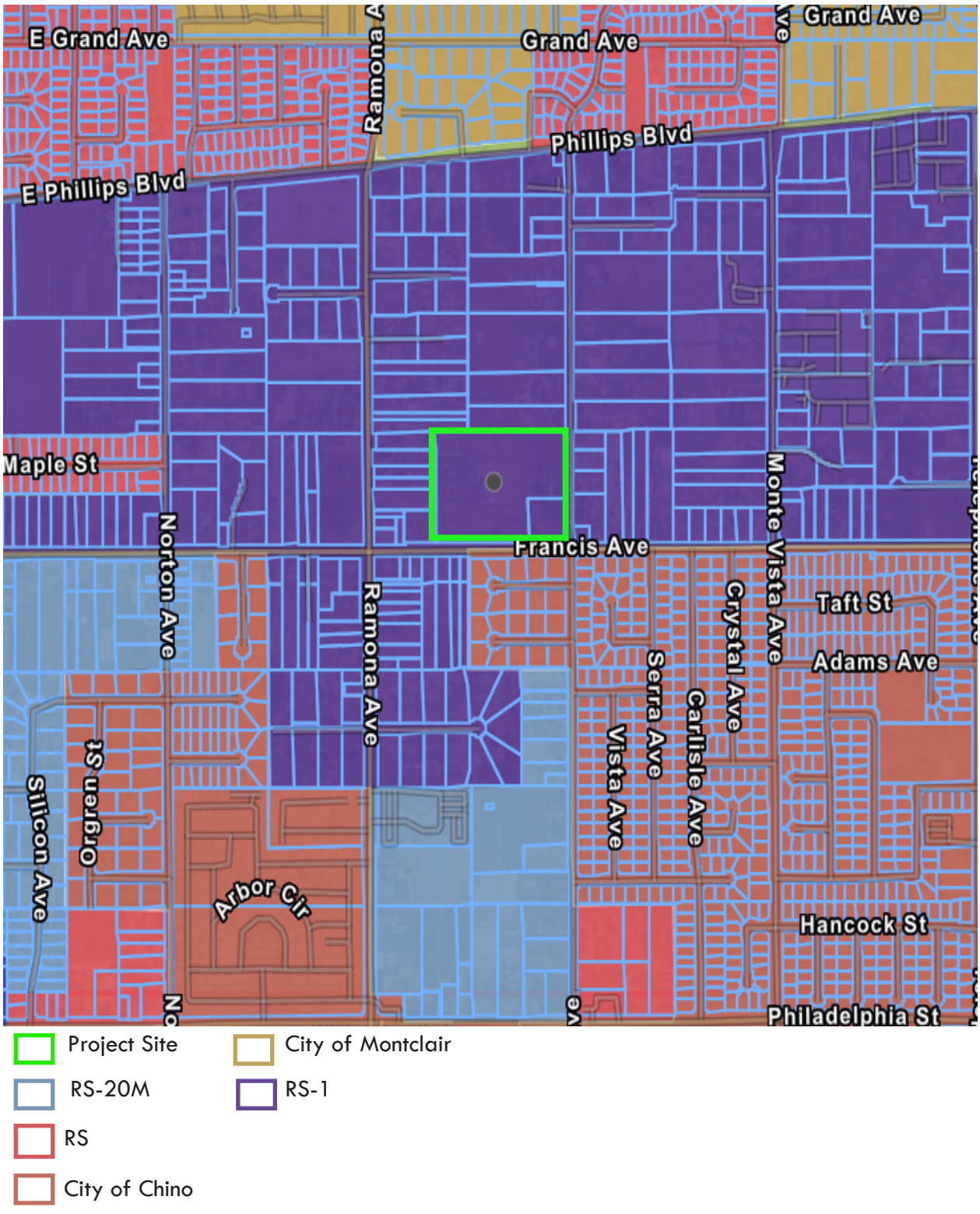
Existing Zoning Designations



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3.6 PROJECT DESIGN FEATURES AND EXISTING PLANS, PROGRAMS, OR POLICIES

Throughout the impact analysis in this EIR, reference is made to existing Plans, Programs, or Policies (PPPs) currently in place which effectively reduce environmental impacts. Where applicable, PPPs are listed to show their effect in reducing potential environmental impacts. The Project proponent has also incorporated into the Project various measures which serve to reduce potentially significant impacts. These voluntary measures are referred to as Project Design Features (PDFs) and are identified and discussed in the impact analysis. Where the application of these measures does not reduce an impact to below a level of significance, Project-specific mitigation is introduced. The County will include these PPPs and PDFs along with mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for the Project to ensure their implementation.

3.7 GOVERNING DOCUMENTS AND INTENDED USES OF THE EIR

Development and operation of the Yorba Villas Residential Project will be governed by the following:

- The County of San Bernardino Countywide Plan, as amended, which establishes policies governing land use, circulation, housing, noise, and safety throughout the County.

This EIR is intended to serve as the primary environmental document for all actions associated with the proposed Project, including all discretionary approvals requested or required to implement the Project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed Project.

This EIR examines the potential environmental impacts of the proposed Project and will be considered by the County and others in adopting and implementing the Project. The function of the EIR is to enable the County of San Bernardino, other responsible agencies, and interested parties to evaluate the environmental impacts of the proposed Project and make informed decisions with respect to the requested entitlements.

3.8 DISCRETIONARY APPROVALS AND PERMITS

As part of the proposed Project, the following discretionary actions are required:

- **Certification of this Environmental Impact Report**
- **General Plan Amendment** to increase the allowed density from Very Low Density Residential (VLDR) to Low Density Residential (LDR)
- **Zoning Map Amendment** to change the zoning from Single Residential 1-acre Minimum (RS-1) to Single Residential (RS)
- **Tentative Tract Map Approval** to subdivide the Project site into 45 numbered lots for residential use and 2 lettered lots for emergency vehicle access

Approvals and permits necessary to execute the proposed Project, including but not limited to:

- **Site Plan Approval** to review and approve the location, design, configuration, and impact of the proposed development of the Project.
- **Planned Development Permit** to allow for reduced setbacks from Development Code Standards

- **Grading Permits** to allow for excavation (cut) and embankment (fill) grading activities
- **Encroachment Permits and right-of-way improvements** to improve frontage of Francis and Yorba Avenue
- **Septic System Removal Permit** to allow for removal of the septic system remnants on site

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4. Environmental Setting

The purpose of this section is to provide a "description of the physical environmental conditions in the vicinity of the Project, as they exist at the time the Notice of Preparation (NOP) is published, from both a local and a regional perspective" pursuant to CEQA Guidelines Section 15125(a). In addition to the summary below, detailed environmental setting descriptions are provided in each subsection of Section 5 of this Draft EIR.

4.1 PROJECT LOCATION

The Project site is located at 4570 Francis Avenue, Chino, CA (APN: 1013-211-21, 1013-211-22) in unincorporated San Bernardino County. The Project site is bound by Francis Avenue to the south and Yorba Avenue to the east.

The Project area is surrounded by unincorporated San Bernardino County, which borders three sides of the Project area, the City of Chino is located to the south-east, and the City of Montclair is approximately ¼ mile to the north. As shown on Figure 3-1 in Section 3.0, *Project Description,* the Project site is approximately 0.8 mile north of State Route 60 (SR-60) and 3.7 miles east of State Route 71 (SR-71). The site is regionally accessed from SR-60 and the Ramona Avenue interchange, and from SR-71 and the Philadelphia Street interchange. Local access to the Project site is provided by Francis Avenue as seen in Figure 3-2, *Local Vicinity*.

4.2 PROJECT SITE DESCRIPTION

The 13.35 gross acre Project site consists of two parcels. The parcel on the corner of Francis and Yorba Avenue (the southeastern most portion of the Project site) was developed with a single-family residence; a guest cottage, swimming pool, storage shed, mobile home, bird cage area, and a horse stable, but in 2018 the owner demolished all structures, and the site is currently an empty lot.

The second parcel is coterminous with the first and is roughly divided into three sections: 1) the western section, 2) the middle section, and 3) the eastern section. The western portion of the site was developed with approximately 28 small single-family residences between 1938 and 1997. The structures in this area were demolished in 1997 (Tetra Tech 2016); however, some of the concrete slabs remain onsite.

In 1960, the central portion of the site was developed into a rabbit farm that operated until 2002. Since the closure of the rabbit farm in 2002, the vacant portion of the site has been utilized as grazing land for goats raised on a nearby site. The middle section also contains numerous elongated concrete slabs. The eastern section of the vacant parcel is undeveloped vacant land that was used for goat grazing. An aerial of the Project site is shown in Figure 3-3, *Aerial View*.

The Project site has a Countywide Plan Land Use designation of Very Low Density Residential (VLDR) and is zoned Single Residential 1-Acre Minimum (RS-1).

4.3 AESTHETICS

Scenic Vistas: Scenic vistas are panoramic views of important visual features, as seen from public viewing areas. The San Bernardino Countywide Plan aims to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.

The Project site and surrounding areas are urbanized and do not contain any sensitive scenic vistas. Distant public views of the San Gabriel Mountains to the north and Chino Hills to the south and southwest are visible from the Francis Avenue and Yorba Avenue roadway corridors.

State Scenic Highways: There are no officially designated state scenic highways in the vicinity of the proposed Project (Caltrans 2019). The closest Eligible State scenic highway (not officially designated) is State Route 71 (Caltrans 2019), which is located approximately 10 miles south of the Project site and is not visible from the Project site. Likewise, there are no County-designated scenic highways that run through the Project vicinity.

Visual Character of Project Site: The Project site is within the Riverside-San Bernardino Urbanized Area, according to the Census 2020 Urbanized Area Outline Maps (Census 2020). The visual character of the Project site consists of numerous concrete pads and vacant land. The vegetation on site includes scattered ornamental trees and grasses. Chain-link fencing surrounds the Project site.

Visual Character of Surrounding Area: The existing visual character of the area surrounding the Project site is urban. There is no consistent architectural or visual theme within the surrounding area and significant visual resources are limited.

The Project site is bound to the east by Francis Avenue and the south by Yorba Avenue. The parcels adjacent to the Project site directly southwest of Francis Avenue include single-story residences with various architectural styles. The parcels directly east of Yorba Avenue include multiple homes per lot. The City of Chino is located to the southeast of the Project site and includes residential houses with brick walls and various hedges along Francis Avenue. Along the west and north property line, there are residential homes, commercial storage, truck storage, and goat keeping.

Light and Glare. The Project site is largely undeveloped and does not consist of any sources of nighttime lighting. However, the Project site is surrounded by sources of nighttime lighting including streetlights along Francis Avenue, illumination from vehicle headlights, offsite exterior residential lighting, and interior illumination passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians. Sensitive receptors relative to lighting and glare include motorists and pedestrians passing through the Project area.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the Project site that presently generate substantial glare since most of the buildings are limited to one-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

4.4 CULTURAL RESOURCES

Historic. In the late 1700s, the Project area consisted of lands that were affiliated with the Mission San Luis Rey, however most land was managed as outlying ranches known as “asistencias”. Soon after American control was established (1848), gold was discovered in California. There was a tremendous influx of Americans and Europeans, and western Riverside County saw development of hard rock mining for gold. Several mineral rights were issued around this time, however none within the Project area. Around the same time, Riverside County was settled by homesteaders and farmers, and quickly became a diversified agricultural area with citrus, grain, grapes, poultry, and swine being the leading commodities. In 1881, former miner Richard Gird bought the Rancho Santa Ana del Chino and Chino Addition and began planting

various crops including sugar beets. It is possible that the lands in the Project area were used to grow sugar beets for many years, and then converted to pasture or alfalfa land once the Chino Valley Sugar Beet Factory closed in 1917 or 1918. In the late 1930s, the State of California began to realize that the three existing state prison facilities (San Quentin, Folsom, and the new women's prison at Tehachapi) would soon be overcrowded, so an ambitious plan to build new prisons led the State to purchase large quantities of farmland in the Chino area. Today, California Department of Corrections and Rehabilitation runs the California Institution for Men in Chino and the California Institution for Women off Chino-Corona Road to the southeast. About the same time, Chino Airport was first developed as a training base prior to World War II; "Cal Aero Field" was one of four airports developed as part of the Curtis Wright Technical Institute based at the Glendale Airport. The United States Army Air Force contracted with the school to provide primary flight training for Army Air Cadets just before and throughout the war. The dairy industry flourished from the 1950s through the 1980s, with dairy-friendly zoning in the southwest corner of San Bernardino County encouraging many ethnic Dutch families to relocate there and become the cornerstone of the industry (MCC 2020).

Project Site. The Phase I Environmental Site Assessment that was prepared for the Project site (Tetra Tech 2016) describes that between the years of 1938 and 1960, the Project site was used for residential and agricultural purposes, mainly orchards and dry farming. In 1960, the central portion of the site was developed as a rabbit farm that operated until approximately 2002, while the residential parcel of the site was improved with at least two residential structures that were demolished in 2018. Numerous residential structures occupied the western portion of the site from 1938 to 1997 and were demolished in 1997. After closure of the rabbit farm in 2002, the vacant parcel of the site has been utilized as grazing land for an adjacent goat farm (Tetra Tech 2016).

The Project site consists of two vacant parcels which contained concrete slabs, a maintenance shed, and several animal pens associated with the rabbit farm until 2018. A cultural report was prepared in 2016, and approved by the City of Chino, and determined that none of the structures were historic. As a result, in 2018, the owner demolished all structures, and the site is currently an empty lot with concrete slabs and scattered trees. The vacant parcel of the site is roughly divided into three sections: 1) the western section, 2) the middle section, and 3) the eastern section. The western section of the parcel was observed to be improved by numerous small rectangular concrete pads and a maintenance shed utilized for storage of materials associated with the goats currently grazing the site. The middle section of the vacant parcel was observed to be improved by numerous elongated concrete slabs and several animal pens associated with the former rabbit farm located on this portion of the site, beehives, and a small vacant maintenance shed. The eastern section of the vacant parcel was observed as undeveloped vacant land. The Project site does not include any historic structures or other resources (MCC 2020). In addition, the Project site is not adjacent to any historic structures. Areas surrounding the site consist of residential housing.

Archaeologic. Most researchers agree that the earliest occupation for the Chino area dates to the early Holocene (11,000 to 8,000 years ago). The material culture related to this time included scrapers, hammer stones, large flaked cores, drills, and choppers, which were used to process food and raw materials.

Around 8,000 years ago, subsistence patterns changed, resulting in a material complex consisting of an abundance of milling stones (for grinding food items) with a decrease in the number of chipped stone tools. The material culture from this time period includes large, bifacially worked dart points and grinding stones, handstones and metates. This Encinitas Tradition includes Topanga Pattern in coastal Los Angeles and Orange counties, the La Jolla Pattern in coastal San Diego County, and the Sayles or Pauma cultures in inland San Diego County extending into western San Bernardino County, where the Project is located (MCC 2020).

At approximately 3,500 years ago, Pauma groups in the general vicinity of the Project area adopted new cultural traits which transformed the archaeological site characteristics - including mortar and pestle technology. This indicated the development of food storage, largely acorns, which could be processed and saved for the leaner, cooler months of the year.

At approximately 1,500 years ago, bow and arrow technology started to emerge, and the Palomar Tradition is attributed to this time. The Palomar Tradition is characterized by soapstone bowls, arrowhead projectile points, pottery vessels, rock paintings, and cremation sites. The shift in material culture assemblages is largely attributed to the emergence of Shoshonean (Takic-speaking) people who entered California from the east.

4.7 GEOLOGY AND SOILS

Regional Setting. The Project site is located within the Chino Basin in the northern portion of the Peninsular Range geomorphic province of California. Major structural features surround this region, including the Cucamonga fault and the San Gabriel Mountains to the north, the Chino fault and Puente/Chino Hills to the west, and the San Jacinto fault to the east. This is an area of large-scale crustal disturbance as the relatively northwestward-moving Peninsular Range Province collides with the Transverse Range Province (San Gabriel and San Bernardino Mountains) to the north (GEO 2019).

The Project site is underlain by younger alluvial soil deposits eroded from the mountains surrounding the basin and deposited in the site vicinity (GEO 2019).

Faults and Ground Shaking. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to cross the site. The closest active fault to the Project site is the Chino-Elsinore fault, which is located approximately 3 miles to the southwest (GEO 2019).

However, all of southern California is seismically active. The amount of motion expected at a building site can vary from none to forceful depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located on poorly consolidated material such as alluvium located near the source of the earthquake epicenter or in response to an earthquake of great magnitude.

Onsite Soils. The Geotechnical Report describes that the site is underlain by alluvial soil deposits mantled in areas of the site by minor amounts of goat manure. The manure was generally less than approximately one inch thick. The alluvial soil encountered within the excavations generally consisted of combinations of sand and silt, with some gravel interspersed. The soil was generally moist and medium dense. The in-situ moisture content within the upper approximately 15 feet generally ranged from 1 to 10 percent.

Liquefaction and Settlement. Liquefaction occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, has an inability to support weight, and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Clayey (cohesive) soils or soils which possess clay particles in excess of 20 percent are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table. Lateral spreading refers to spreading of soils in a rapid fluid-like flow movement similar to water.

The Geotechnical Report identifies that the State of California has not prepared liquefaction hazard maps for this area. However, the San Bernardino County Geologic Hazards Map does not show the site in a zone

of susceptibility for liquefaction. Onsite soils include combinations of sand and silt, with some gravel interspersed. In addition, the depth of groundwater is deeper than 51.5 feet below ground surface (bgs) and the historic high groundwater levels are approximately 200 feet bgs (GEO 2019).

Based on these onsite soils and groundwater conditions, the Geotechnical Report determined that the seismic settlement potential is estimated to be 1 inch or less; and differential seismic settlement is estimated to be less than ½ an inch over a horizontal span of about 40 feet (GEO 2019).

Lateral Spreading. Lateral spreading is a type of liquefaction induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

As described previously the Project site contains combinations of sand and silt, with some gravel interspersed that are not susceptible to liquefaction. In addition, groundwater was estimated to be approximately 200 feet below ground surface (bgs), which is not conductive to effects related to liquefaction and lateral spreading, which require groundwater or liquefied soils to exist. based on the relatively flat topography of the site and general lack of potentially liquefiable layers, the Geotechnical Report determined that the potential for lateral spreading on the site is low (GEO 2019).

Subsidence. Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and occur in areas with subterranean oil, gas, or groundwater. Effects of subsidence include fissures, sinkholes, depressions, and disruption of surface drainage. Ground water has been historically approximately 200 feet bgs at the Project site. As such, the potential for subsidence within the Project site is low.

Landslides. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquake induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

The Geotechnical Report describes that the Project site is generally level without significant slopes. The site is not considered susceptible to static slope instability or seismically induced landslides (GEO 2019). In addition, the Project site is not adjacent to any hills or slopes that could be subject to a landslide.

Expansive Soils. Expansive soils are soils containing water-absorbing minerals that expand as they take in water. These soils can damage buildings due to the force they exert as they expand. Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience a much higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture.

The near surface soils consist of sands and silty sands, and the near-surface soil is anticipated to have a very low expansion potential (GEO 2020).

Paleontological Resources. Paleontological resources include any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include any materials associated with an archaeological resource or any cultural item defined as Native American human remains. Significant

paleontological resources are defined as fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or important to define a particular time frame or geologic strata, or that add to an existing body of knowledge in specific areas, in local formations, or regionally.

The primary geological setting of the San Bernardino Valley area is defined by sediment accumulated from erosion of the surrounding highlands (i.e., the Jurupa Mountains, Chino Hills, and San Jacinto Mountains to the south and the San Bernardino Mountains to the north and northeast), and the upper layers of the younger alluvium found in the valley are generally too young to preserve fossil resources; however, the deeper layers and underlying sediments have high paleontological sensitivity (Placeworks, 2019).

The Project site is underlain by younger Quaternary alluvium, derived as alluvial fan deposits from San Gabriel Mountains to the north, probably via the San Antonio Creek drainage area that currently flows to the west of the Project site (MCC 2020). These younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but they are usually underlain by older Quaternary alluvium that may contain significant fossil vertebrate remains (MCC 2020). Thus, grading within the initial five feet will have a low potential for paleontological sensitivity and increase to moderate/unknown potential below five feet in depth below the ground surface (MCC 2020).

4.9 HAZARDS AND HAZARDOUS MATERIALS

From 1938 until approximately 1960, the Project site was used for residential and agricultural purposes, mainly orchards and dry farming. In 1960, the central portion of the site was developed as a rabbit farm that operated until approximately 2002, while the residential parcel of the site was improved with three residential structures that were demolished in 2018. Numerous residential structures occupied the western portion of the Site from 1938 to 1997 and were demolished in 1997. After closure of the rabbit farm in 2002, the vacant parcel of the Site has been utilized as grazing land for an adjacent goat farm (ESA 2016). The Project site is currently vacant and contains concrete slabs associated with former developments.

Former Underground Storage Tanks. The Phase I ESA (Phase I 2016) describes that a former underground storage tank (UST) was located in the southwest portion of the Project site. The Phase II investigation reported that petroleum hydrocarbons (TPH) and volatile organic compounds were not detected above regulatory guidelines near the UST at shallow depths. In addition, a Phase II subsurface investigation concluded that the UST does not constitute a recognized environmental condition (REC).

Septic Systems. Two septic systems were identified on the Project site during the Phase I and Phase II investigation, which determined that they are not a hazardous materials concern.

Pesticides from Agricultural Use. As described previously, the Project site was previously used for residential and agricultural purposes, mainly orchards and dry farming from 1938 to 1960. A wide variety of pesticides may have been used during this period. Accordingly, the noted agricultural use onsite may have included contaminants of concern, such as organochlorine pesticides (OCPs) and arsenic, which have impacted soil in the undeveloped portions of the Site.

The Phase II ESA found that onsite soils contain concentrations of OCPs, including: 4,4'-DDE, 4,4'-DDT, and dieldrin that exceed Regional Screening Levels in shallow soils throughout the southwestern portion of the site (shown in Figure 5.5-1). In addition, concentrations of dieldrin were found to exceed Regional Screening Levels along the southern and western portions of the site (Tetra Tech 2016).

4.10 HYDROLOGY AND WATER QUALITY

Watershed. The Project site is in the Santa Ana River Watershed. The watershed is located south and east of Los Angeles and includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north and west by the Mojave and San Gabriel watersheds. The Santa Ana River watershed is divided into smaller specific watersheds. This watershed is in an arid region and therefore has little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed, primarily in the San Bernardino and San Gabriel mountains. This upper zone has the highest gradient and soils and geology that do not allow large quantities of percolation of surface water into the ground. A variety of downstream water storage reservoirs (Lake Perris, Lake Mathews, and Big Bear Lake) and flood control areas (Prado Dam area and Seven Oaks Dam area) have been created to hold surface water.

The Santa Ana River watershed is regulated by the Santa Ana Regional Water Quality Control Board (RWQCB). The Santa Ana RWQCB manages a large watershed area, which includes most of San Bernardino County to the east and then southwest through northern Orange County to the Pacific Ocean. The Santa Ana RWQCB's jurisdiction encompasses 2,800 square miles.

Groundwater Basin. The Project site is located in the Chino Subbasin of the Upper Santa Ana Groundwater Basin. The Chino Basin is one of the largest groundwater basins in southern California and encompasses about 235 square miles of the Upper Santa Ana River watershed. It lies within portions of San Bernardino, Riverside, and Los Angeles counties. The Chino Basin has approximately 5 to 7 million-acre feet of water in storage and an estimated 1 million acre-feet of additional unused storage capacity. Prior to 1978, the Basin was in overdraft. After 1978, the Basin has been managed via adjudication by the Chino Basin Watermaster.

Water Quality Impairments: Section 303(d) of the federal CWA requires states to identify water bodies that are "impaired," or those that do not meet water quality standards and are not supporting their beneficial uses. Total Maximum Daily Loads (TMDLs) are then designed to serve as pollution control plans for these specific pollutants.

Receiving waters for the Project site include the San Antonio Channel, Chino Creek Reach 1B, Prado Dam, Santa Ana River Reach 1, Santa Ana River Reach 2, Newport Slough, and Pacific Ocean. The Newport Slough has been placed on the 303(d) list for indicator bacteria and the Chino Creek Reach 1B has been placed on the 303(d) list for nutrients.

The County of San Bernardino has adopted the EPA's National Pollutant Discharge Elimination System (NPDES) regulations in an effort to reduce pollutants in urban runoff and stormwater flows. The Santa Ana RWQCB issued the County a Municipal Separate Storm Sewer System (MS4) Permit (Order No. R8-2010-0036), which establishes pollution prevention requirements for planned developments. The County participates in an Area-wide Urban Stormwater Runoff Management Program to comply with the MS4 Permit requirements. Runoff from the development upland site is managed and regulated under the NDPES MS4 Permit and associated Storm Water Management Program.

Groundwater Supply. Groundwater from the Chino Basin provides approximately 50 percent of the water supply. The remaining supply comes from the Monte Vista Water District through imported water. The Chino Basin was adjudicated by the California Superior Court in 1978 to regulate the amount of groundwater that can be pumped from the basin by creating the Chino Basin Watermaster to oversee management of water rights. The Monte Vista Water District currently has base water rights of 4,824 AFY. The District also owns the Monte Vista Irrigation Company, which has 677 AFY of base rights and receives its share of unpumped

agricultural rights. In addition, the District has rights to "carry over" supplies of water that was previously not used (UWMP 2015).

Storm Drainage Facilities. The Project site is currently 40 percent impervious and 60 percent pervious (WQMP 2021). The existing topography of the Project site is relatively flat and generally drains from the north to the south. There is no existing storm drain system near the Project site and existing stormwater that does not infiltrate into the site's pervious surfaces runs via sheet flow to Francis Avenue.

Soil Infiltration. Onsite soils infiltration testing was performed during preparation of the Geotechnical Report, which determined that soils have an infiltration rate of 0.3 to 13 inches per hour. Based on these infiltration rates, the onsite silty soils or soils with a higher fines content are not considered feasible for infiltration. Sandy soils with a low fines content are anticipated to have higher infiltration rates; however, sandy soils underlain by finer-grained soils are not considered suitable (GEO 2019).

Flood Zone, Tsunami, and Seiche. The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the Project area (06059C0279J) shows that the Project site is located within "Zone X," which is an area of minimal flood hazard potential outside of the 0.2 percent annual chance flood.

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The Project site is over 30 miles from the Pacific Ocean, and outside of the Tsunami Hazard Zone identified by the California Department of Conservation (DOC 2020).

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. There are no water bodies in the vicinity of the Project site, and no existing risks related to seiche flood hazards exist on or near the site.

4.11 LAND USE AND PLANNING

Project Site. The Project site is located within an urban area that consists of fully developed areas and areas that are planned for urban development. As shown in Figure 3-9, Existing Countywide Plan Designations, the Project Site has a land use designation of Very Low Density Residential (VLDR). The Land Use Element describes that the VLDR land use designation has a primary purpose to allow for very low density residential uses when developed as single-family neighborhoods that can share common infrastructure, public facilities, and services. Typical uses include single-family residential uses, public facilities, and incidental agriculture. Development within the VLDR category has a maximum of 2 units per acre. The Project site is zoned Single Residential 1-Acre Minimum (RS-1) that allows 1 dwelling unit per acre. The Single Residential land use zoning district provides sites for single-family residential uses, incidental agricultural and residential uses, and similar and compatible uses.

The Project site consists of two parcels totaling 13.35-ares comprised of disturbed vacant land with concrete slabs from previous developments. The site has scattered trees throughout the Project site with various shrubs and grasses.

Surrounding Uses. The surrounding uses, described below, consist of residential housing. Figure 3-3, *Aerial View* shows the existing and surrounding uses at the Project site.

West and North: Along the west and north property line there are residential homes, commercial storage, truck storage, and goat keeping.

South: Francis Avenue bounds the site to the south, followed by single-family residential houses within the City of Chino.

East: Yorba Avenue bounds the Project site to the east, followed by parcels with multiple residential houses per lot.

4.12 NOISE

Noise. To assess the existing noise levels, 24-hour noise level measurements were taken in the vicinity of the Project site as shown in Figure 5.8-1 in Section 5.8, *Noise*. The field survey noted that noise within the proposed Project area is generally characterized by vehicle traffic on Francis Avenue that is adjacent to the south side of the Project site and Yorba Avenue that is adjacent to the east side of the Project site. The average noise levels adjacent to the Project site are between 60.5 dBA CNEL and 66.7 dBA CNEL.

Sensitive Receptors. Noise sensitive receptors are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: residences, schools, hospitals, and recreation areas. The nearest sensitive receptor to the Project site is a single-family home located approximately 15 feet to the north of the Project site. There is also a single-family home located approximately 20 feet west of the Project site. The nearest school is EJ Marshall Elementary School that is located approximately 0.6 mile to the southeast of the Project site.

4.17 TRIBAL CULTURAL RESOURCES

Native American Tribes. The territory of the Gabrieleño at the time of Spanish contact covers much of current-day Los Angeles, San Bernardino, and Orange Counties, which includes the Project site in the County of San Bernardino. The southern region of this cultural area is bound by Aliso Creek, the eastern region is located east of San Bernardino along the Santa Ana River, the northern region includes the San Fernando Valley, and the western region includes portions of the Santa Monica Mountains. The Gabrieleño also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in southern California. Trade of materials and resources controlled by the Gabrieleño extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California.

The Gabrieleño lived in permanent villages and smaller, resource-gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. Gabrieleño houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses—semicircular, earth covered buildings—were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a yuvar, an open-air structure built near the chief's house.

Hunting implements included wooden clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush (*Juncus sp.*), deer grass (*Muhlenbergia rigens*), and skunkbush (*Rhus trilobata*).

The social structure of the Gabrieleño is little known; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays.

Rivers and streams were used as trading routes and travel routes as they provided resources. Thus, many tribal cultural resources are found along rivers, streams, and other known travel or trade routes. The Project site does not include, and is not located near a river, stream, or identified corridor that could have been a travel or trade route.

Project Site Ground Disturbances. The Phase I Environmental Site Assessment that was prepared for the Project site describes that between the years of 1938 to 1960, the vacant parcel of the site was used for orchards and dry farming. In 1960, the central portion of the subject site was developed as a rabbit farm that operated until 2002. Numerous structures, presumably residences, occupied the western portion of the subject Site from at least 1938 until 1997. The structures were demolished circa 1997. The eastern portion of the subject Site was occupied by a residence from at least 1938 until 1977, when it was demolished and has remained vacant land to the present day. After closure of the rabbit farm in 2002, the vacant parcel of the Site has been utilized as grazing land by an adjacent goat farm.

The Geotechnical Report that was prepared for the Project describes that the site is underlain by alluvial soil deposits mantled in areas of the site by minor amounts of goat manure. Shallow soil disturbances occurred in agricultural areas. Shallow remnant foundations reside in the western portion of the site.

Prior to development of the site structures that were demolished in 2018, the Project site and adjacent areas were used for agriculture, which resulted in shallow soil disturbances.

REFERENCES

2020/2021 Biological Assessment Update for Francis Avenue Residential Development Project located in San Bernardino County, California. Prepared by Hernandez Environmental Services, 2021 (Hernandez 2021). Appendix A.

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County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

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Phase I Cultural and Paleontological Resources Assessment, 2020. Prepared by Material Culture Consulting (MCC 2020). Appendix C.

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Preliminary Hydrology Study for Tentative Tract No. 20394 (MDS 2021). Prepared by MDS Consulting, 2021. Appendix F.

Preliminary Water Quality Management Plan for Tentative Tract No. 20394 (APN 1013-211-21 and 1013-211-22) (WQMP 2021). Prepared by MDS Consulting, 2021. Appendix G.

San Bernardino County Geologic Hazards Maps. Accessed:
http://cms.sbcounty.gov/lus/planning/zoningoverlaymaps/geologichazardmaps.aspx

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San Bernardino County Development Code. Accessed:
https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-77511

Tree Preservation Report for Yorba Villas Residential, Chino. Prepared by Arborgate Consulting, Inc., 2020 (Arborgate 2020).

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5.0 Environmental Impact Analysis

Chapter 5 examines the environmental setting of the Project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area that was determined to need further study in the Draft EIR. This scope was determined in the Notice of Preparation (NOP), which was published June 1, 2021, and through public and agency comments received during the NOP comment period that ended on July 5, 2021 (see Appendix A). Environmental issues and their corresponding sections are:

5.1 Aesthetics
5.2 Biological Resources
5.3 Cultural Resources
5.4 Geology and Soils
5.5 Hazards and Hazardous Materials
5.6 Hydrology and Water Quality
5.7 Land Use and Planning
5.8 Noise
5.9 Tribal Cultural Resources

This Draft EIR evaluates the direct and indirect impacts resulting from the planning, construction, and operations of the Project. Under CEQA, EIRs are intended to focus their discussion on significant impacts and may limit discussion of other impacts to a brief explanation of why the impacts are not significant.

Format of Environmental Topic Sections

Each environmental topic section generally includes the following main subsections:

- **Introduction:** This describes the purpose of analysis for the environmental topic and referenced documents used to complete the analysis. This subsection may define terms used.
- **Regulatory Setting:** This subsection describes applicable federal, state, and local plans, policies, and regulations that the Project must address and may affect its implementation.
- **Environmental Setting:** This subsection describes the existing physical environmental conditions (environmental baseline) related to the environmental topic being analyzed.
- **Thresholds of Significance:** This subsection sets forth the thresholds of significance (significance criteria) used to determine whether impacts are "significant." The thresholds of significance used to assess the significant of impacts are based on those provided in Appendix G of the CEQA Guidelines.
- **Methodology:** This subsection provides a description of the methods used to analyze the impact and determine whether it would be significant or less than significant.
- **Environmental Impacts:** This subsection provides an analysis of the impact statements for each identified significance threshold. The analysis of each impact statement is organized as follows:
    - A statement of the CEQA threshold being analyzed,
    - The Draft EIR's conclusion as to the significance of the impact.
    - An impact assessment that evaluates the changes to the physical environment that would result from the Project.
    - An identification of significance comparing identified impacts of the Project to the significance threshold with implementation of existing regulations, prior to implementation of any required mitigation.

- **Cumulative Impacts:** This subsection describes the potential cumulative impacts that would occur from the Project's environmental effects in combination with other cumulative projects (See Table 4-8).

- **Existing Regulations and Regulatory Requirements.** A list of applicable laws and regulations that would reduce potentially significant impacts.

- **Level of Significance Before Mitigation.** A determination of the significance of the impacts after the application of applicable existing regulations and regulatory requirements.

- **Mitigation Measures.** For each impact determined to be potentially significant after the application of applicable laws and regulations, feasible mitigation measure(s) to be implemented are provided. Mitigation measures include enforceable actions to:
    - avoid a significant impact;
    - minimize the severity of a significant impact;
    - rectify an impact by repairing, rehabilitating, or restoring the effected physical environment;
    - reduce or eliminate the impact over time through preservation and/or maintenance operations during the life of the Project; and/or
    - compensating for the impact by replacing or providing substitute resources or environmental conditions.

- **Level of Significance after Mitigation.** This section provides the determination of the impact's level of significance after the application of regulations, regulatory requirements, and mitigation measures.

Impact Significance Classifications

The below classifications are used throughout the impact analysis in this Draft EIR to describe the level of significance of environmental impacts. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on definitions consistent with CEQA and the CEQA Guidelines.

- **No Impact.** The Project would not change the environment.
- **Less Than Significant.** The Project would not cause any substantial, adverse change in the environment.
- **Less Than Significant with Mitigation Incorporated.** The Draft EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and Unavoidable.** The Project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1 Aesthetics

5.1.1 INTRODUCTION

This section describes the existing visual setting and aesthetic character of the Project site and vicinity and evaluates the potential for the Project to impact scenic vistas, visual character and quality, and light and glare. This analysis focuses on changes that would be seen from public viewpoints and provides an assessment of whether aesthetic changes from implementation of the Project would result in substantially degraded aesthetic conditions. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan*, October 2020
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, August 2020
- *County of San Bernardino Development Code*

Aesthetics Terminology

- **Aesthetic Resources** include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that provide an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include visual character, scenic resources, and scenic vistas. These factors together not only describe the intrinsic aesthetic appeal of an area, but also communicate the value placed upon a landscape or scene by its observers.
- **Scenic Resources** are visually significant hillsides, ridges, water bodies, and buildings that are critical in shaping the visual character and scenic identity of the area and surrounding region.
- **Scenic Vistas** are defined as panoramic views of important visual features, as seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting.
- **Visual Character** broadly describes the unique combination of aesthetic elements and scenic resources that characterize a particular area. The quality of an area's visual character can be qualitatively assessed considering the overall visual impression or attractiveness created by the particular landscape characteristics. In urban settings, these characteristics largely include land use type and density, urban landscaping and design, architecture, topography, and background setting.

5.1.2 REGULATORY SETTING

5.1.2.1 Local Regulations

County of San Bernardino Countywide Plan

The County recently adopted the Countywide Plan to serve as their General Plan. County policies pertaining to visual character are contained in the Land Use and Natural Resources Elements of the 2020 adopted Countywide Plan. The following goals and policies from the Countywide Plan are relevant to the proposed Project:

Policy LU-2.1 Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and

adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.

Policy LU-2.3 Compatibility with natural environment. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.

Policy LU-2.4 Land use map consistency. We consider proposed development that is consistent with the Land Use Map (i.e., it does not require a change in Land Use Category), to be generally compatible and consistent with surrounding land uses and a community's identity. Additional site, building, and landscape design treatment, per other policies in the Countywide Plan and development standards in the Development Code, may be required to maximize compatibility with surrounding land uses and community identity

Policy LU-4.3 Native or drought-tolerant landscaping. We require new development, when outside of high and very high fire hazard severity zones, to install and maintain drought-tolerant landscaping and encourage the use of native species.

Policy LU-4.5 Community identity. We require that new development be consistent with and reinforce the physical and historical character and identity of our unincorporated communities, as described in Table LU-3 and in the values section of Community Action Guides. In addition, we consider the aspirations section of Community Action Guides in our review of new development.

Policy NR-4.1 Preservation of scenic resources. We consider the location and scale of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.

Policy V/H-1.1 Housing compatibility. We encourage housing types and designs that are compatible with established land use patterns and the environment of the region, including single-family dwellings, mobile home parks/manufactured homeland leased communities, and apartments.

County of San Bernardino Development Code

- Chapter 83.02 (General Development and Use Standards). This chapter provides development standards that ensure an environment of stable and desirable character that is harmonious and compatible between existing and future development. Sections within this chapter detail requirements pertaining to maximum building heights, screening and buffering, setbacks, and allowed projections/structures within setbacks.
- Chapter 83.06 (Fences, Hedges, and Walls). This chapter establishes requirements for fences, hedges, and walls to ensure that these elements do not unnecessarily block views and sunlight; provide adequate buffering between different land uses, provide screening of outdoor uses and equipment; and provide for noise mitigation. Overall, the requirements are designed to provide aesthetic enhancement of the County. This chapter of the code discusses requirements for fences, hedges, and walls, including maximum height limit, walls required between different land uses, special wall/fencing for different uses, and prohibited fence materials.
- Chapter 83.07 (Glare and Outdoor Lighting). This chapter encourages outdoor lighting practices and systems that minimize light pollution, glare, and light trespass; conserve energy and resources while maintaining nighttime safety, visibility, utility and productivity; and curtail the degradation of the nighttime visual environment. Section 83.07.030 provides standards for outdoor lighting in the Valley Region.

- Chapter 83.10 (Landscaping Standards). The purpose of this chapter is to enhance the aesthetic appearance of the County by providing standards related to the quality and functional aspects of landscaping. In addition to enhancing the aesthetic quality of the County, the landscaping standards are intended to benefit air and water quality, help prevent and manage erosion, offer fire protection, and replace valuable ecosystems that may be lost during development. These standards also encourage water conservation, efficient water management, natural vegetation preservation, and more.
- Chapter 83.13 (Sign Regulation). This chapter establishes regulations for signs and other exterior advertising formats helping to improve the appearance of the County and protect public and private investment in structures and open space.
- Chapter 87.01 (Subdivisions). This Division constitutes the San Bernardino County Subdivision Ordinance. These provisions are intended to supplement, implement, and work with the Subdivision Map Act, Government Code §§ 66410 et seq. (hereafter referred to as the "Map Act"). This Division is not intended to replace the Map Act, and must be used in conjunction with the Map Act in the preparation of subdivision applications, and the review, approval, and improvement of proposed subdivisions.

5.1.3 ENVIRONMENTAL SETTING

Aesthetic resources include a combination of numerous elements, such as landforms, vegetation, water features, urban design, and/or architecture, that impart an overall visual impression that is pleasing to, or valued by, its observers. Factors important in describing the aesthetic resources of an area include visual character, scenic resources, and scenic vistas. These factors together not only describe the intrinsic aesthetic appeal of an area, but also communicate the value placed upon a landscape or scene by its observers.

Scenic Vistas

Scenic vistas are panoramic views of important visual features, as seen from public viewing areas. The San Bernardino Countywide Plan aims to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.

The Project site and surrounding areas are urbanized and do not contain any sensitive scenic vistas. Distant public views of the San Gabriel Mountains to the north and Chino Hills to the south and southwest are visible from the Francis Avenue and Yorba Avenue roadway corridors.

State Scenic Highway

There are no officially designated state scenic highways in the vicinity of the proposed Project (Caltrans 2019). The closest Eligible State scenic highway (not officially designated) is State Route 71 (Caltrans 2019), which is located approximately 10 miles south of the Project site and is not visible from the Project site. Likewise, there are no County-designated scenic highways that run through the Project vicinity.

Visual Character of the Project Site

The visual character of the Project site consists of numerous concrete pads and vacant land. The vegetation onsite includes scattered ornamental trees and grasses. Chain-link fencing surrounds the Project site.

Visual Character of Adjacent Areas

The existing visual character of the area surrounding the Project site is urban. There is no consistent architectural or visual theme within the surrounding area and there is minimal intrinsic aesthetic appeal.

The Project site is bound to the east by Francis Avenue and the south by Yorba Avenue. The parcels adjacent to the Project site directly southwest of Francis Avenue include single-story residences with various architectural styles. The parcels directly east of Yorba Avenue include multiple homes per lot. The City of Chino is located to the southeast of the Project site and includes residential houses with brick walls located along Francis Avenue. Along the west and north property line, there are residential homes, commercial storage, truck storage, and goat keeping.

Urbanized Area

For an unincorporated area, Public Resources Code Section 21071(b) defines "urbanized area" as being completely surrounded by one or more incorporated cities and meeting both criteria:

> (i) The population of the unincorporated area and the population of the surrounding incorporated city or cities equals not less than 100,000 persons.
>
> (ii) The population density of the unincorporated area at least equals the population density of the surrounding city or cities.

Based on these criteria, the Project is located within an urbanized area for purposes of determining if the Project would conflict with applicable zoning and other regulations governing scenic quality.

Light and Glare

The Project site is undeveloped and does not include any sources of nighttime lighting. However, the Project site is surrounded by sources of nighttime lighting that includes streetlights along Francis Avenue, illumination from vehicle headlights, offsite exterior residential lighting, and interior illumination passing through windows. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians. Sensitive receptors relative to lighting and glare include motorists and pedestrians passing through the Project area.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the Project site that presently generate substantial glare since most of the buildings are limited to one-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

5.1.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of the State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

- AE-1 Have a substantial adverse effect on a scenic vista?
- AE-2 Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?
- AE-3 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?

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

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the aesthetics issue areas identified below (refer to Thresholds of Significance list above). For each issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds AE-1
- Threshold AE-2

Therefore, no further assessment of these impacts is required in this Draft EIR.

5.1.5 METHODOLOGY

Aesthetic resources were assessed based on the visual quality of the Project site and surrounding area and the changes that would occur from implementation of the proposed Project. The significance determination for scenic vistas is based on consideration of whether the vista can be viewed from public areas within or near the Project site and the potential for the Project to either hinder views of the scenic vista or result in visual degradation.

The assessment of aesthetic character and quality impacts is subjective by nature. Aesthetic character and quality generally refer to the identification of visual resources and the overall visual perception of the environment. The evaluation of aesthetic character identifies the proposed Project's development characteristics and its expected appearance, and compares it to the site's existing appearance and character, and to the character of adjacent existing and future planned uses to determine whether and/or to what extent a degradation of the visual character of the area from public view points could occur (considering factors such as the blending/contrasting of new and existing buildings given the proposed uses, architectural features, density, scale, height, bulk, setbacks, signage, etc.).

The analysis of light and glare identifies light-sensitive land uses and describes the Project's proposed light and glare sources, and the extent to which Project lighting, including illuminated signage, could spill off the Project site onto adjacent existing and future light-sensitive areas. The analysis also considers the potential for sunlight to reflect off building surfaces (glare) and the extent to which such glare would interfere with the operation of motor vehicles or other activities.

5.1.6 ENVIRONMENTAL IMPACTS

IMPACT AE-3: WOULD THE PROJECT IN NON-URBANIZED AREAS, SUBSTANTIALLY DEGRADE THE EXISTING VISUAL CHARACTER OR QUALITY OF PUBLIC VIEWS OF THE SITE AND ITS SURROUNDINGS? (PUBLIC VIEWS ARE THOSE THAT ARE EXPERIENCED FROM PUBLICLY ACCESSIBLE VANTAGE POINT). IF THE PROJECT IS IN AN URBANIZED AREA, WOULD THE PROJECT CONFLICT WITH APPLICABLE ZONING AND OTHER REGULATIONS GOVERNING SCENIC QUALITY?

Less than Significant Impact.

As mentioned previously, the Project site is located within an urbanized area as defined by Public Resources Code Section 21071(b). As described previously, the Project site is directly adjacent to Yorba Avenue, Francis Avenue, and single-family residential development. The Project site consists of remnant foundations

and vacant land. The existing character of the site and surrounding area is neither unique nor of special aesthetic value or quality.

Countywide Plan. The Project site currently has a Countywide Plan land use designation of Very Low Density Residential (VLDR) which allows for a maximum of 2 units per acre. The proposed Project includes a Policy Plan Amendment to change the designation of the site to Low Density Residential, allowing for up to 5 dwelling units per acre. The Project proposed to develop 45 new single-family residences, resulting in a density of 3.75 units per acre. The Project proposes lots ranging in size from 7,861 SF to 13,838 SF. The proposed Low Density Residential designation would be compatible with the surrounding single-family, residential uses which have a land use designation of VLDR. Although the proposed Low Density Residential designation allows for development of residential uses to a maximum density of 5 dwelling units per acre compared to the VLDR of 2 dwelling unit per acre, the surrounding land uses include similar size lots ranging from multiple units per lot to the east of Yorba Avenue, 16,400 SF lots to the south of Francis Avenue, lots averaging 7,500 SF to the southeast, and 20,000 SF to 30,000 SF lots to the west.

Zoning. The Project site is currently zoned Single Residential 1-Acre Minimum (RS-1), which allows a density of 1 dwelling unit per acre. The proposed Project includes a Zoning Amendment to change the designation from RS-1 to Single Residential (RS) which allows for 4 units per acre. As shown in Table 5.1-1, with approval of a planned development permit, the proposed Project is consistent with the RS development standards.

Table 5.1-1: Proposed Project Consistency with RS Development Standards

Development Feature	Requirement by Zoning District	Provided by Project
Maximum Density:	4 units per acre	3.75 units per acre
Setbacks:	Front: 25 ft Rear: 15 ft Street Side: 15 ft; Collector or wider:25 ft Interior Side: 5 ft on one side, 10 ft on other side	Front: 15 ft to 32.5 ft.* Rear: 15 ft to 33.7 ft. Street side: 5 ft to 26 ft Interior: range 5 ft on both sides to 5 ft on one side and 10 ft on the other side* *Approval of the planned development permit would allow flexibility in the side setbacks required by the RS zone.

Maximum Lot Coverage	Lot less than 20,000 sq. ft - Entire building envelope; Lot of 20,000 sq. ft. or larger - 40 percent	Approval of the policy plan, zone change, tentative tract map and planned development would result in 45 numbered lots for residential use ranging from 7,861 SF to 13,838 SF and 3 lettered lots for emergency access, a pocket park, and detention and water quality basin. The maximum lot coverage proposed would be 55 percent.
Height Limit	35 feet	Maximum height of 19 feet, 2 inches.
Garage Parking Spaces	2 Parking Spaces including 1 Covered (90 spaces)	90 spaces
Total Parking Spaces	90	225
Parking to Unit Ratio	2.0/dwelling unit	5/dwelling unit

In addition, the Project would be consistent with the Countywide Plan Land Use Element policies related to scenic quality, as shown in Table 5.1-2.

Table 5.1-2: Consistency with Goals and Policies Related to Scenic Quality

Countywide Plan Policy	Proposed Project Consistency with Policy
Land Use Element	
Policy LU-2.1 Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.	**Consistent.** The proposed Project would be compatible with the surrounding existing residential uses and is designed to minimize negative impacts on existing conforming uses by screening the residential housing with the use of 6-foot-high block walls on top of 3-foot-high retaining walls along the northern and western Project boundaries. A 6-foot-high block wall would be included along the eastern and southern boundaries of the Project. In addition, landscaping would be provided along Francis Avenue and Yorba Avenue.
Policy LU-2.3 Compatibility with natural environment. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.	**Consistent**. The proposed Project would comply with the setbacks outlined in Table 5.1-1 to scale and buffer the proposed single-family residences from the single-family residences to the north and west. In addition, the Project site is within an urban area and would be compatible with the surrounding environment. Thus, the Project is consistent with Policy LU-2.3.
Policy LU-2.4 Land use map consistency. We consider proposed development that is consistent with the Land Use Map (i.e., it does not require a	**Consistent**. The proposed Project includes a Policy Plan Amendment to change the land use designation of Very Low Density Residential (VLDR) to Low

change in Land Use Category), to be generally compatible and consistent with surrounding land uses and a community's identity. Additional site, building, and landscape design treatment, per other policies in the Countywide Plan and development standards in the Development Code, may be required to maximize compatibility with surrounding land uses and community identity.	Density Residential (LDR) which would allow for more units per acre. A Zoning Amendment would change the zoning of the Project site from Single Residential 1-Acre Minimum (RS-1) to Single Residential (RS). The proposed Project would comply with the development standards of the Development Code. In addition, the residential uses would remain the same and would be consistent with the surrounding land uses and community's identity. The surrounding land uses include similar size lots ranging from multiple units per lot to the east of Yorba Avenue, 16,400 SF lots to the south of Francis Avenue, lots averaging 7,500 SF to the southeast, and 20,000 SF to 30,000 SF lots to the west. Thus, the proposed Project is consistent with Policy LU-2.4.
Policy LU-4.3 Native or drought-tolerant landscaping. We require new development, when outside of high and very high fire hazard severity zones, to install and maintain drought-tolerant landscaping and encourage the use of native species.	**Consistent.** According to California's Fire Hazard Severity Zones (FHSZ), the proposed Project is not within a FHSZ. This development would provide landscaping consisting of drought-tolerant trees and shrubs. Thus, the proposed Project is consistent with Policy LU-4.3.
Policy LU-4.5 Community identity. We require that new development be consistent with and reinforce the physical and historical character and identity of our unincorporated communities, as described in Table LU-3 and in the values section of Community Action Guides. In addition, we consider the aspirations section of Community Action Guides in our review of new development.	**Consistent.** Table LU-3 defines the valley community character as a suburban lifestyle characterized by a mix of lot sizes and/or land uses in proximity to urban services and facilities as well as economic activity that benefits local residents and/or serves the local economy. The proposed Project is consistent with benefiting local residents by providing housing. The Project includes residential lot sizes ranging from 7,861SF to 13,838 SF. Thus, the proposed Project is consistent with Policy LU-4.5.
Policy NR-4.1 Preservation of scenic resources. We consider the location and scale of development to preserve regionally significant scenic vistas and natural features, including prominent hillsides, ridgelines, dominant landforms, and reservoirs.	**Consistent.** Obstructed views of the Angeles National Forest mountain ranges are visible traveling north on Yorba Avenue. The proposed Project would not obstruct existing views of the San Bernardino Mountains from Yorba Avenue. . Thus, the Project is consistent with Policy NR-4.1.
Policy V/H-1.1 Housing compatibility. We encourage housing types and designs that are compatible with established land use patterns and the environment of the region, including single-family dwellings, mobile home parks/manufactured home land leased communities, and apartments.	**Consistent.** The proposed Project would consist of single-story single-family residences that would provide three different architectural designs including Spanish Colonial, California Ranch, and Hacienda Ranch. The housing types and designs would be compatible with the surrounding land uses. Thus, the Project is consistent with Policy V/H-1.1.

As demonstrated above, the proposed Project would be consistent with the development standards required by the RS zoning district and Low Density Residential land use designations as well as the Countywide Plan policies related to scenic quality.

Overall, the Project is located within an urbanized area and would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts would be less than significant. In addition, as the Project would utilize the vacant land and develop single-family housing, which is consistent with the land

uses adjacent to the site, the Project would increase the visual cohesion between the Project site and the surrounding single-family residential area. Hence, the proposed Project would not degrade the visual character of the Project site and surrounding area; and impacts would be less than significant.

IMPACT AE-4: WOULD THE PROJECT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE THAT WOULD ADVERSELY AFFECT DAY AND NIGHTTIME VIEWS IN THE AREA?

Less than Significant Impact. The Project site is largely undeveloped and does not contain lighting sources. However, the Project site is surrounded by sources of nighttime lighting that includes streetlights along Francis Avenue, illumination from vehicle headlights, offsite exterior residential lighting, and interior illumination passing through windows of nearby homes. Sensitive receptors relative to lighting and glare include residents, motorists, and pedestrians.

The proposed Project would include installation of new lighting sources on the Project site that would include exterior lighting for streetlights, residential security lighting, walkways lighting, interior lighting, which could be visible through windows to the outside and headlights from vehicles. In addition, the Project would result in additional vehicular trips after sunset, which would temporarily and intermittently increase lighting in the street corridor and may affect existing residences that are adjacent to the streets. However, the lighting from vehicle headlights is focused on a downward trajectory and would be intermittent and for a short period of time; therefore, impacts related to vehicle headlights would be less than significant.

The requirements of Section 83.07.030 Glare and Outdoor Lighting in the County's Development Code limit the potential for light trespass on an abutting residential land use, residential parcel, or public right-of-way. In addition, direct or indirect light from any light fixture shall not cause glare above five-tenths foot-candles when measured at the property line of a residential land use zoning district, residential parcel, or public right-of-way. With compliance with the County's Development Code, the County's plan check, and Project permitting process, impacts related to increased sources of light would be less than significant.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the Project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the Project site that presently generate substantial glare since most of the buildings are limited to one-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

As described above, the exterior of the proposed residences would be finished in a palette of earth-toned colors, and consist of stucco with cement roof tiles, which are not reflective surfaces. Additionally, installation of outdoor lighting would be required to meet the requirements in Section 83.07.030 Glare and Outdoor Lighting in the County's Development Code, which would reduce the potential to generate glare from new lighting fixtures. As a result, the proposed Project would not create a substantial source of glare, and impacts would be less than significant.

5.1.7 CUMULATIVE IMPACTS

Visual Character and Site Quality

The cumulative aesthetics study area for the proposed Project is the viewshed from public areas that can view the Project site and locations that can be viewed from the Project site. The conversion of the Project site from disturbed vacant land to residential uses would contribute to a change in the visual characteristics of

the area. As discussed previously, implementation of the land uses approved by the Policy Plan amendment would substantially change the existing visual character of the Project site. However, the Project would be compliant with the County's Development Code and Countywide Plan, which would minimize aesthetic impacts related to the planned land uses. Pursuant to the County's Countywide Plan implementation of the proposed Project would represent a consistent and logical continuation of the planned pattern of development in unincorporated San Bernardino County.

The cumulative change in visual condition that would result from the proposed Project, in combination with future nearby projects would not be considered adverse, because the proposed Project would implement the County's Countywide Plan and Development Code regulations related to architecture, landscaping, signs, lighting, and other related items that are intended to improve visual quality. Thus, the proposed Project would result in a less than significant cumulatively considerable impact related to degradation of the existing visual character or quality of the site and its surroundings.

The cumulative study area for light and glare are areas immediately adjacent to the Project site that could receive light or glare from the Project or could generate daytime glare or nighttime lighting that would be visible within the Project site and could combine with lighting from the Project. Because cumulative projects would result in more intense development than currently exists, the proposed Project, in combination with past, present, and reasonably foreseeable future projects could create significant cumulative nighttime lighting and daytime glare impacts. However, application of the County's Development Code regulations require compliance with light and glare standards that would avoid significant effects. These regulations provide that lighting would be shielded to prevent light from shining onto adjacent properties or inclusion of features that could create glare. With implementation of the existing County regulations, the development that would occur by the related projects would not result in a cumulatively considerable contribution of light and glare. Thus, the cumulative effects of development from the Project in combination with cumulative projects related to light and glare are less than significant.

Light and Glare

The cumulative study area for light and glare are areas immediately adjacent to the Project site that could receive light or glare from the Project or could generate daytime glare or nighttime lighting that would be visible within the Project site and could combine with lighting from the Project. Because cumulative projects would result in more intense development than currently exists, the proposed Project, in combination with past, present, and reasonably foreseeable future projects could create significant cumulative nighttime lighting and daytime glare impacts. However, application of the County's Development Code Section 83.07.030 require compliance with light and glare standards that would avoid significant effects.

With implementation of the existing County of San Bernardino Regulations, the development that would occur by the related projects would not result in a cumulatively considerable contribution of light and glare. Thus, the cumulative effects of development from the Project in combination with cumulative projects related to light and glare would be less than significant.

5.1.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- County of San Bernardino Development Code
- County of San Bernardino Countywide Plan

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.1.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and the proposed Project's design criteria, Impacts AE-1 through AE-4 would be less than significant.

5.1.10 MITIGATION MEASURES

No mitigation measures are required.

REFERENCES

Caltrans California Scenic Highway System Map (Caltrans 2019). Accessed: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

County of San Bernardino Development Code. Accessed: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-72092#JD_83.07.030

5.2 Biological Resources

5.2.1 INTRODUCTION

This section addresses potential environmental effects of the proposed Project related to biological resources. The information and analysis herein rely on the following technical reports and documents regarding the biological resources and conditions of the Project site:

- *County of San Bernardino Countywide Plan*, October 2020
- General Biological Resources Assessment (Psomas 2016), Psomas, July 27, 2016 (Appendix B).
- 2020/2021 Biological Assessment Update for Francis Avenue Residential Project located in San Bernardino County, California (Hernandez 2020), Hernandez Environmental Services, July 19, 2021 (Appendix B).
- Tree Preservation Report (Arborgate 2021), Arborgate Consulting, Inc., January 28, 2021 (Appendix C).
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), Placeworks, August 2020

Biological Resources Terminology

- **Endangered Species.** The term "endangered species" means any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.
- **Threatened Species.** The term "threatened species" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Within this Draft EIR, the following terms and acronyms are used to identify federal status species:

- Federally listed as Endangered (FE).
- Federally listed as Threatened (FT).
- Federally proposed for listing as Endangered (FPE)
- Federally proposed for listing as Threatened (FPT)
- Federally proposed for delisting (FPD)
- Federal candidate species (former C1 species) (FC)

Within this Draft EIR, the following terms and acronyms are used to identify state special-status species:

- State-listed as Endangered (SE)
- State-listed as Threatened (ST)
- State-listed as Rare (SR)
- State candidate for listing as Endangered (SCE)
- State candidate for listing as Threatened (SCT)
- State Fully Protected (SFP)
- California Species of Special Concern (SSC)

5.2.2 REGULATORY SETTING

5.2.2.1 Federal Regulatory Setting

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 defines an endangered species as "any species which is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA, unless properly permitted, it is unlawful to "take" any endangered or threatened listed species. "Take" is defined in Section 3(18) of FESA as: "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a federal agency for an action which could affect a federally listed plant or animal species, the property owner and agency are required to consult with USFWS pursuant to Section 7 of the FESA if there is a federal nexus or consult with USFWS and potentially obtain a permit pursuant to Section 10 of the FESA in the absence of a federal nexus. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

Bald and Golden Eagle Protection Act (BGEPA)

The BGEPA was enacted in 1940 and prohibits anyone from "taking" bald and golden eagles (including their parts, nests, or eggs) without a permit from the Secretary of the Interior. BGEPA imposes criminal penalties and defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb" (16 USC 668 et seq.). The USFWS recommends that Project proponents prepare an eagle conservation plan to mitigate impacts to eagles.

Executive Order 13112, Invasive Species

Under this order, agencies must identify actions that may affect the status of invasive species. Federal agencies may not authorize, fund, or carry out actions that would introduce or spread invasive species unless they determine that the benefits would outweigh the harm, make that determination public, and use all feasible and prudent measures to minimize risk of harm.

Plant Protection Act of 2000

The act (7 USC § 7701 et seq.) established a federal program to control the spread of noxious weeds. The Secretary of Agriculture publishes a list of designated noxious weeds that cannot be moved through interstate or foreign commerce except under permit.

Noxious Weed Act of 1974

This act (7 USC § 2814), as amended, provides for the control and management of nonindigenous weeds

that injure or have the potential to injure the interests of agriculture and commerce, wildlife resources, or the public health. The Secretary of Agriculture has authority to designate plants as noxious weeds; to inspect, seize, and destroy products; and to quarantine areas if necessary to prevent the spread of such weeds.

Lacey Act

This act (16 USC 3371 et. seq.) protects plants and wildlife by creating civil and criminal penalties for a wide variety of violations, including illegal take, possession, transport, or sale of protected species.

Federal Clean Water Act, Section 401/ California Porter-Cologne Water Quality Control Act

Section 401 of the CWA requires that any applicant for a federal permit for activities that involve a discharge to waters of the state shall provide the federal permitting agency with 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 CWA. As such, before the United States Army Corps of Engineers (USACE) will issue a CWA Section 404 permit, applicants must apply for and receive a Section 401 water quality certification (WQC) from the regional RWQCB. The RWQCB regulates "discharging waste, or proposing to discharge waste, within any region that could affect "waters of the state" (Water Code Section 13260 (a)), pursuant to provisions of the Porter-Cologne Water Quality Control Act which defines RWQCB jurisdictional "waters of the state" as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code Section 13050 (e)).

With the exception of isolated waters and wetlands, most discharges of fill to waters of the state are also subject to a CWA Section 404 permit. If a CWA Section 404 permit is not required for the Project, the RWQCB may still require issuance of Waste Discharge Requirements (WDR) under the Porter-Cologne Water Quality Control Act. The RWQCB may regulate isolated waters that are not under jurisdiction of the USACE through issuance of WDR's. However, Projects that obtain a Section 401 WQC are simultaneously enrolled in a statewide general WDR. Processing of Section 401 WQC's generally requires submittal of 1) a construction storm water pollution prevention plan (SWPPP), 2) a final water quality technical report that demonstrates that post-construction storm water Best Management Practices (BMPs) comply with the local design standards for municipal storm drain permits (MS4 permits) implemented by the State Water Resources Control Board effective January 1, 2011, and 3) a conceptual Habitat Mitigation and Monitoring Plan (HMMP) to compensate for permanent impacts to RWQCB waters, if any. In addition to submittal of a CEQA document, a WQC application typically requires a discussion of avoidance and minimization of impacts to RWQCB jurisdictional resources, and efforts to protect beneficial uses as defined by the local RWQCB basin plan for the Project. The RWQCB cannot issue a Section 401 WQC until the Project CEQA document is certified by the lead agency.

Federal Clean Water Act, Section 404

Section 404 of the CWA regulates the discharge of dredged material, placement of fill material, or excavation within "waters of the U.S." and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. "Waters of the U.S." are defined by the CWA as "rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands." Wetlands are defined by the CWA as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions." The permit review process entails an assessment of potentially adverse impacts to USACE jurisdictional "waters of the U.S." However, the USACE does not have regulatory authority over non-navigable, isolated, intrastate waters such as mudflats, sandflats, wetlands, prairie potholes, wet meadows, playa lakes, natural ponds, and vernal pools, which are not hydrologically connected to other intra- or inter-state "waters of the U.S."

5.2.2.2 State Regulatory Setting

California Endangered Species Act

Under the California's Endangered Species Act (CESA), California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se but warrant consideration in the preparation of biological resource assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest areas.

Natural Community Conservation Planning Act

The statutory framework (Fish and Game Code § 2800 et seq.) for natural community conservation plans (NCCP), which provide long-term, landscape-scale protection for natural vegetation communities and wildlife diversity. It supports collaborative planning and approval by local governments, state and federal agencies, environmental organizations, landowners, and members of the public.

California Rare Plant Ranks (CRPR)

The California Native Plant Society (CNPS) maintains a list of special-status plant species based on collected scientific information. Although CNPS's designations have no legal status or protection under federal or state endangered species legislation (CNPS 2015), three designations meet the criteria of Section 15380 of the CEQA Guidelines—CRPR 1A, plants presumed extinct; CRPR 1B, plants rare, threatened, or endangered in California and elsewhere; and CRPR 2, plants rare, threatened, or endangered in California, but more numerous elsewhere.

State of California Fish and Game Code, Sections 3503.5, 3511, 3515

Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

State of California Fish and Game Code, Section 1602

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, state or local government agency, or public utility) who proposes a Project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake to notify the California Department of Fish and Wildlife (CDFW) of the proposed Project. In the course of this notification process, the CDFW will review the proposed Project as it affects streambed habitats within the Project area. The CDFW may then place conditions in the Section 1602 Streambed Alteration Agreement to avoid, minimize, and mitigate any potentially significant adverse impacts within CDFW jurisdictional limits.

Native Plant Protection Act of 1977

This act (Fish and Game Code § 1900 et seq.) directed CDFW to "preserve, protect and enhance rare and endangered plants in this State." It gave the California Fish and Game Commission the power to designate

native plants as "endangered" or "rare" and protect endangered and rare plants from take. CESA, which came later, entered all "rare" animals as "threatened" species, but not rare plants. Thus, there are three listings for plants in California: rare, threatened, and endangered. Because rare plants are not included in CESA, mitigation measures for impacts to rare plants are specified in a formal agreement between CDFW and the Project proponent.

5.4.2.3 Local Regulatory Setting

San Bernardino Countywide Plan

The Natural Resources Element of the Countywide Plan contains the following policies that are applicable to the Project:

Policy NR 5.1 We participate in landscape-scale habitat conservation planning and coordinate with existing or proposed habitat conservation and natural resource management plans for private and public lands to increase certainty for both the conservation of species, habitats, wildlife corridors, and other important biological resources and functions and for land development and infrastructure permitting.

Policy NR 5.5 We require that new development satisfy habitat conservation responsibilities without shifting conservation responsibilities onto military property.

Policy NR 5.6 We support the proactive assemblage of lands to protect biological resources and facilitate development through private or public mitigation banking. We require public and private conservation lands or mitigation banks to ensure that easement and fee title agreements provide funding methods sufficient to manage the land in perpetuity.

Policy NR 5.7 We comply with state and federal regulations regarding protected species of animals and vegetation through the development review, entitlement, and environmental clearance processes.

Policy NR 5.8 We require the use of non-invasive plant species with new development and encourage the management of existing invasive plant species that degrade ecological function.

San Bernardino County Development Code

Chapter 88.01; Plant Protection and Management. This chapter provides regulatory and management guidance for plant resources including native trees and plants in unincorporated areas as well as mixed public and private lands. It primarily addresses tree and vegetation removal in public land and private land in unincorporated areas.

Chapter 88.02; Soil and Water Conservation. promotes the health of soil communities to limit soil erosion potential and preserve air quality. This code primarily regulates ground-disturbing activities.

5.2.3 ENVIRONMENTAL SETTING

Regional

The Valley Region of San Bernardino County is largely developed, with approximately 77 percent of the area under County jurisdiction either developed or under agricultural uses. A total of 31 special-status plant species have been documented in the Valley Region, including 3 plant species that are federally and/or state listed. A total of 42 special-status animal species have been documented, including 9 species that are federally endangered or threatened, 6 that are state endangered or threatened, 2 that are state fully protected, and 24 that are non-listed species. Major habitat linkages within the Valley Region include the San Gabriel-San Bernardino Connection between the Angeles Nation al Forest and San Bernardino National Forest, the San Bernardino-San Jacinto Connection between the San Bernardino and San Jacinto Mountains, and the Puente-Chino Hills Wildlife Corridor between the Whittier Narrows in Los Angeles County to the Cleveland National Forest in Orange County. The Cable Creek wash and Devil Creek wash also act as wildlife corridors. Protected and wilderness areas in the Valley Region include the former Norton Air Force Base Conservation Management Plan, North Etiwanda Preserve, Day Canyon Preserve, Colton Dunes Conservation Bank, Vulcan Materials Alluvial Fan Sage Scrub Mitigation Bank, Lytle Creek Conservation Bank, Chino Hills State Park, Prado Basin Mitigation Area, Wooly Star Preserve Area, Crafton Hills Conservancy, Wildwood Canyon State Park, and Oak Glen Preserve. The main jurisdictional water in the Valley Region is the Santa Ana River and its tributaries (Plan EIR).

Vegetation Communities

The Project site currently consists of concrete slabs and vacant disturbed land. The Biological Assessment Update found that the Project site consists of a mix of developed areas and disturbed vegetation areas. Disturbed vegetation areas are dominated by non-native annual grasses and herbs, including ripgut brome, spotted spurge, Bermuda grass, Canadian horseweed, horehound, and Russian thistle which was consistent with the General Biological Resources Assessment. Scattered trees consist of tree of heaven, blue gum eucalyptus, cider gum eucalyptus, velvet ash, Northern California walnut, avocado, Canary Island date palm, Peruvian peppertree, queen palm, and Mexican fan palm (Hernandez 2020).

Special Status Species

Special-status species are species that have been identified by federal, state, or local resource conservation agencies as threatened or endangered, under provisions of the federal and state Endangered Species Acts (FESA and CESA, respectively), because they have declining or limited population sizes, usually resulting from habitat loss.

Special-Status Plant Species

Several special status plant species are known to occur or have historically occurred in the vicinity of the Project site. One of these species, slender-horned spineflower (*Dodecahema leptoceras*), is a federal and State-listed Endangered species, though no potentially suitable habitat for this species was observed on the Project site.

Special-Status Wildlife Species

No special-status wildlife species were identified as having a potential to occur in the Project site, based on the literature review and habitat observed in the study area.

Jurisdictional Waters and Wetlands

The Project site does not contain any streams, water bodies, creeks, wetlands, or vernal pools that would be considered jurisdictional waters or wetlands.

Wildlife Movement

Based on the field survey results and lack of wildlife onsite, the Project site is unlikely to serve as a wildlife corridor due to expansive residential, surrounding roads, and freeways in the Project vicinity.

5.2.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

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

BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

BIO-3: 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?

BIO-4: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

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

BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in one biological resources issue area identified below (refer to Thresholds of Significance list above). For the issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Threshold BIO-6

Therefore, no further assessment of this potential impact is required in this Draft EIR.

5.2.5 METHODOLOGY

The analysis within this Draft EIR section is based on the Biological Resources Assessment, included as Appendix B. The assessments are based on surveys that include a general biological survey, updated biological survey and burrowing owl habitat assessment, vegetation mapping, and investigation of jurisdictional waters and wetlands throughout the Project area.

The literature review was based on the review of the following: California Natural Diversity Database, a CDFW species account database, Federal Register listings, California Native Plant Society), USFWS critical habitat maps, United States Department of Agriculture Natural Resources Conservation Service soils mapping, and numerous regional flora and fauna field guides.

A general biological field survey was conducted on November 3, 2020, with an update field survey conducted on July 13, 2021, in-field habitat assessment, and vegetation mapping were conducted for the entire Project area.

5.2.6 ENVIRONMENTAL IMPACTS

IMPACT BIO-1: WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR THROUGH HABITAT MODIFICATIONS, ON ANY SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE?

Less Than Significant Impact. The General Biological Resources Assessment and Biological Assessment Update (Psomas 2016; Hernandez 2021) identified that the Project site is highly disturbed and that no special status vegetation types were identified on the Project site. In addition, no potentially suitable habitat for special status plant species was identified onsite.

On November 3, 2020, and July 13, 2021, Hernandez Environmental conducted a field survey of the approximate 13.35-acre Project site. The purpose of the field surveys was to update prior surveys and document the currently existing habitat conditions. The Project site consists of a mix of developed areas and disturbed vegetated areas. Developed areas on the site consist of concrete pads. Disturbed vegetated areas are dominated by non-native annual grasses and herbs, including ripgut brome, spotted spurge, Bermuda grass, Canadian horseweed, horehound, and Russian thistle. Scattered trees consisting of tree of heaven, blue gum eucalyptus, cider gum eucalyptus, velvet ash, Northern California walnut, avocado, Canary Island date palm, Peruvian peppertree, queen palm, and Mexican fan palm were also present throughout the site (Hernandez 2021). The Project site appeared to be regularly maintained for weed abatement purposes. General wildlife species observed during the field survey included western fence lizard (*Sceloporus occidentalis*), mourning dove (*Zenaida macroura*), Cassin's kingbird (*Tyrannus vociferans*), common raven (*Corvus corax*), hummingbird sp. (*Trochilidae sp.*), northern mockingbird (*Mimus polyglottos*), house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), white-crowned sparrow (*Zonotrichia leucophrys*), song sparrow (*Melospiza melodia*), Say's phoebe (*Sayornis saya*), house cat (*Felis catus*), and California ground squirrel (*Otospermophilus beecheyi*). No sensitive plant or wildlife species were observed during the field survey (Hernandez 2021).

Multiple special status wildlife species are known to exist in the region; however, no potentially suitable habitat exists on the Project site to support these species (Psomas 2016; Hernandez 2021). A habitat assessment for burrowing owl was conducted on July 13, 2021 in accordance with the CDFW Staff Report on Burrowing Owl Mitigation, due to the potential for the site to provide suitable foraging habitat for burrowing owl. Although evidence of ground squirrels is present within the Project area, no suitable burrows or burrowing owl sign were observed within the Project site during the field surveys. Due to the high level of disturbance and lack of suitable burrows on the site, the habitat assessment concluded that there is no habitat for burrowing owl on the Project site (Hernandez 2021). Thus, impacts related to special status species, including burrowing owl, would not occur from implementation of the proposed Project.

IMPACT BIO-2: 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 WILDLIFE OR US FISH AND WILDLIFE SERVICE?

No Impact. The Project site consists of solely upland areas that do not contain any drainages, vernal pools, wetland habitats, creeks, or rivers. The Project site does not contain any riparian habitat, jurisdictional streambed or wetland areas, or sensitive natural community identified by USFWS or CDFW (Psomas 2016; Hernandez 2021). Thus, impacts to these resources would not occur from implementation of the proposed Project.

IMPACT BIO-3: WOULD THE PROJECT HAVE A SUBSTANTIAL ADVERSE EFFECT ON STATE OR FEDERALLY PROTECTED WETLANDS (INCLUDING, BUT NOT LIMITED TO, MARSH, VERNAL POOL, COASTAL, ETC.) THROUGH DIRECT REMOVAL, FILLING, HYDROLOGICAL INTERRUPTION, OR OTHER MEANS?

No Impact. As described in the response above, the Project site consists of solely upland areas that do not contain any drainages, creeks, rivers, or other wetland areas (Psomas 2016; Hernandez 2021). The Project site does not contain any jurisdictional areas that would be subject to Section 404 of the Clean Water Act, and the proposed Project does not involve any hydrological interruption on any existing water resources. Thus, impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act would not occur from implementation of the proposed Project.

IMPACT BIO-4: 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 Impact with Mitigation Incorporated. The Project site is located in an urban, developed area and is surrounded by roadways or developed land uses. Although regional wildlife corridors exist in the general vicinity of the Project site (San Gabriel Mountains, Jurupa Hills, La Sierra Hills, Puente Hills and Chino Hills), none exist within close proximity of the Project site. Thus, development of the proposed Project would not result in an impact on regional wildlife movement (Psomas 2016; Hernandez 2021).

The Project site contains ornamental trees that include: tree of heaven (*Ailanthus altissima*), blue gum (*Eucalyptus globulus*), cider gum (*Eucalyptus gunnii*), velvet ash (*Fraxinus velutina*), Northern California walnut (*Juglans hindsii*), avocado (*Persea americana*), Canary Island date palm (*Phoenix canariensis*), Peruvian peppertree (*Schinus molle*), queen palm (*Syagrus romanzoffiana*), and Mexican fan palm (*Washingtonia robusta*) (Psomas 2016), which could be used by nesting bird species. Therefore, impacts related to nesting birds could occur if site development activities are during the avian breeding season (typically February 15 through September 15). Any activities that occur during the nesting/breeding season of birds protected by the federal Migratory Bird Treaty Act (MBTA), could result in a potentially significant impact if requirements of the MBTA are not followed. Implementation of Mitigation Measure BIO-1 would ensure MTBA compliance and would require a nesting bird survey to be conducted prior to the commencement of construction during nesting season, which would reduce potential impacts related to nesting avian species and native wildlife nursery sites to a less than significant level.

IMPACT BIO-5: WOULD THE PROJECT CONFLICT WITH ANY LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE?

Less Than Significant Impact. As described above, the Project site contains ornamental trees that include tree of heaven, blue gum Eucalyptus, cider gum Eucalyptus, velvet ash, Northern California walnut, avocado, Canary Island date palm, Peruvian peppertree, queen palm, and Mexican fan palm (Psomas 2016; Hernandez 2021).

Specific trees are subject to regulation by the County of San Bernardino Development Code, which include: (1) oak trees in the Genus Quercus which is five inches or more in diameter as measured at a point four and a half feet (breast height) above grade level; (2) a living, native tree with six inch or greater stem diameter or 19 inches in circumference measured from breast height; or (3) three or more palm trees in linear plantings, which are 50 feet or greater in length within established windrows or parkway plantings (Section 88.01.070 of the County of San Bernardino Development Code).

The Tree Preservation Report (see Appendix C) prepared for the Project site in January 2021 concluded that there are no protected trees onsite that are subject to regulation by the County of San Bernardino Development Code (Arborgate 2020). In addition, the Project includes landscaping that would replace the removed trees with new trees, as required by the Development Code, and would install other plant species to provide uniform vegetation on the Project site and meet Low Impact Development (LID) standards. Compliance with the Development Code standards would be verified through the County's standard development permitting process. Thus, impacts related to conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, would be less than significant.

5.2.7 CUMULATIVE IMPACTS

The cumulative study area for biological resources includes the southwestern San Bernardino County region, which contains many urban areas, such as the Project site and surrounding area. As previously described, the Project site provides limited potential for special-status plants and migratory bird species and no potential for jurisdictional resources. Cumulatively considerable impacts to these limited biological resources would not occur from implementation of the Project because impacts to biological resources would be less than significant with the inclusion of MM BIO-1 to limit impacts to nesting birds. Additionally, any cumulative projects would be required to comply with applicable survey requirements and mitigation for biological resources. Since all projects would be required to implement their respective mitigation measures, their contribution would not be cumulatively considerable. There are no projects that would, in combination with the Project, produce a significant impact to biological resources.

5.2.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

Federal

- Federal Endangered Species Act
- Clean Water Act
- Migratory Bird Treaty Act

State

- California Endangered Species Act
- California Fish and Game Code

Standard Conditions

None.

Plans, Programs, or Policies

PPP BIO-1 The Project shall comply with Chapter 88.01 Plant Protection and Management prior to removing any trees located on the Project site.

5.2.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, Impact BIO-4 would be potentially significant.

Upon implementation of regulatory requirements, Impacts BIO-1, BIO-2, BIO-3, and BIO-5 would be less than significant.

5.2.10 MITIGATION MEASURES

MM BIO-1: Nesting Birds: To the extent possible, construction activities (i.e., demolition, earthwork, clearing, and grubbing) within the Project site and offsite infrastructure areas, shall occur outside of the general bird nesting season for migratory birds, which is March 15 through August 31 for songbirds and January 1 through August 31 for raptors.

If construction activities (i.e., earthwork, clearing, and grubbing) must occur during the general bird nesting season for migratory songbirds (March 15 through August 31) and raptors (January 1 to August 31), a qualified biologist shall perform a pre-construction survey of potential nesting habitat to confirm the absence of active nests belonging to migratory birds and raptors afforded protection under the MBTA and California Fish & Game Code. The pre-construction survey shall be performed no more than three days prior to the commencement of construction activities. The results of the pre-construction survey shall be documented by the qualified biologist. If construction is inactive for more than seven days, an additional survey shall be conducted.

If the qualified biologist determines that no active migratory bird or raptor nests occur, the activities shall be allowed to proceed without any further requirements. If the qualified biologist determines that an active migratory bird or raptor nest is present, no impacts within 300 feet (500 feet for raptors) of the active nest shall occur until the young have fledged the nest and the nest is confirmed to no longer be active, or as determined by the qualified biologist. The biological monitor may modify the buffer or propose other recommendations in order to minimize disturbance to nesting birds.

5.2.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with biological resources to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to biological resources would occur.

REFERENCES

2020/2021 Biological Assessment Update for Francis Avenue Residential Development Project located in San Bernardino County, California. Prepared by Hernandez Environmental Services, 2021 (Hernandez 2021). Appendix B.

General Biological Resources Assessment. Prepared by Psomas, 2016 (Psomas 2016). Appendix B

San Bernardino Countywide Plan. Natural Resources Element. Accessed: http://countywideplan.com/policy-plan/beta/nr/

San Bernardino County Development Code. Accessed: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-77511

Tree Preservation Report for Yorba Villas Residential, Chino. Prepared by Arborgate Consulting, Inc., 2020 (Arborgate 2020). Appendix C.

5.3 Cultural Resources

5.3.1 INTRODUCTION

This section addresses potential environmental effects of the Project related to cultural resources, which include historic and archaeological resources. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan*, October 2020
- *County of San Bernardino Development Code*
- *Phase I Cultural Resources Assessment: Chino Yorba and Francis Residential Project City of Chino, San Bernardino County, California, Material Culture Consulting, December 2020, Appendix D*
- *Phase I Environmental Site Assessment: 4664 and 4570 Francis Avenue Chino, California 91710 and Phase II Environmental Site Assessment: 4570 Francis Avenue Chino, California 91710, Tetra Tech, September 2016, Appendix E*
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, August 2020

In accordance with Public Resources Code Section 15120(d), certain information and communications that disclose the location of archaeological sites and sacred lands are allowed to be exempt from public disclosure.

Cultural Resources Terminology

- **Archaeological resources** include any material remains of human life or activities that are at least 100 years of age, and that are of scientific interest. A unique or significant archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it (1) contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information; (2) has a special and particular quality, such as being the oldest of its type or the best available example of its type; and (3) is directly associated with a scientifically recognized important prehistoric or historic event or person.
- **Cultural resources** are defined as buildings, sites, structures, or objects, each of which may have historic, architectural, archaeological, cultural, or scientific importance, according to the California Environmental Quality Act (CEQA).
- **Historic building** or **site** is one that is noteworthy for its significance in local, state, or national history or culture, its architecture or design, or its works of art, memorabilia, or artifacts.
- **Historic context** refers to the broad patterns of historical development in a community or its region that is represented by cultural resources. A historic context statement is organized by themes such as economic, residential, and commercial development.
- **Historic integrity** is defined as "the ability of a property to convey its significance."
- **Historical resources** are defined as "a resource listed or eligible for listing on the California Register of Historical Resources" (CRHR) (Public Resources Code, Section 5024.1; 14 CCR 15064.5). Under CEQA Guidelines Section 15064.5(a), the term "historical resources" includes the following:

(1) A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Public Resources Code, Section 5024.1).

(2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

(3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Public Resources Code Section 5024.1) including the following:

   (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

   (B) Is associated with the lives of persons important in California's past;

   (C) 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

   (D) Has yielded, or may be likely to yield, information important in prehistory or history.

(4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

5.3.2 REGULATORY SETTING

5.5.2.1 Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) established the National Register of Historic Places (National Register), which is the official register of designated historic places. The National Register is administered by the National Park Service, and includes listings of buildings, structures, sites, objects, and districts that possess historical, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

To be eligible for the National Register, a property must be significant under one or more of the following criteria per 36 Code of Federal Regulations Part 60:

a) Properties that are associated with events that have made a significant contribution to the broad patterns of our history;

b) Properties that are associated with the lives of persons significant in our past;

c) Properties that 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) Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the aforementioned criteria, an eligible property must also possess historic "integrity," which is "the ability of a property to convey its significance." The National Register criteria recognize seven qualities that define integrity: location, design, setting, materials, workmanship, feeling, and association.

Structures, sites, buildings, districts, and objects over 50 years of age can be listed in the National Register as significant historical resources. Properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the National Register.

Properties listed in or eligible for listing in the NRHP are also eligible for listing in the California Register of Historic Resources, and as such, are considered historical resources for CEQA purposes.

National Register of Historic Places

The National Register of Historic Places (NRHP) was established by the NHPA of 1966 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." The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must also possess integrity of location, design, setting, materials, workmanship, feeling, and association.

A property is eligible for the NRHP if it is significant under one or more of the following criteria:

Criterion A: It is associated with events that have made a significant contribution to the broad patterns of our history;

Criterion B: It is associated with the lives of persons who are significant in our past;

Criterion C: It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or

Criterion D: It has yielded, or may be likely to yield, information important in prehistory or history.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands. The ARPA regulates authorized archaeological investigations

on federal lands; increased penalties for looting and vandalism of archaeological resources; required that the locations and natures of archaeological resources be kept confidential in most cases. In 1988, amendments to the ARPA included a requirement for public awareness programs regarding archaeological resources.

5.5.2.2 State Regulations

California Register of Historical Resources

Eligibility for inclusion in the California Register of Historical Resources (CRHR) is determined by applying the following criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) It is associated with the lives of persons important in California's 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 value; or
4) It has yielded or is likely to yield information important in prehistory or history. The Register includes properties which are listed or have been formally determined to be eligible for listing in the National Register, State Historical Landmarks, and eligible Points of Historical Interest (PRC §5024.1).

In addition to meeting one or more of the above criteria, the CRHR requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). The California Register also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

California Health and Safety Code, Section 7050.5

This code requires that if human remains are discovered on a Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Public Resources Code Section 5097.98

Public Resources Code Section 5097.98 provides guidance on the appropriate handling of Native American remains. Once the NAHC receives notification from the Coroner of a discovery of Native American human remains, the NAHC is required to notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. According to Public Resources Code Section 5097.98(k), the NAHC is authorized to mediate disputes arising between landowners and known descendants relating to the

treatment and disposition of Native American human burials, skeletal remains, and items associated with Native American burials.

CEQA Guidelines Section 15064.5

Section 15064.5 provides guidelines for determining the significance of impacts to archaeological and historical resources. The section provides the definition of historical resources, and how to analyze impacts to resources that are designated or eligible for designation as a historical resource. Section 15064.5 additionally provides provisions for the accidental discovery or recognition of human remains in any location other than a dedicated cemetery.

5.5.2.3 Local Regulations

County of San Bernardino Countywide Plan

The County of San Bernardino Countywide Plan Cultural Resources Element contains the following policies related to cultural and archaeological resources that are applicable to the proposed Project:

Policy CR-1.1: Tribal notification and coordination. We notify and coordinate with tribal representatives in accordance with state and federal laws to strengthen our working relationship with area tribes, avoid inadvertent discoveries of Native American archaeological sites and burials, assist with the treatment and disposition of inadvertent discoveries, and explore options of avoidance of cultural resources early in the planning process.

Policy CR-1.2: Tribal planning. We will collaborate with local tribes on countywide planning efforts and, as permitted or required, planning efforts initiated by local tribes.

Policy CR-1.3: Mitigation and avoidance. We consult with local tribes to establish appropriate Project-specific mitigation measures and resource-specific treatment of potential cultural resources. We require Project applicants to design projects to avoid known tribal cultural resources, whenever possible. If avoidance is not possible, we require appropriate mitigation to minimize Project impacts on tribal cultural resources.

Policy CR-1.4: Resource monitoring. We encourage coordination with and active participation by local tribes as monitors in surveys, testing, excavation, and grading phases of development projects with potential impacts on tribal resources.

Policy CR-2.1: National and state historic resources. We encourage the preservation of archaeological sites and structures of state or national significance in accordance with the Secretary of Interior's standards.

Policy CR-2.2: Local historic resources. We encourage property owners to maintain the historic integrity of resources on their property by (listed in order of preference): preservation, adaptive reuse, or memorialization.

Policy CR-2.3: Paleontological and archaeological resources. We strive to protect paleontological and archaeological resources from loss or destruction by requiring that new development include appropriate mitigation to preserve the quality and integrity of these resources. We require

new development to avoid paleontological and archeological resources whenever possible. If avoidance is not possible, we require the salvage and preservation of paleontological and archeological resources.

San Bernardino County Code

Development Code Chapter 82.12, Cultural Resources Preservation (CP) Overlay, includes regulations pertaining to the identification and conservation of important archaeological and historical resources. The CP Overlay may be applied to areas where archaeological and historic sites that warrant preservation are known or are likely to be present. Specific identification of known cultural resources is indicated by listing in one or more of the following inventories:

- California Archaeological Inventory;
- California Historical Resources Inventory;
- California Historical Landmarks;
- California Points of Historic Interest; and/or
- National Register of Historic Places.

5.3.3 ENVIRONMENTAL SETTING

Historic

In the late 1700s, the Project area consisted of lands that were affiliated with the Mission San Luis Rey, however most land was managed as outlying ranches known as asistencias. Soon after American control was established (1848), gold was discovered in California. There was a tremendous influx of Americans and Europeans, and western Riverside County saw development of hard rock mining for gold. Several mineral rights were issued around this time, however none within the Project area. Around the same time, Riverside County was settled by homesteaders and farmers, and quickly became a diversified agricultural area with citrus, grain, grapes, poultry, and swine being the leading commodities. In 1881, former miner Richard Gird bought the Rancho Santa Ana del Chino and Chino Addition and began planting various crops including sugar beets. It is possible that the lands in the Project area were used to grow sugar beets for many years, and then converted to pasture or alfalfa land once the Chino Valley Sugar Beet Factory closed in 1917 or 1918. In the late 1930s, the State of California began to realize that the three existing state prison facilities (San Quentin, Folsom, and the new women's prison at Tehachapi) would soon be overcrowded, so an ambitious plan to build new prisons led the State to purchase large quantities of farmland in the Chino area. Today, California Department of Corrections and Rehabilitation runs the California Institution for Men in Chino and the California Institution for Women off Chino-Corona Road to the southeast. About the same time, Chino Airport was first developed as a training base prior to World War II; "Cal Aero Field" was one of four airports developed as part of the Curtis Wright Technical Institute based at the Glendale Airport. The United States Army Air Force contracted with the school to provide primary flight training for Army Air Cadets just before and throughout the war. The dairy industry flourished from the 1950s through the 1980s, with dairy-friendly zoning in the southwest corner of San Bernardino County encouraging many ethnic Dutch families to relocate there and become the cornerstone of the industry.

Project Site

The Phase I Environmental Site Assessment that was prepared for the Project site (Tetra Tech 2016) describes that between the years of 1938 and 1960, the Project site was used for residential and agricultural

purposes, mainly orchards and dry farming. In 1960, the central portion of the site was developed as a rabbit farm that operated until approximately 2002, while the residential parcel of the site was improved with at least two residential structures that were demolished in 2018. Approximately 28 residential structures occupied the western portion of the site from 1938 to 1997 and were demolished in 1997. After closure of the rabbit farm in 2002, the vacant parcel of the site was utilized as grazing land for an adjacent goat farm (Tetra Tech 2016).

The Project site consists of two vacant parcels which contained concrete slabs, a maintenance shed, and several animal pens associated with the rabbit farm until 2018. The owner has demolished all structures, and the site is currently an empty lot with concrete slabs and scattered trees. The vacant parcel of the site is roughly divided into three sections: 1) the western section, 2) the middle section, and 3) the eastern section. The western section of the parcel was observed to be improved by numerous small rectangular concrete pads and a maintenance shed utilized for storage of materials associated with the goats currently grazing the site. The middle section of the vacant parcel was observed to be improved by numerous elongated concrete slabs and several animal pens associated with the former rabbit farm located on this portion of the site, beehives, and a small vacant maintenance shed. The eastern section of the vacant parcel was observed as undeveloped vacant land. The Project site does not include any historic structures or other resources (MCC 2020). In addition, the Project site is not adjacent to any historic structures. Areas surrounding the site consist of residential housing.

Archaeologic

Most researchers agree that the earliest occupation for the Chino area dates to the early Holocene (11,000 to 8,000 years ago). The material culture related to this time included scrapers, hammer stones, large flaked cores, drills, and choppers, which were used to process food and raw materials.

Around 8,000 years ago, subsistence patterns changed, resulting in a material complex consisting of an abundance of milling stones (for grinding food items) with a decrease in the number of chipped stone tools. The material culture from this time period includes large, bifacially worked dart points and grinding stones, handstones and metates. This Encinitas Tradition includes Topanga Pattern in coastal Los Angeles and Orange counties, the La Jolla Pattern in coastal San Diego County, and the Sayles or Pauma cultures in inland San Diego County extending into western San Bernardino County, where the Project is located (MCC 2020).

At approximately 3,500 years ago, Pauma groups in the general vicinity of the Project area adopted new cultural traits which transformed the archaeological site characteristics - including mortar and pestle technology. This indicated the development of food storage, largely acorns, which could be processed and saved for the leaner, cooler months of the year.

At approximately 1,500 years ago, bow and arrow technology started to emerge, and the Palomar Tradition is attributed to this time. The Palomar Tradition is characterized by soapstone bowls, arrowhead projectile points, pottery vessels, rock paintings, and cremation sites. The shift in material culture assemblages is largely attributed to the emergence of Shoshonean (Takic-speaking) people who entered California from the east.

The Phase I Cultural Resources Assessment concluded that there were no previously recorded cultural resources within the Project area which included a 1-mile radius around the Project area as well as the Project itself (MCC 2020).

5.3.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

CUL-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

CUL-2: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

CUL-3: Disturb any human remains, including those interred outside of formal cemeteries.

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the cultural resources issue areas identified below (refer to Thresholds of Significance list above). For each issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds CUL-1[1]
- Threshold CUL-3

Therefore, no further assessment of these impacts is required in this Draft EIR.

Historic Resources Thresholds

Historic resources are usually 50 years old or older and must meet at least one of the criteria for listing in the California Register (such as association with historical events, important people, or architectural significance), in addition to maintaining a sufficient level of physical integrity (CEQA Guidelines Section 15064.5[a][3]). Additionally, CEQA Guidelines Section 15064.5(b), states that a Project with an effect that may cause a substantial adverse change in the significance of a historical resource is a Project that would have a significant effect on the environment. A substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired. The significance of a historical resource is materially impaired when a Project:

a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the Project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or

c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

5.3.5 METHODOLOGY

[1] Phase I Cultural Resources Assessment prepared by Material Culture Consulting was previously approved by the City of Chino in 2019.

To determine whether a historic related impact would result from the proposed Project, the analysis includes consideration of the history of use and development of the Project site, and whether any of the existing structures are older than 45-50 years of age. The analysis combines these factors to identify the potential of Project to impact any historic resources on the site.

In determining whether an archaeological related impact would result from the proposed Project, the analysis includes consideration of the archaeologic sensitivity of the Project area, the past disturbance on the site, and the proposed excavation. The analysis combines these factors to identify the potential of Project construction to impact any unknown archaeological resources.

5.3.6 ENVIRONMENTAL IMPACTS

IMPACT CUL-2: WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF AN ARCHAEOLOGICAL RESOURCE PURSUANT TO § 15064.5?.

Less than Significant with Mitigation Incorporated. The records search conducted for the Project identified that 23 cultural resources investigations have been previously completed within a 1-mile radius of the Project site, but none including the Project site (MCC 2020). The results of the previous investigations did not identify any previously recorded cultural resources within a 0.5-mile of the Project site; however, five previously identified archaeological or historical resources are located within one mile of the Project site (MCC 2020).

The Project site has been highly disturbed from various past uses. The previous development involved excavations related to installation and removal of septic systems [two of which still exists in the southeastern portion of the site (Tetra Tech 2016)], water lines, and other utility infrastructure. As a result, the potential for archaeological resources exists on site are low. However, Mitigation Measure CUL-1 has been included to ensure that inadvertent discovery of resources during ground-disturbing activities.

Mitigation Measure CUL-1 requires retention of an on-call archaeologist that would be present at the pre-grading conference to establish procedures for archeological resource surveillance. Mitigation CUL-1would also halt work within 50 feet of a find until it can be evaluated by the qualified on-call archaeologist and the Gabrieleño Band of Mission Indians Kizh-Nation. Construction activities could continue in other areas. Mitigation Measure CUL-1 has been previously agreed to through consultation with the Gabrieleño Band of Mission Indians Kizh-Nation. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and shall be discussed in consultation with the appropriate regulatory agency(ies). With implementation of Mitigation Measure CUL-1, impacts related to archaeological resources would be less than significant.

5.3.7 CUMULATIVE IMPACTS

Historic Resources: Because all historical resources are unique and nonrenewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Federal, state, and local laws and regulations protect historic resources when feasible. However, it is not always feasible to protect historical resources. As described previously, the Project site does not include any historic resources and is not located adjacent to any historic resources. Therefore, implementation of the proposed Project would not impact, either directly or indirectly, any historic resources. Because no impacts related to historic resources would occur from implementation of the Project, the Project would not result in any cumulative impacts to historic resources.

Archaeologic Resources: The cumulative study area for archaeological resources includes the southern California region, which contains the same general prehistoric uses and migration trends as the Project area.

As described previously, the disturbance associated with the development and agricultural activities within the Project area have likely eradicated any archaeological resources and the Project would excavate and grade within soils depths that have already been disturbed. Therefore, the Project has a less than significant potential to impact archaeological resources, and similarly, impacts would be less than cumulatively significant.

5.3.3 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- San Bernardino County Development Code Chapter 82.12
- California Health and Safety Code Section 7050.5
- Public Resources Code Section 5097.98

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.3.4 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, Impact CUL-2 would be **potentially significant.**

5.3.10 MITIGATION MEASURES

Mitigation Measure CUL-1: Archaeological Resources

Prior to the issuance of the first grading permit, the Applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, from a qualified professional archeologist meeting the Secretary of Interior's Professional Qualifications for Archaeology as defined at 36 CFR Part 61, Appendix A stating that the archeologist has been retained to provide on-call services in the event archeological resources are discovered. The archeologist shall be present at the pregrading conference to establish procedures for archeological resource surveillance. In the event a previously unrecorded archaeological deposit is encountered during construction, all activity within 50 feet of the area of discovery shall cease and the County shall be immediately notified. The archeologist shall be contacted to flag the area in the field and shall determine, in consultation with the County and the Gabrieleño Band of Mission Indians Kizh-Nation, if the archaeological deposits meet the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique archaeological resource (Public Resources Code 21083.2(g)). If the find is considered a "resource" the archaeologist shall pursue either protection in place or recovery, salvage and treatment of the deposits. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4 in consultation with the County and the Gabrieleño Band of Mission Indians Kizh-Nation. Per CEQA Guidelines Section 15126.4(b)(3), preservation in place shall be the preferred means to avoid impacts to archaeological resources qualifying as historical resources. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C). If unique archaeological resources cannot be preserved in place or left in an undisturbed

state, recovery, salvage and treatment shall be required at the developer/applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the archaeologist. Resources shall be identified and curated into an established accredited professional repository. The archaeologist shall have a repository agreement in hand prior to initiating recovery of the resource. Excavation as a treatment option will be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the Project.

5.3.5 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impact CUL-2 would be less than significant after mitigation.

REFERENCES

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

County of San Bernardino Development Code. Accessed: http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf

County of San Bernardino Municipal Code. Accessed: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-90905

Phase I Cultural and Paleontological Resources Assessment. Prepared by Material Culture Consulting, 2020 (MCC 2020). Appendix D.

Phase I Environmental Site Assessment: 4664 and 4570 Francis Avenue Chino, California 91710 and Phase II Environmental Site Assessment: 4570 Francis Avenue Chino, California 91710. Prepared by Tetra Tech, 2016 (Tetra Tech 2016). Appendix E.

5.4 Geology and Soils

5.4.1 INTRODUCTION

This section addresses potential environmental effects of the proposed Project related to geology, soils, seismicity, and paleontological resources. The impacts examined include risks related to geologic hazards such as earthquakes, landslides, liquefaction, expansive soils; impacts on the environment related to soil erosion and sedimentation; and impacts related to paleontological resources. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan*, October 2020
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, June 2019
- *County of San Bernardino Development Code*
- *Geotechnical Investigation Proposed Residential Development APN's 1013-211-21 And 1013-211-22 Northwest of Francis Avenue and Yorba Avenue City Of Chino, California, Leighton and Associates, Inc. (GEO 2019) July 16, 2019, Appendix F*
- *Phase I Cultural Resources Assessment: Chino Yorba and Francis Residential Project City of Chino, San Bernardino County, California, Material Culture Consulting, (MCC 2020) December 30, 2020, Appendix D*

5.4.2 REGULATORY SETTING

5.4.2.1 Federal Regulations

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program that provides characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. This Act designated the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under this Act provide building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which development under the proposed Project would be required to adhere.

Clean Water Act

The federal Water Pollution Control Act of 1948, as amended in 1972, (33 USC § 1251 et seq.)(also known as the Clean Water Act [CWA]) is the principal statute governing water quality. The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the US Environmental Protection Agency (EPA) the authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates both direct and indirect discharge of pollutants into the nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful to discharge any pollutant from a point source into navigable waters

unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges and requires states to establish site-specific water quality standards for navigable bodies of water.

Society of Vertebrate Paleontology

The Society of Vertebrate Paleontology's Handbook for Society of Vertebrate Paleontology and Official Society Policy and Guidelines outlines practices and guidelines for practicing paleontologists. Additionally, the Society provides standard procedures for the assessment and mitigation of adverse impacts to paleontological resources.

Paleontological Resources Preservation, Omnibus Public Lands Act, Public Law 111-011, Title VI, Subtitle D (PRPA), 2009

This legislation directs the Secretaries of the U.S. Department of the Interior (USDI) and U.S. Department of Agriculture (USDA) to manage and protect paleontological resources on federal land using "scientific principles and expertise." To formulate a consistent paleontological resources management framework, the Paleontological Resources Preservation Act (PRPA) incorporates most of the recommendations from the report of the Secretary of the Interior titled "Assessment of Fossil Management on Federal and Indian Lands" (USDI, 2000). In passing the PRPA, Congress officially recognized the scientific importance of paleontological resources on some federal lands by declaring that fossils from these lands are federal property that must be preserved and protected. The PRPA codifies existing policies of the Bureau of Land Management (BLM), National Park Service (NPS), U.S. Forest Service (USFS), Bureau of Reclamation, and U.S. Fish and Wildlife Service (USFWS), and provides the following:

- Uniform criminal and civil penalties for illegal sale and transport, and theft and vandalism of fossils from federal lands.
- Uniform minimum requirements for paleontological resource-use permit issuance (terms, conditions, and qualifications of applicants).
- Uniform definitions for "paleontological resources" and "casual collecting."
- Uniform requirements for curation of federal fossils in approved repositories

5.4.2.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the construction of buildings for human occupancy on top of the traces of active faults. It was passed into law following the February 1971 magnitude 6.5 San Fernando (Sylmar) Earthquake that resulted in over 500 million dollars in property damage and 65 deaths. Although the Act addresses the hazards associated with surface fault rupture, it does not address other earthquake-related hazards, such as seismically induced ground shaking, liquefaction, or landslides.

This Act requires the State Geologist to establish regulatory zones, now referred to as Earthquake Fault Zones, around the mapped surface traces of active faults, and to publish appropriate maps that depict these zones. Earthquake Fault Zone maps are publicly available and distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. The Act requires local agencies to regulate development within Earthquake Fault Zones. Before a development Project can be permitted within an Earthquake Fault Zone, a geologic investigation is required to demonstrate that

proposed buildings would not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back a minimum of 50 feet from the fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act, which was passed by the California legislature in 1990, addresses earthquake hazards related to liquefaction and seismically induced landslides. Under the Act, seismic hazard zones are mapped by the State Geologist in order to assist local governments in land use planning. The Act states "it is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety." Section 2697(a) of the Act states that "cities and counties shall require, prior to the approval of a Project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard."

California Building Code

The California Building Code (CBC) is included in Title 24 of the California Code of Regulations. The CBC incorporates the International Building Code, a model building code adopted across the United States. Current State law requires every city, county, and other local public agency enforcing building regulations to adopt the provisions of the CBC within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission. The current CBC was adopted by the County and is included in Chapter 15, Section 04 of the County's Municipal Code. These codes provide standards to protect property and public safety. They regulate the design and construction of excavations, foundations, building frames, retaining walls, and other building elements, and thereby mitigate the effects of seismic shaking and adverse soil conditions. The codes also regulate grading activities, including drainage and erosion control.

California Construction General Permit

The State of California adopted a Statewide National Pollutant Discharge Elimination System (NPDES) Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on July 17, 2012. The Construction General Permit regulates construction site storm water management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of storm water associated with construction activity.

To obtain coverage under this permit, Project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents, including a risk-level assessment for construction sites, an active storm water effluent monitoring and reporting program during construction, rain event action plans, and numeric action levels (NALs) for pH and turbidity, as well as requirements for qualified professionals to prepare and implement the plan. The Construction General Permit requires the SWPPP to identify Best Management Practices (BMPs) that will be implemented to reduce soil erosion. Types of BMPs include preservation of vegetation and sediment control (e.g., fiber rolls).

Requirements for Geotechnical Investigations

Requirements for geotechnical investigations are included in CBC Appendix J, Grading, Section J104; additional requirements for subdivisions requiring tentative and final maps and for other specified types of structures are in the California Health and Safety Code Sections 17953 to 17955 and in CBC Section 1803. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate site geology, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness. CBC Section J105 sets forth requirements for inspection and observation during and after grading.

Public Resources Code (PRC) Section 5097.5

Requirements for paleontological resource management are included in the PRC Division 5, Chapter 1.7, Section 5097.5, and Division 20, Chapter 3, Section 30244, which states: No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. These statutes prohibit the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. As a result, local agencies are required to comply with PRC 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others. PRC Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor, and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, and district) lands.

5.7.2.3 Regional Regulations

SCAQMD Rule 403

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

Rule 403 requires Project applicants to control fugitive dust using the best available control measures such that dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a, off-site nuisance. Applicable Rule 403 dust suppression (and PM_{10} generation) techniques to reduce impacts on nearby sensitive receptors may include, but are not limited to, the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. Locations where grading is to occur shall be thoroughly watered prior to earthmoving.
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.

- Suspend all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Provide bumper strips or similar best management practices where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replant disturbed areas as soon as practical.
- Sweep on-site streets (and off-site streets if silt is carried to adjacent public thoroughfares) to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

5.7.2.4 Local Regulations

County of San Bernardino Countywide Plan

The following policies contained in the Countywide Plan Hazards Element related to geologic hazards is relevant to the Project:

Policy HZ 1.2 We require all new development to be located outside of the environmental hazards areas listed below. For any lot or parcel that does not have sufficient buildable area outside of such hazards areas, we require adequate mitigation, including designs to allow occupants to shelter in place and to have sufficient time to evacuate during times of extreme weather and natural disasters.

- Flood: 100-year flood zone, dam/basin inundation area
- Geologic: Alquist-Priolo earthquake fault zone; County-identified fault zone; rockfall/debris-flow hazard area, medium or high liquefaction area (low to high and localized), existing and County-identified landslide area, moderate to high landslide susceptibility area
- Fire: high or very high fire hazard severity zone

Policy HZ 1.7 We require that underground utilities be designed to withstand seismic forces, accommodate ground settlement, and hardened to fire risk.

Policy HZ 1.8 We require new development in medium-high or high wind erosion hazard areas to minimize the effects of wind-blown soil through building and site design features such as fencing, surface treatment or pavement, attenuation or wind barriers, architectural features, building materials, and drought resistant landscaping.

Policy HZ-1.9 We minimize risk associated with flood, geologic, and fire hazard zones or areas by encouraging such areas to be preserved and maintained as open space.

The Natural Resources Element of the Countywide Plan contains the following policies intended in part to minimize soil erosion:

Policy NR-2.5 We ensure compliance with the County's Municipal Stormwater NPDES (National Pollutant Discharge Elimination System) Permit by requiring new development and significant redevelopment to protect the quality of water and drainage systems through site design, source controls, stormwater treatment, runoff reduction measures, best management practices, low impact development strategies, and technological advances. For existing development, we monitor businesses and coordinate with municipalities.

Policy NR-7.1 We protect economically viable and productive agricultural lands from the adverse effects of urban encroachment, particularly increased

The following policy contained in the Cultural Resources Element related to paleontological resources is applicable to the proposed Project:

Policy CR 2.3 We strive to protect paleontological and archaeological resources from loss or destruction by requiring that new development include appropriate mitigation to preserve the quality and integrity of these resources. We require new development to avoid paleontological and archaeological resources whenever possible. If avoidance is not possible, we require the salvage and preservation of paleontological and archaeological resources.

San Bernardino County Development Code

Chapter 63.01; California Building Code. The CBC has been amended and adopted as Chapter 63.01, of the County Code (Building Code). This regulates all building and construction projects within County limits and implements a minimum standard for building design and construction. These minimum standards include specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities including drainage and erosion control.

Chapter 35.01; **Pollutant Discharge Elimination System Regulations.** Incorporates the Areawide Urban Storm Water Run-Off Permit [NPDES Permit No. CAS618036, Order No. R8-2002- 0012] issued by the California Regional Water Quality Control Board Santa Ana Region pursuant to Section 402(p) of the Clean Water Act. Requires preparation of a WQMP.

Chapter 85.11; Pre-Construction Flood Hazard Mitigation and Erosion Control Inspection. Includes erosion control measures such as requirements for SWPPPs with BMPs.

Chapter 82.15; Geologic Hazard Overlay. The Geologic Hazard (GH) Overlay established by Sections 82.01.020 (Land Use Plan and Land Use Zoning Districts) and 82.01.030 (Overlays) is created to provide greater public safety by establishing investigation requirements for areas that are subject to potential geologic problems, including active faulting, land sliding, debris flow/mud flow, rockfall, liquefaction, seiche, and adverse soil conditions.

Chapter 87.08; Soils Reports. Provides standards for the preparation and review of soils reports, in compliance with the Map Act Chapter 4, Article 7. A preliminary soils report based upon adequate test borings and prepared by a registered civil engineer shall be required for every subdivision for which a Final Map is required or when required as a condition of development when soils conditions warrant the investigation and report. The preliminary soils report shall be submitted with the Tentative Map application.

5.4.3 ENVIRONMENTAL SETTING

Regional Setting

The Project site is located within the Chino Basin in the northern portion of the Peninsular Range geomorphic province of California. Major structural features surround this region, including the Cucamonga fault and the San Gabriel Mountains to the north, the Chino fault and Puente/Chino Hills to the west, and the San Jacinto fault to the east. This is an area of large-scale crustal disturbance as the relatively northwestward-moving Peninsular Range Province collides with the Transverse Range Province (San Gabriel and San Bernardino Mountains) to the north (GEO 2019).

The Project site is underlain by younger alluvial soil deposits eroded from the mountains surrounding the basin and deposited in the site vicinity (GEO 2019).

Faults and Ground Shaking

In 1972, the Alquist-Priolo Special Studies Zones Act was signed into law. In 1994, it was renamed the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act). The primary purpose of the A-P Act 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 A-P Act requires the State Geologist (Chief of the California Geology Survey) to delineate "Earthquake Fault Zones" along with faults that are "sufficiently active" and "well-defined." The boundary of an "Earthquake Fault Zone" is generally about 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The A-P Act dictates that Cities and Counties withhold development permits for sites within an Alquist-Priolo Earthquake Fault Zone until geologic investigations demonstrate that the site zones are not threatened by surface displacements from future faulting.

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no active faults are known to cross the site. The closest active fault to the Project site is the Chino-Elsinore fault, which is located approximately 3 miles to the southwest (GEO 2019).

However, all of southern California is seismically active. The amount of motion expected at a building site can vary from none to forceful depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located on poorly consolidated material such as alluvium located near the source of the earthquake epicenter or in response to an earthquake of great magnitude.

Onsite Soils

The Geotechnical Report describes that the site is underlain by alluvial soil deposits mantled in areas of the site by minor amounts of goat manure. The manure was generally less than approximately one inch thick. The alluvial soil encountered within the excavations generally consisted of combinations of sand and silt, with some gravel interspersed. The soil was generally moist and medium dense. The in-situ moisture content within the upper approximately 15 feet generally ranged from 1 to 10 percent.

Liquefaction and Settlement

Liquefaction occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, has an inability to support weight, and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Clayey (cohesive) soils or soils which possess clay particles in excess of 20 percent are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table. Lateral spreading refers to spreading of soils in a rapid fluid-like flow movement similar to water.

The Geotechnical Report identifies that the State of California has not prepared liquefaction hazard maps for this area. However, the San Bernardino County Geologic Hazards Map does not show the site in a zone of susceptibility for liquefaction. Onsite soils include combinations of sand and silt, with some gravel interspersed. In addition, the depth of groundwater is deeper than 51.5 feet below ground surface (bgs) and the historic high groundwater levels are approximately 200 feet bgs (GEO 2019).

Based on these onsite soils and groundwater conditions, the Geotechnical Report determined that the seismic settlement potential is estimated to be 1 inch or less; and differential seismic settlement is estimated to be less than ½ an inch over a horizontal span of about 40 feet (GEO 2019).

Lateral Spreading

Lateral spreading is a type of liquefaction induced ground failure associated with the lateral displacement of surficial blocks of sediment resulting from liquefaction in a subsurface layer. Once liquefaction transforms the subsurface layer into a fluid mass, gravity plus the earthquake inertial forces may cause the mass to move downslope towards a free face (such as a river channel or an embankment). Lateral spreading may cause large horizontal displacements and such movement typically damages pipelines, utilities, bridges, and structures.

As described previously the Project site contains combinations of sand and silt, with some gravel interspersed that are not susceptible to liquefaction. In addition, groundwater was estimated to be approximately 200 feet bgs, which is not conducive to effects related to liquefaction and lateral spreading, which require groundwater or liquefied soils to exist. Based on the relatively flat topography of the site and general lack of potentially liquefiable layers, the Geotechnical Report determined that the potential for lateral spreading on the site is low (GEO 2019).

Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and occur in areas with subterranean oil, gas, or groundwater. Effects of subsidence include fissures, sinkholes, depressions, and disruption of surface drainage. Because the ground water has been historically approximately 200 feet bgs at the Project site, the potential for subsidence at the Project site is considered low.

Landslides

Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquake induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

The Geotechnical Report describes that the Project site is generally level without significant slopes. The site is not considered susceptible to static slope instability or seismically induced landslides (GEO 2019). In addition, the Project site is not adjacent to any hills or slopes that could be subject to a landslide.

Expansive Soils

Expansive soils are soils containing water-absorbing minerals that expand as they take in water. These soils can damage buildings due to the force they exert as they expand. Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience a much higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture.

The near surface soils consist of sands and silty sands, and the near-surface soil is anticipated to have a very low expansion potential (GEO 2020).

Paleontological Resources

Paleontological resources include any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, except that the term does not include any materials associated with an archaeological resource or any cultural item defined as Native American human remains. Significant paleontological resources are defined as fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or important to define a particular time frame or geologic strata, or that add to an existing body of knowledge in specific areas, in local formations, or regionally.

The primary geological setting of the San Bernardino Valley area is defined by sediment accumulated from erosion of the surrounding highlands (i.e., the Jurupa Mountains, Chino Hills, and San Jacinto Mountains to the south and the San Bernardino Mountains to the north and northeast), and the upper layers of the younger alluvium found in the valley are generally too young to preserve fossil resources; however, the deeper layers and underlying sediments have high paleontological sensitivity (Placeworks, 2019).

The Project site is underlain by younger Quaternary alluvium, derived as alluvial fan deposits from San Gabriel Mountains to the north, probably via the San Antonio Creek drainage area that currently flows to the west of the Project site (MCC 2020). These younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but they are usually underlain by older Quaternary alluvium that may contain significant fossil vertebrate remains (MCC 2020). Thus, the Project site has a low potential for paleontological sensitivity above five feet bgs and moderate/unknown potential below five feet in depth bgs (MCC 2020).

5.4.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

GEO-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- GEO-1i 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 4),
- GEO-1ii Strong seismic ground shaking,
- GEO-1iii Seismic-related ground failure, including liquefaction;
- GEO-1iv Landslides;
- GEO-2 Result in substantial soil erosion or the loss of topsoil;
- GEO-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- GEO-4 Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- GEO-5 Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
- GEO-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the geology or soils issue areas identified below (refer to Thresholds of Significance list above). For each issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds GEO-1i through 1iv
- Threshold GEO-2
- Threshold GEO-3
- Threshold GEO-4
- Threshold GEO-5

Therefore, no further assessment of these impacts is required in this Draft EIR.

5.4.5 METHODOLOGY

A Geotechnical Report was conducted for the Project site (GEO 2019), which included field exploration, exploratory soil borings, obtaining representative soil samples, laboratory testing, engineering analysis, and the review of pertinent geological literature. The laboratory testing determined the characteristics of the geology and soils that underlie the site. These subsurface conditions were then analyzed to identify potential significant impacts resulting from Project construction and operation in relation to geology and soils.

In determining whether a geotechnical related impact would result from the proposed Project, the analysis includes consideration of state law, including the California Building Code that is integrated into the County's Development Code, and implemented/verified during Project permitting approvals. In general, existing state law, building codes, and municipal codes that are implemented by the approving agency provide for an adequate level of safety or reduction of potential effects such that projects developed and operated to code reduce potential of impacts.

In determining whether a paleontological related impact would result from the proposed Project, the analysis includes consideration of the types of soils that exist on the Project site, the paleontological sensitivity of those soils, the past disturbance on the site, and the proposed excavation. The analysis combines these factors to identify the potential of Project construction to impact any unknown paleontological resources on the site.

5.4.6 ENVIRONMENTAL IMPACTS

IMPACT GEO-6: WOULD THE PROJECT DIRECTLY OR INDIRECTLY DESTROY A UNIQUE PALEONTOLOGICAL RESOURCE OR SITE OR UNIQUE GEOLOGIC FEATURE? Less than Significant Impact with Mitigation Incorporated.

Unique Geologic Feature

Notable geological features in the Valley Region of San Bernardino County include the San Andreas Fault at the southwest foot of the San Bernardino Mountains, the San Jacinto Fault at the southwest edge of the San Bernardino Basin, and the Cucamonga Fault at the southern foot of the San Gabriel Mountains. However, there are no unique geological features in the Project vicinity (PlaceWorks, 2019). As such, development of the Project would not result in impacts to unique geologic features.

Paleontological Resources

Record searches completed for the proposed Project indicate that surface deposits consist of younger Quaternary alluvium, derived as alluvial fan deposits from San Gabriel Mountains to the north, probably via the San Antonio Creek drainage area that currently flows to the west of the Project site (MCC 2020). These younger Quaternary deposits typically do not contain significant vertebrate fossils in the uppermost layers, but they are usually underlain by older Quaternary alluvium that may contain significant fossil vertebrate remains below five feet below the ground surface (MCC 2020). Excavations into similar soil types in San Bernardino County have uncovered fossils. Two fossil localities were discovered in similar deposits near the Project site. LACM 8014, southwest of the proposed Project area just southwest of the intersection of the Pomona Freeway (SR-60) and the Corona Freeway (SR-71) approximately 3.5 miles away, that produced a fossil specimen of bison, *Bison*. Slightly farther from the proposed Project area, but to the south-southwest in English Canyon, the locality LACM 1728 produced fossil specimens of horse, *Equus*, and camel, *Camelops*, at a depth of 15 to 20 feet below the surface (MCC 2020). Therefore, grading and other earthmoving activities may have the potential to impact unknown paleontological resources. Although, Project excavation is anticipated to reach a maximum depth of five-feet, Mitigation Measure GEO-1 is included to require preparation of a paleontological resource monitoring plan that requires spot checks if excavation reaches or exceeds depths of five feet, provides procedures to follow for monitoring and fossil discovery, and requires a curation agreement with an appropriate, accredited institution. With implementation of Mitigation Measure GEO-1, impacts related to paleontological resources would be less than significant.

5.4.7 CUMULATIVE IMPACTS

The potential cumulative exposure of people or structures to unstable geologic units and/or expansive soils that have the potential to result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, movement, or collapse tend to be region wide in nature, even though each site-specific development has unique geologic considerations. Site-specific development projects within unincorporated San Bernardino County and adjacent areas are subject to uniform site-development policies and construction standards imposed by the County that are based on the state requirements in the CBC and site-specific geotechnical studies prepared to define site-specific conditions that might pose a risk to safety, such as those described previously for the proposed Project. While increases in the number of people and structures subject to unstable geologic units and soils would increase in the Project area with cumulative development, given the application of CBC requirements by the County through the construction permitting process, the cumulative effects of development related to unstable geologic units and/or expansive soils; including landslides, lateral spreading, subsidence, liquefaction, movement, or collapse would be less than significant.

Impacts to paleontological resources are also site-specific rather than cumulative. Soils within the Valley Region of San Bernardino County, including Project site, are sensitive for paleontological resources. However, with incorporation of mitigation (Mitigation Measure GEO-1) and compliance with CWP Policy CR 2.3, which protects paleontological resources from loss or destruction and requires that new development include appropriate mitigation to preserve the quality and integrity of these resources, avoid them when possible, and salvage and preserve them if avoidance is not possible, cumulative impacts would be less than significant.

5.4.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

None.

Standard Conditions

None.

Plans, Programs, or Policies

PPP GEO-1: CBC Compliance. The Project is required to comply with the California Building Standards Code (CBC) as included in the County's Code as Chapter 63.01, to preclude significant adverse effects associated with seismic and soils hazards. As part of CBC compliance, CBC related and geologist and/or civil engineer specifications for proposed development on the Project site shall be incorporated into grading plans and building specifications as a condition of construction permit approval.

PPP GEO-2: Prior to grading permit issuance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) pursuant to the County's Development Code Section 85.11.030. The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other County requirements to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by County of San Bernardino staff or its designee to confirm compliance.

PPP GEO-3: Prior to grading permit issuance, the project developer shall have a Water Quality Management Plan (WQMP) approved by the County for implementation. The project shall comply with the County's Development Code Section 85.11.030 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the project.

5.4.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, Impacts GEO-1i, GEO-1ii, GEO-1iii. GEO-1iv, GEO-1, GEO-2, GEO-3, GEO-4 and GEO-5 would be less than significant.

Without mitigation, Impact GEO-6 would be **potentially significant.**

5.4.10 MITIGATION MEASURES

Mitigation Measure GEO-1: Paleontological Resources
Prior to the issuance of the first grading permit, the Applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, from a paleontologist selected from the roll of qualified paleontologists maintained by the County, stating that the paleontologist has been retained to provide services for the Project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the County. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. The PRIMP shall also require periodic paleontological spot checks if excavation reaches or exceeds depths of five feet in areas mapped as Quaternary alluvium.

In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered.

Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by Project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage, and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

5.4.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Compliance with existing regulatory programs and implementation of Mitigation Measure GEO-1 would reduce potential impacts associated with potential geotechnical hazards and unique paleontological resource impacts to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to geology and soils and paleontological resources would occur.

REFERENCES

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

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Geotechnical EIR Due-Diligence Level Report (Geotechnical Report). Prepared by Leighton and Associates, Inc., 2019 (GEO 2019). Appendix F.

Phase I Cultural and Paleontological Resources Assessment, 2016. Prepared by Material Culture Consulting (MCC 2020). Appendix D

San Bernardino County Geologic Hazards Maps. Accessed: http://cms.sbcounty.gov/lus/planning/zoningoverlaymaps/geologichazardmaps.aspx

State Water Resources Control Board Construction Storm Water Program. Accessed: http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml

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5.5 Hazards and Hazardous Materials

5.5.1 INTRODUCTION

This section considers the nature and range of foreseeable hazardous materials and physical hazards/ impacts that would result from implementation of the proposed Project. It identifies the ways that hazardous materials and other types of hazards could expose people and the environment to various health and safety risks during construction activities and operation of proposed Project.

This section also describes routine hazardous materials that are likely to be used, handled, or processed within the Project area, and the potential for upset and accident conditions in which hazardous materials could be released. The impact analysis identifies ways in which hazardous materials might be routinely used, stored, handled, processed, or transported, and evaluates the extent to which existing and future populations could be exposed to hazardous materials. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan*, October 2020
- *County of San Bernardino Development Code,* and
- *Phase I Environmental Site Assessment: 4664 and 4570 Francis Avenue Chino, California 91710 and Phase II Environmental Site Assessment: 4570 Francis Avenue Chino, California 91710, Tetra Tech, September 2016, Appendix E*
- *San Bernardino Countywide Plan Environmental Impact Report (Plan EIR), PlaceWorks, August 2020*

Hazards and Hazardous Materials Terminology

- **Hazardous Material.** Hazardous material is defined in the California Health and Safety Code, Chapter 6.95, Section 25501(o) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.

5.5.2 REGULATORY SETTING

5.9.2.1 Federal Regulations

Hazardous Materials Management

The primary federal agencies responsible for hazardous materials management include the U.S. Environmental Protection Agency (USEPA) and the U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

Resource Conservation and Recovery Act of 1976

Federal hazardous waste regulations are generally promulgated under the Resource Conservation and Recovery Act (RCRA). Pursuant to RCRA, the USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in a "cradle to grave" manner. RCRA was designed to protect human health and the environment, reduce/eliminate the generation of hazardous waste, and conserve energy and natural resources.

The Hazardous and Solid Waste Amendments of 1984 both expanded the scope of RCRA and increased the level of detail in many of its provisions, reaffirming the regulation from generation to disposal and to prohibiting the use of certain techniques for hazardous waste disposal. The USEPA has largely delegated responsibility for implementing the RCRA program in California to the State, which implements this program through the California Hazardous Waste Control Law.

RCRA regulates landfill siting, design, operation, and closure (including identifying liner and capping requirements) for licensed landfills. In California, RCRA landfill requirements are delegated to the California Department of Resources Recycling and Recovery (CalRecycle), which is discussed in detail below.

RCRA allows the USEPA to oversee the closure and post-closure of landfills. Additionally, the federal Safe Drinking Water Act, 40 CFR Part 141, gives the USEPA the power to establish water quality standards and beneficial uses for waters from below- or above-ground sources of contamination. For the Project area, water quality standards are administered by the Regional Water Quality Control Board (RWQCB).

RCRA also allows the USEPA to control risk to human health at contaminated sites. Vapor intrusion presents a significant risk to human populations overlying contaminated soil and groundwater and is considered when conducting human health risk assessments and developing Remedial Action Objectives.

Occupational Safety and Health Act of 1970

Federal and state occupational health and safety regulations also contain provisions regarding hazardous waste management through the Occupational Safety and Health Act of 1970 (amended), which is implemented by OSHA. Title 29 of the Code of Federal Regulations (29 CFR) requires special training of handlers of hazardous materials; notification to employees who work in the vicinity of hazardous materials; acquisition from the manufacturer of material safety data sheets (MSDS), which describe the proper use of hazardous materials; and training of employees to remediate any hazardous material accidental releases. OSHA regulates administration of 29 CFR.

OSHA also establishes standards regarding safe exposure limits for chemicals to which construction workers may be exposed. Safety and Health Regulations for Construction (29 CFR Part 1926.65 Appendix C) contains requirements for construction activities, which include occupational health and environmental controls to protect worker health and safety. The guidelines describe the health and safety plan(s) that must be developed and implemented during construction, including associated training, protective equipment, evacuation plans, chains of command, and emergency response procedures.

Adherence to applicable hazard-specific OSHA standards is required to maintain worker safety. For example, methane is regulated by OSHA under 29 CFR Part 1910.146 with regard to worker exposure to a "hazardous atmosphere" within confined spaces where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit. Title 49 of the CFR governs the manufacture of packaging and transport containers, packing and repacking, labeling, and the marking of hazardous material transport. Title 42, Part 82 governs solid waste disposal and resource recovery.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC § 9601 et seq.), commonly known as the Superfund, protects water, air, and land resources from the risks created by past chemical disposal practices such as abandoned and historical hazardous waste sites. It gave the EPA power to seek out the parties responsible for a release and ensure their cooperation in the cleanup. CERCLA also enabled the revision of the National Contingency Plan, which established the National Priority List (NPL) of sites, known as Superfund sites. CERCLA was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986 to continue cleanup activities.

Hazardous Materials Transportation Act

The transportation of hazardous materials is regulated by the Hazardous Materials Transportation Act (HMTA), which is administered by the Research and Special Programs Administration (RSPA) of the US Department of Transportation (USDOT). The Hazardous Materials Transportation Act provides USDOT with a broad mandate to regulate the transport of hazardous materials, with the purpose of adequately protecting the nation against risk to life and property, which is inherent in the commercial transportation of hazardous materials. The Hazardous Materials Transportation Act governs the safe transportation of hazardous materials by all modes, excluding bulk transportation by water. The Research and Special Programs Administration carries out these responsibilities by prescribing regulations and managing a user-funded grant program for planning and training grants for states and Indian tribes. USDOT regulations that govern the transportation of hazardous materials are applicable to any person who transports, ships, causes to be transported or shipped, or are involved in any way with the manufacture or testing of hazardous materials packaging or containers. USDOT regulations pertaining to the actual movement govern every aspect of the movement, including packaging, handling, labeling, marking, placarding, operational standards, and highway routing. Additionally, USDOT is responsible for developing curriculum to train for emergency response and administers grants to states and Indian tribes for ensuring the proper training of emergency responders. Hazardous Materials Transportation Act was enacted in 1975 and was amended and reauthorized in 1990, 1994, and 2005.

Title 49 of the Code of Federal Regulations, Chapter I

Under Code of Federal Regulations (CFR) Title 49, Chapter I, USDOT's Pipeline and Hazardous Materials Safety Administration regulates the transport of hazardous materials. Title 49, Chapter I sets forth regulations for response to hazardous materials spills or incidents during transport and requirements for shipping and packaging of hazardous materials.

Emergency Planning and Community Right-to-Know Act

Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA)(42 USC § 11001 et seq.) to inform communities and citizens of chemical hazards in their areas by requiring businesses to report the locations and quantities of chemicals stored onsite to state and local agencies; releases to the environment of more than 600 designated toxic chemicals; offsite transfers of waste; and pollution prevention measures and activities and to participate in chemical recycling. The EPA maintains and publishes an online, publicly available, national database of toxic chemical releases and other waste management activities by certain industry groups and federal facilities—the Toxics Release Inventory. To implement EPCRA, each state appointed a state emergency response commission to coordinate planning and implementation activities associated with hazardous materials. The commissions divided their states into emergency planning districts and named a local emergency planning committee for each district. The federal EPCRA program is implemented and administered in California Governor's Office of Emergency Services (Cal OES), a state commission, 6 local committees, and 81 Certified Unified Program agencies. Cal OES coordinates and provides staff support for the commission and local committees.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 USC § 2601 et seq.) gave the EPA the ability to track the 75,000 industrial chemicals produced or imported into the United States. The EPA repeatedly screens these chemicals; can require reporting or testing of any that may pose an environmental or human health hazard; and can ban the manufacture and import of chemicals that pose an unreasonable risk. The EPA tracks the thousands of new chemicals each year with unknown or dangerous characteristics. The act supplements other federal statutes, including the Clean Air Act and the Toxics Release Inventory under EPCRA.

Code of Federal Regulations Title 29, Section 1926.62

CFR Title 29, Section 1926.62 provides federal regulations for construction work where an employee may be occupationally exposed to lead. It includes standards for exposure assessment, worker protection, methods of compliance, biological monitoring, and medical surveillance.

Code of Federal Regulations Title 40, Part 761

CFR Title 40, Part 761 provides federal regulations for the manufacturing, processing, distribution, use, and clean up of polychlorinated biphenyls (PCBs). It provides remediation standards for the clean up of PCB waste in soils.

5.9.2.2 State Regulations

Hazardous Materials Management and Waste Handling

In the regulation of hazardous waste management, California law often mirrors or is more stringent than federal law. The California Environmental Protection Agency (CalEPA) and California Occupational Safety and Health Administration (CalOSHA) are the primary state agencies responsible for hazardous materials management. Additionally, the California Emergency Management Agency (CalEMA) administers the California Accidental Release Prevention (CalARP) program. The California Department of Toxic Substances Control (DTSC), which is a branch of CalEPA, regulates the generation, transportation, treatment, storage, and disposal hazardous waste, as well as the investigation and remediation of hazardous waste sites. The California DTSC program incorporates the provisions of both federal (RCRA) and State hazardous waste laws. The California Department of Pesticide Regulation, which is a branch of CalEPA, regulates the sale, use, and cleanup of pesticides (CCR, Title 3).

Excavated soil containing hazardous substances and hazardous building materials would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws and regulations are overseen by a variety of state and local agencies. The California Integrated Waste Management Board and the RWQCB specifically address management of hazardous materials and waste handling in their adopted regulations (CCR, Title 14 and CCR, Title 27).

The primary local agency, known as the Certified Unified Program Agency (CUPA), with responsibility for implementing federal and State laws and regulations pertaining to hazardous materials management is the San Bernardino County Fire Department (SBCFD). The Unified Program is the consolidation of six state environmental regulatory programs into one program under the authority of a CUPA. A CUPA is a local agency that has been certified by Cal-EPA to implement the six state environmental programs within the local agency's jurisdiction. This program was established under the amendments to the California Health and Safety Code made by SB 1082 in 1994. The six consolidated programs are:

- Hazardous Materials Release Response Plan and Inventory (Business Plans)
- California Accidental Release Prevention (CalARP)
- Hazardous Waste (including Tiered Permitting)
- Underground Storage Tanks (USTs)
- Above Ground Storage Tanks (Spill Prevention Control and Countermeasures (SPCC) requirements)
- Uniform Fire Code (UFC) Article 80 Hazardous Material Management Program (HMMP) and Hazardous Material Identification System (HMIS)

As CUPA, SBCFD manages six hazardous material and hazardous waste programs, described below. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits, inspection activities, and enforcement activities throughout San Bernardino County (with the exception of the City of Victorville). This approach strives to reduce overlapping and sometimes conflicting requirements of different governmental agencies independently managing these programs.

Hazardous Materials Release Response Plans and Inventory (Business Plan)

This CUPA program provides information to emergency responders and the general public regarding hazardous materials at certain facilities, and coordinates reporting of releases and spill response among businesses and local, state, and federal government authorities. Businesses are required to disclose all hazardous materials and wastes above certain quantities that are used, stored, or handled at their facility. They are also required to train their employees to safely handle chemicals and to take appropriate emergency response actions. Inspections are conducted periodically to verify the inventory and other information on the business emergency/contingency plan.

California Accidental Release Prevention Program

This program aims to reduce risks involving regulated substances through the evaluation of hazards and consequences and the development of risk management plans and prevention programs. The program requires certain facilities (referred to as "stationary sources") that handle specified chemicals (termed "regulated substances") to take specified actions to prevent and prepare for chemical accidents.

Underground Storage Tank Program

The Hazardous Materials Division oversees the Underground Storage Tank (UST) Program throughout San Bernardino County, with the exception of the city of Victorville. The purpose of this program is to ensure that hazardous substances are not released into the groundwater and/or the environment from UST systems. Specialists annually inspect tank system components, associated monitoring equipment, and inventory records to ensure that the UST systems comply with applicable laws and regulations.

Aboveground Petroleum Storage Act /Spill Prevention, Control, and Countermeasure Plan

Facilities that have cumulative aboveground storage capacities of petroleum products at or exceeding 1,320 gallons are subject to the Aboveground Petroleum Storage Act. Facilities that are subject to this act must prepare a Spill Prevention, Control, and Countermeasure Plan. Facilities handling petroleum or any other hazardous material require a business emergency/contingency plan. Both petroleum and nonpetroleum aboveground storage tanks are subject to the fire code requirements of the authority having fire code jurisdiction.

Hazardous Waste Generation and Onsite Treatment

The Hazardous Waste Inspection Program works to ensure that all hazardous wastes generated by San Bernardino County facilities are properly managed. Specialists in this program inspect facilities that generate hazardous waste, investigate complaints of unlawful hazardous waste disposal, and participate in public education. These programs are designed to provide information about laws and regulations relating to safe management of hazardous waste.

Hazardous Materials Management Plans (HMMPs) and Hazardous Materials Inventory Statements (HMISs)

The Uniform Fire Code has a provision for the local fire agency to collect information regarding hazardous materials at facilities for purposes of fire code implementation. A fire chief may require additional information to a Business Plan to meet the California Fire Code HMMP/HMIS requirements.

Hazardous Waste Control Act

The Hazardous Waste Control Act was passed in 1972 and established the California Hazardous Waste Control Program within the Department of Health Services. California's hazardous waste regulatory effort became the model for the federal Resource Conservation and Recovery Act (RCRA). California's program, however, was broader and more comprehensive than the federal system, regulating wastes and activities not covered by the federal program. California's Hazardous Waste Control Law was followed by emergency regulations in 1973 that clarified and defined the hazardous waste program, as follows:

- Included definitions of what was a waste and what was hazardous as well as what was necessary for appropriate handling, processing, and disposal of hazardous and extremely hazardous waste in a manner that would protect the public, livestock, and wildlife from hazards to health and safety.
- The early regulations also established a tracking system for the handling and transportation of hazardous waste from the point of waste generation to the point of ultimate disposition, as well as a system of fees to cover the costs of operating the hazardous waste management program.
- Advancing the newly developing awareness of hazardous waste management issues, the program established a technical reference center for public and private use dealing with all aspects of hazardous waste management.

California Government Code Section 65962.5 (a), Cortese List

The Hazardous Waste and Substance Sites List (Cortese List) is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Cortese List. The Department of Toxic Substances Control is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The Department of Toxic Substances Control regulates the generation, transportation, treatment, storage, and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose "cradle-to-grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. CalEPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other Certified Unified Program Agencies.

Title 23, Division 3, Chapter 16 of the California Code of Regulations, Underground Storage Tank Regulations

The Title 23, Division 3, Chapter 16 regulations are intended to protect waters of the state from discharges of hazardous substances from underground storage tanks. These regulations establish construction requirements for new underground storage tanks; establish separate monitoring requirements for new and existing underground storage tanks; establish uniform requirements for unauthorized release reporting, and for repair, upgrade, and closure of underground storage tanks.

Title 27 of the California Code of Regulations, Solid Waste

Title 27 of the California Code of Regulations contains a waste classification system that applies to solid wastes that cannot be discharged directly or indirectly to waters of the State and which therefore must be discharged to waste management sites for treatment, storage, or disposal. CalRecycle and its certified Local Enforcement Agency regulate the operation, inspection, permitting, and oversight of maintenance activities at active and closed solid waste management sites and operations.

California Human Health Screening Levels

The California Human Health Screening Levels (CHHSLs or "Chisels") are concentrations of 54 hazardous chemicals in soil or soil gas that CalEPA considers to be below thresholds of concern for risks to human health. The CHHSLs were developed by the Office of Environmental Health Hazard Assessment on behalf of CalEPA. The CHHSLs were developed using standard exposure assumptions and chemical toxicity values published by the EPA and CalEPA. The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, the presence of a chemical in soil, soil gas, or indoor air at concentrations below the corresponding CHHSL can be assumed to not pose a significant health risk to people who may live or work at the site. There are separate CHHSLs for residential and commercial/industrial sites.

Occupational Safety: Title 8 – CalOSHA

CalOSHA administers federal occupational safety requirements and additional state requirements in accordance with California Code of Regulations Title 8. CalOSHA requires preparation of an Injury and Illness Prevention Program (IIPP), which is an employee safety program of inspections, procedures to correct unsafe conditions, employee training, and occupational safety communication. This program is administered via inspections by the local CalOSHA enforcement unit.

CalOSHA regulates lead exposure during construction activities under CCR Title 8, Section 1532.1, Lead, which establishes the rules and procedures for conducting demolition and construction activities such that worker exposure to lead contamination is minimized or avoided.

Compliance with CalOSHA regulations and associated programs would be required for the proposed Project due to the potential hazards posed by onsite construction activities and contamination from former uses.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government, and private agencies. The plan is administered by the California Emergency Management Agency and includes response to hazardous materials incidents. The California Emergency Management Agency coordinates the response of other agencies, including CalEPA, California Highway Patrol, California Department of Fish and Wildlife, Regional Water Quality Control Board, South Coast Air Quality Management District, County Fire Department, and the County Health Department.

Hazardous Materials in Structures: Asbestos-Containing Materials and Lead-Based Paint

Several regulations and guidelines pertain to abatement of and protection from exposure to asbestos-containing materials (ACM) and lead-based paint (LBP), including Construction Safety Orders 1529 (pertaining to ACM) and Section 1532.1 (pertaining to LBP) from Title 8 of the California Code of Regulations, and Part 61, Subpart M, of the Code of Federal Regulations (pertaining to ACM). California Health and Safety Code Section 39650 et seq. provides further regulations on airborne toxic control measures. In California, ACM and LBP abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services. Asbestos is also regulated as a hazardous air pollutant under the Clean Air Act and a potential worker safety hazard under the authority of Cal/OSHA. Requirements for limiting asbestos emissions from building demolition and renovation are specified in SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection and good working practice by workers exposed to lead and ACMs.

California Emergency Services Act

The California Emergency Services Act (Government Code Section 8550 et seq.) was adopted to establish the State's roles and responsibilities during human-made or natural emergencies that result in conditions of disaster and/or extreme peril to life, property, or the resources of the State. This act is intended to protect health and safety by preserving the lives and property of the people of the State.

California Building Code and Fire Code

Chapter 7A of the California Building Code (CBC), Materials and Methods for Exterior Wildfire Exposure, prescribes building materials and construction methods for new buildings in a fire hazard severity zone. Chapter 7A contains requirements for roofing; attic ventilation; exterior walls; exterior windows and glazing; exterior doors; decking; protection of underfloor, appendages, and floor projections; and ancillary structures. Chapter 49 of the California Fire Code (CFC), Requirements for Wildland-Urban Interface Fire Areas, prescribes construction materials and methods in fire hazard severity zones; requirements generally parallel CBC Chapter 7A.

California Public Resources Code Defensible Space Regulations

Public Resources Code (PRC) Sections 4291 et seq. require that brush, flammable vegetation, or combustible growth within 100 feet of buildings be removed. This requirement does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure.

California Health and Safety Code Methamphetamine or Fentanyl Contaminated Property Cleanup Act

California Health and Safety Code Division 20, Chapter 6.9.1, Sections 25400.10 through 25400.47 establishes regulations for assessment and remediation for properties contaminated with methamphetamine or fentanyl. Additionally, Section 25400.16 sets standards for methamphetamine and fentanyl contamination.

5.9.2.4 Regional Regulations

AB 617, Community Air Protection Program In response to Assembly Bill

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017), CARB has established the Community Air Protection Program. AB 617 requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. Air districts are required to host workshops in order to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. Under AB 617, CARB must prepare an air monitoring plan by October 1, 2018, that evaluates the availability and effectiveness of air monitoring technologies and existing community air monitoring networks. Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology (BARCT), adopt new rules requiring the latest BARCT for all criteria pollutants for which an area has not achieved attainment of California AAQS, and provide uniform state-wide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the air pollution impacted communities identified by CARB.

Santa Ana RWQCB

The Santa Ana RWQCB issued a Municipal Stormwater (MS4) Permit for the part of the Santa Ana Basin in San Bernardino County in 2010 (Order No. R8-2010-0036). The principal permittee of the MS4 Permit is the San Bernardino County Flood Control District. Priority projects—generally, redevelopment projects that add or replace 5,000 or more square feet of impervious surfaces, and new development projects that create 10,000 or more square feet of impervious surfaces—must implement LID BMPs to the maximum extent practicable. The MS4 Permit requires individual priority projects to prepare and implement a water quality management plan (WQMPs) that may include source control BMPs, mitigation measures, and treatment control BMPs.

South Coast Air Quality Management District Rule 1403

SCAQMD Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices to minimize asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos containing materials. The requirements for demolition and renovation activities include asbestos surveying, notification, asbestos containing materials removal procedures and time schedules, handling and cleanup procedures, storage, and disposal requirements for asbestos containing waste materials.

5.9.2.4 Local Regulations

San Bernardino County Hazardous Materials Release Response Plans and Inventory Program

In San Bernardino County, the Business Emergency/Contingency Plan (Business Plan) is also used to satisfy the contingency plan requirement for hazardous waste generators. Any business subject to any of the CUPA permits is required in San Bernardino County to file a Business Emergency/Contingency Plan using the California Environmental Reporting System. This submission is used as the basis for the permit application. A new business going through the process of obtaining County planning or building approval is required to comply with the Business Emergency/Contingency Plan requirement prior to obtaining final certificate of occupancy and prior to bringing hazardous materials onto the property.

The quantities that trigger disclosure are based on the maximum quantity on site at any time excluding materials under active shipping papers or for direct retail sale to the public. The basic quantities are: hazardous materials at or exceeding 55 gallons, 500 pounds, or 200 cubic feet at any time in the course of a year; specified amounts of radioactives, and extremely hazardous substances above the threshold planning quantity (SBCFD 2018).

County of San Bernardino Emergency Plan

County Fire's Office of Emergency Services (OES) is responsible for countywide emergency planning, mitigation, response and recovery activities. OES manages the County's emergency operations center and develops and maintains the County's emergency operations plan and hazard mitigation plan. The current emergency operations plan, adopted by the County Board of Supervisors in 2013, specifies roles and responsibilities of various County and other local agencies in each of the four phases of emergency management: preparedness/planning, response, recovery, and mitigation. The San Bernardino County Multi-Jurisdictional Hazard Mitigation Plan, approved by FEMA in July 2017, includes risk assessments for many types of hazards, both natural and man-made; an assessment of community capabilities for hazard

mitigation; and mitigation strategies. County-identified evacuation routes consist of major and secondary highways.

San Bernardino County implements an extensive emergency preparedness system that adheres to the National Incident Management System (NIMS), which provides a comprehensive and standardized incident management system. Because San Bernardino County is NIMS compliant, it is eligible for federal preparedness grants. The County also follows the Standardized Emergency Management System (SEMS) adopted by California, which makes it eligible for reimbursement of response-related costs under state disaster assistance programs.

San Bernardino County Fire Hazard Abatement Program

To reduce the threat of wildfires, the San Bernardino County Fire Hazard Abatement (FHA) Program enforces the fire hazard requirements in San Bernardino County Code Sections 23.0301 to 23.0319. The FHA Program establishes defensible space and reduction/removal of flammable materials on properties. The program conducts surveys to identify fire hazards throughout the year, and notices to abate the hazard(s) are mailed to property owners. Property owners have 30 days to abate the violations. Failure to abate may result in citations, penalties, and/or fees. The FHA Program responds to complaints year-round in the unincorporated areas and contracting cities and fire districts.

County of San Bernardino Countywide Plan

The County recently updated their Countywide Plan which serves as the County General Plan. The following goals and policies from the existing Countywide Plan Hazards Element are relevant to the proposed Project:

Policy HZ 1.2 We require all new development to be located outside of the environmental hazard areas listed below. For any lot or parcel that does not have sufficient buildable area outside of such hazard areas, we require adequate mitigation, including designs that allow occupants to shelter in place and to have sufficient time to evacuate during times of extreme weather and natural disasters.

- Flood: 100-year flood zone, dam/basin inundation area
- Geologic: Alquist Priolo earthquake fault zone; County-identified fault zone; rockfall/debris-flow hazard area, medium or high liquefaction area (low to high and localized), existing and County-identified landslide area, moderate to high landslide susceptibility area)
- Fire: high or very high fire hazard severity zone

Policy HZ 1.7 Underground utilities. We require that underground utilities be designed to withstand seismic forces, accommodate ground settlement, and hardened to fire risk.

Policy HZ 1.10 Energy independence. We encourage new residential development to include rooftop solar energy systems and battery storage systems that can provide backup electrical service during temporary power outages

Policy HZ 1.12 Local hazard mitigation plan implementation. We require adherence to the goals, objectives and actions in the Multi-jurisdictional Hazard Mitigation Plan and subsequent amendments to reduce and mitigate damages from hazards in the county.

Policy HZ 2.2 We maintain up-to-date databases of the storage, use, and production of hazardous materials, based on federally- and state-required disclosure and notification, to appropriately respond to potential emergencies.

Policy HZ 2.3 We minimize the use of hazardous materials by choosing and by encouraging others to use non-toxic alternatives that do not pose a threat to the environment.

Policy HZ 2.4 We designate truck routes for the transportation of hazardous materials through unincorporated areas and prohibit routes that pass through residential neighborhoods to the maximum extent feasible.

Policy HZ-2.5 We engage with residents and businesses to promote safe practices related to the use, storage, transportation, and disposal of hazardous materials.

Policy HZ 2.9 We prioritize noise mitigation measures that control sound at the source before buffers, soundwalls, and other perimeter measures.

Policy HZ 3.1 We require projects processed by the County to provide a health risk assessment when a Project could potentially increase the incremental cancer risk by 10 in 1 million or more in unincorporated environmental justice focus areas, and we require such assessments to evaluate impacts of truck traffic from the Project to freeways. We establish appropriate mitigation prior to the approval of new construction, rehabilitation, or expansion permits.

Policy HZ 3.3 We assist the air quality management districts in establishing community emissions reduction plans for unincorporated environmental justice focus areas and implement, as feasible, those parts of the plans, that are within the jurisdiction and authority of the County, with particular emphasis in addressing the types of pollution identified in the Hazard Element tables.

Policy HZ 3.16 We notify the public through the County website when applications are accepted for conditional use permits, changes in zoning, and Policy Plan amendments in or adjacent to environmental justice focus areas. We prepare public notices in the predominant language(s) spoken in the communities containing environmental justice focus areas

Policy HZ 3.18 In order for Planning Project Application (excluding Minor Use Permits) to be deemed complete, we require applicants to indicate whether the Project is within or adjacent to an unincorporated environmental justice focus area and, if so, to:

- document to the County's satisfaction how an applicant will address environmental justice concerns potentially created by the Project; and
- present a plan to conduct at least one public meeting for nearby residents, businesses, and property owners to obtain public input for applications involving a change in zoning or the Policy Plan. The County will require additional public outreach if the proposed Project changes substantively in use, scale, or intensity from the proposed Project presented at previous public outreach meeting(s).

The new Countywide Plan's Personal and Property Protection Element contains the following policies related to wildfires and emergency response planning that is applicable to the Project:

Goal PP-3 Reduced risk of death, injury, property damage, and economic loss due to fires and other natural disasters, accidents, and medical incidents through prompt and capable emergency response.

Policy PP-3.8 We inform and prepare our residents and businesses to collaboratively plan and take action to more safely coexist with the risk of wildfires.

Goal PP-4 A reduced risk of and impact from injury, loss of life, property damage, and economic and social disruption resulting from emergencies, natural disasters, and potential changes in climate.

Policy PP-4.1 We maintain, update, and adopt the Emergency Operations Plan, Continuity of Operations Plan, and the Multi-Jurisdictional Hazard Mitigation Plan.

Policy PP-4.2 We ensure that critical and essential County facilities remain operational during emergencies.

Policy PP-4.3 We participate in agreements for automatic and mutual aid with other local, state, federal, and nongovernmental emergency service providers to improve protection services and emergency response throughout the county.

Policy PP-4.4 We identify and publicize emergency shelters and sign and control evacuation routes for use during emergencies.

Policy PP-4.5 We coordinate with and encourage the use of community based networks to aid vulnerable populations prepare for emergencies and provide assistance with evacuation and recovery.

Policy PP-4.6 We reestablish and expedite County services to assist affected residents and businesses in the short- and long-term recovery from emergencies and natural disasters.

Policy PP-4.7 We engage with the community to increase awareness of and preparedness for emergencies and natural disasters.

San Bernardino County Development Code

Section 23.0107; Storage of Hazardous Materials. The limits referred to in Subsection 8001.1.1 of the Uniform Fire Code, in which the storage of hazardous materials is prohibited or limited, is hereby established as follows: the storage of hazardous materials is prohibited in all areas and locations when, in the opinion of the Fire Chief having jurisdiction, the presence of hazardous material would create an unacceptable threat to the occupants and property owners. The aggregate capacity of any installation for hazardous materials shall not exceed quantities specified in this Chapter or limitations imposed by State and Federal regulations.

Chapter 23.06; Permits, Inspections, and Hearing Procedures for Hazardous Materials. No person or entity shall own, operate or allow the operation of any activity or facility subject to the requirements of the CUPA Permit Program Elements, whether for permanent or temporary activities, including but not limited to the generation, production, storage, treatment or other handling of hazardous materials or hazardous waste, nor own or operate a transporter facility as defined in § 23.0711(d) of this Code, without first applying for, receiving, and retaining an unexpired, unrevoked, unsuspended, CUPA permit for each activity or facility and paying fees in those amounts specified in Chapter 2 of Division 6 of Title 1 of the San Bernardino County Code.

Section 33.0879; Abandonment of Sewage Holding Tanks. If DEHS or any agency orders the abandonment of the sewage holding tank, or if connection is made to sanitary sewers, the permittee operating a sewage holding tank shall abandon the sewage holding tank. Abandonment means having the contents removed from the property by a septic tank pumper and either: (1) Removing the tank from the property; or (2) Backfilling the tank with a material acceptable to the San Bernardino County Division of Building and Safety. The abandonment operation shall be conducted under a valid permit from the Division of Building and Safety. DEHS shall, upon payment by the property owner of fees per the San Bernardino County Schedule of Fees, record notice of removal of the holding tank with the County Recorder.

Section 83.01.060; Fire Hazards. This Section establishes standards for storage of solid materials susceptible to fire hazards and flammable liquids and gases were allowed in compliance with Division 2 (Land Use Zoning Districts and Allowed Land Uses). The Section sets limits on the amount of flammable liquids and gases in industrial areas.

5.5.3 ENVIRONMENTAL SETTING

From 1938 until approximately 1960, the Project site was used for residential and agricultural purposes, mainly orchards and dry farming. In 1960, the central portion of the site was developed as a rabbit farm that operated until approximately 2002, while the residential parcel of the site was improved with three residential structures that were demolished in 2018. Numerous residential structures occupied the western portion of the Site from 1938 to 1997 and were demolished in 1997. After closure of the rabbit farm in 2002, the vacant parcel of the Site has been utilized as grazing land for an adjacent goat farm (ESA 2016). The Project site is currently vacant and contains concrete slabs associated with former developments.

Former Underground Storage Tanks

The Phase I ESA (Phase I 2016) describes that a former underground storage tank (UST) was located in the southwest portion of the Project site. The Phase II investigation reported that petroleum hydrocarbons (TPH) and volatile organic compounds were not detected above regulatory guidelines near the UST at shallow depths. In addition, a Phase II subsurface investigation concluded that the UST does not constitute a recognized environmental condition (REC).

Septic Systems

Two septic systems were identified on the Project site during the Phase I and Phase II investigation, which determined that they are not a hazardous materials concern.

Pesticides from Agricultural Use

As described previously, the Project site was previously used for residential and agricultural purposes, mainly orchards and dry farming from 1938 to 1960. A wide variety of pesticides may have been used during this period. Accordingly, the noted agricultural use onsite may have included contaminants of concern, such as organochlorine pesticides (OCPs) and arsenic, which have impacted soil in the undeveloped portions of the Site.

The Phase II ESA found that onsite soils contain concentrations of OCPs, including: 4,4'-DDE, 4,4'-DDT, and dieldrin that exceed Regional Screening Levels in shallow soils throughout the southwestern portion of the site (shown in Figure 5.5-1). In addition, concentrations of dieldrin were found to exceed Regional Screening Levels along the southern and western portions of the site (Tetra Tech 2016).

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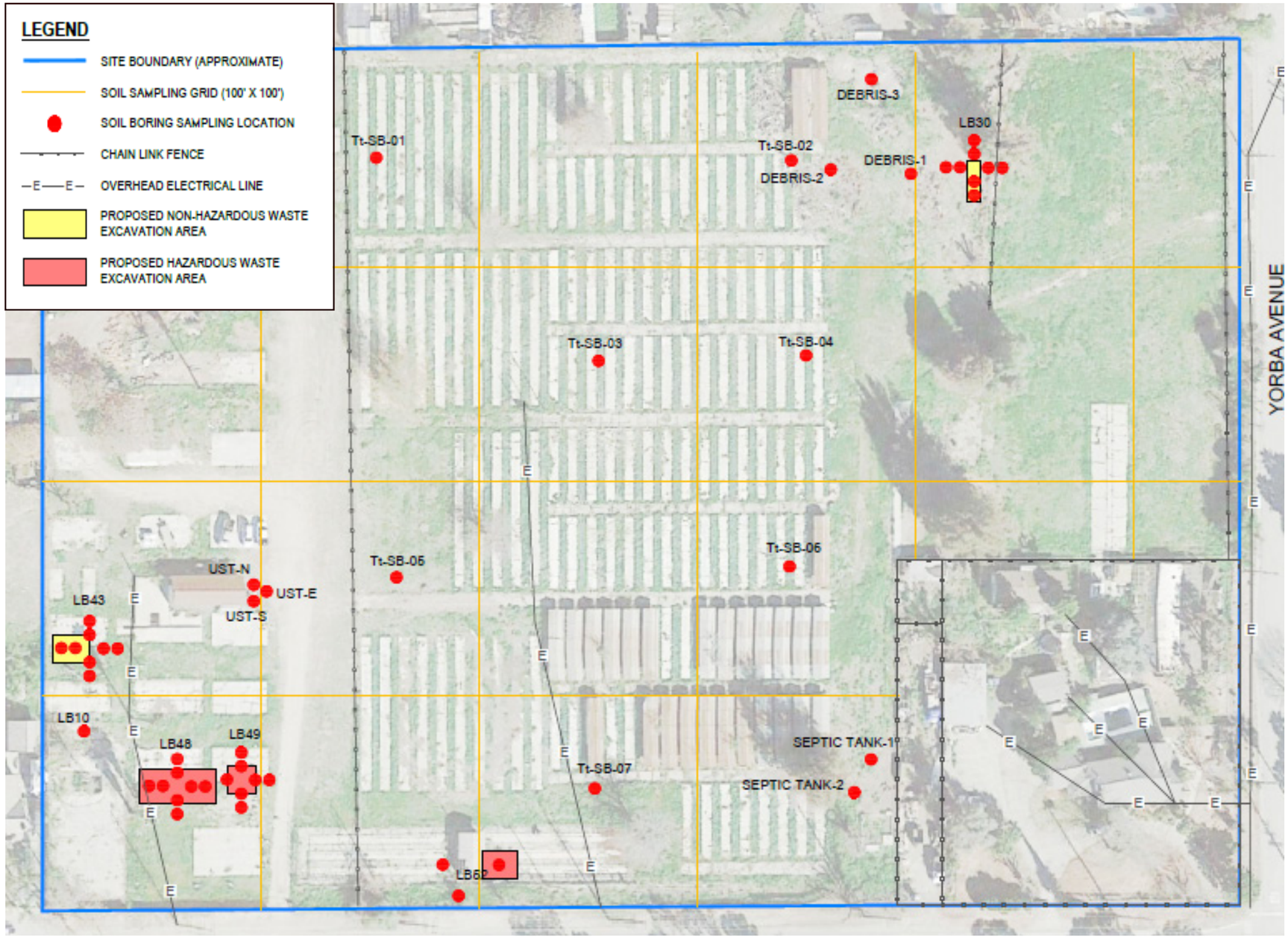
LEGEND
SITE BOUNDARY (APPROXIMATE)
SOIL SAMPLING GRID (100' X 100')
SOIL BORING SAMPLING LOCATION
CHAIN LINK FENCE
OVERHEAD ELECTRICAL LINE
PROPOSED NON-HAZARDOUS WASTE EXCAVATION AREA
PROPOSED HAZARDOUS WASTE EXCAVATION AREA
Tt-SB-01
Tt-SB-02
Tt-SB-03
Tt-SB-04
Tt-SB-05
Tt-SB-06
Tt-SB-07
DEBRIS-1
DEBRIS-2
DEBRIS-3
LB30
LB43
LB10
LB48
LB49
LB60
UST-N
UST-E
UST-S
SEPTIC TANK-1
SEPTIC TANK-2
YORBA AVENUE

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5.5.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials;

HAZ-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment;

HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;

HAZ-4 Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;

HAZ-5 Result in a safety hazard or excessive noise for people residing or working in the Project area for a Project located within an airport land use plan or, where such plan has not been adopted, be within 2 miles of a public airport use airport or public use airport;

HAZ-6 Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; or

HAZ-7 Expose people or structures either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires.

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the hazards/hazardous materials issue areas below refer to Thresholds of Significance list above). For each issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds HAZ-3
- Threshold HAZ-4
- Threshold HAZ-5
- Threshold HAZ-6
- Threshold HAZ-7

Therefore, no further assessment of these impacts is required in this Draft EIR.

5.5.5 METHODOLOGY

This evaluation of the significance of potential impacts related to hazards and hazardous materials considers both direct effects to the resource and indirect effects in a local or regional context. Potentially significant impacts would generally result in the loss or degradation of public health and safety or conflict with local, state, or federal agency regulations. Information for this section was obtained, in part, from the Phase I and Phase II ESAs and the Limited Phase II Subsurface Investigation Report.

5.5.6 ENVIRONMENTAL IMPACTS

IMPACT HAZ-1: WOULD THE PROJECT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH THE ROUTINE TRANSPORT, USE OR DISPOSAL OF HAZARDOUS MATERIALS?

Less than Significant Impact with Mitigation Incorporated.

Construction

The Project would develop and operate 45 single-family residences. The proposed construction activities would involve the routine transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking during construction activities. In addition, hazardous materials would routinely be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state regulations that are implemented by the County of San Bernardino during building permitting for construction activities. As a result, hazardous material impacts related to construction materials would be less than significant.

As described previously, the Project site contains soils contaminated with OCPs and dieldrin that would require excavation and disposal as part of excavation and grading activities. The contaminated soils would need to be excavated and removed during Project excavation and grading activities as required by DTSC, California Integrated Waste Management Board, and the RWQCB. Due to the existence of the contaminated soils and excavation activities that would occur during Project construction, implementation of the proposed Project has the potential to result in a hazard to the public or environment.

Pursuant to the Phase I and Phase II Environmental Site Assessment, Mitigation Measure Haz-1 requires excavation of contaminated soils to approximately 5 feet below the existing ground surface in areas identified as LB30, LB43, LB48, LB49, and LB52 on Figure 5.5-1. As a result, Mitigation Measure Haz-1 would be implemented to reduce the potential risks related to accidental release and exposure of people and the environment to the contaminated soils. Mitigation Measure HAZ-1 requires that a qualified consultant prepare a Soil Management Plan (SMP) to be used by construction workers to remove and dispose of the areas of TPH impacted soil. Mitigation Measure HAZ-1 requires excavation of contaminated soils be completed pursuant to existing DTSC and RWQCB requirements, soils sampling to ensure all contaminated soils are removed, and all contaminated soil and other potentially hazardous materials be transported per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. Excavated soil containing hazardous substances would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). The SMP would detail hazardous materials excavation and disposal methods and requirements pursuant to the regulation of Title 8 of the California Code of Regulations (CalOSHA) and Department of Toxic Substances Control (DTSC) that regulates the removal, transportation, and disposal of hazardous waste to protect human health and the environment. With implementation of Mitigation Measure HAZ-1 impacts related to hazards from contaminated soils would be less than significant.

Operation

Operation of the proposed Project includes activities related to residential development, which generally would use hazardous materials including solvents, cleaning agents, paints, pesticides, batteries, and aerosol cans. Although residents of the Project would utilize common types of hazardous materials generally classified as household hazardous waste, normal routine use of these products would not result in a significant hazard to residents or workers in the vicinity of the Project. Therefore, operation of the proposed Project would not result in a significant hazard to the public or to the environment through the routine transport, use,

or disposal of hazardous waste during operation of the proposed Project. Impacts would be less than significant.

IMPACT HAZ-2: WOULD THE PROJECT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT THROUGH REASONABLY FORESEEABLE UPSET OR ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT?

Less than Significant Impact with Mitigation Incorporated.

Construction

Accidental Releases. While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during demolition, excavation, grading, and construction activities would not pose health risks or result in significant impacts; improper use, storage, transportation and disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. Thus, implementation of the proposed Project could potentially result in the accidental release of hazardous materials such as chemical products typically used in construction as fuels, oils, etc. The use of BMPs during construction implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System General Construction Permit (and included as PPP WQ-1) would minimize potential adverse effects to workers, the public, and the environment. Construction contract specifications would include strict on-site handling rules and BMPs that include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

Contaminated Soils. A Phase I and a Phase II ESA were prepared for the Project site (included as Appendix E), which identified that the site was historically used for residential agriculture uses from at least 1938 until approximately 1960. Therefore, subsurface investigations included soil sampling was conducted to determine if contaminants are in onsite soils. Results of the investigation indicate that onsite soils contain concentrations of organochlorine pesticides, including: 4,4'-DDE, 4,4'-DDT, and dieldrin that exceed Regional Screening Levels in shallow soils throughout the southwestern portion of the site (shown in Figure 5.5-1). In addition, concentrations of dieldrin were found to exceed Regional Screening Levels along the southern and western portions of the site (Tetra Tech 2016).

Due to the existence of the contaminated soils, implementation of the proposed Project has the potential to result in the accidental release of hazardous materials into the environment. Construction workers and the public could be exposed to the substances that are present within the onsite soils. As a result, Mitigation Measure Haz-1 would be implemented to reduce the potential risks related to accidental release and exposure of people and the environment to the contaminated soils. Mitigation Measure HAZ-1 requires that a qualified consultant prepare a Soil Management Plan (SMP) to be used by construction workers to remove and dispose of the contaminated soil identified in the Phase I and Phase II Environmental Site Assessment, and as shown on Figure 5.5-1. Pursuant to the Phase I and Phase II Environmental Site Assessment, Mitigation Measure HAZ-1 requires excavation of contaminated soils to approximately 5 feet below the existing ground surface in areas identified as LB30, LB43, LB48, LB49, and LB52 on Figure 5.5-1. In addition,

sampling of soil will be necessary during excavation in the southern (LB52) and western (LB48) portions of the site (shown on Figure 5.5-1) to ensure residential Regional Screening Levels are not exceeded (Tetra Tech 2016).

Per the SMP a certified hazardous waste hauler shall remove and transport all potentially hazardous materials per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials. Excavated soil containing hazardous substances would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). The SMP would detail hazardous materials excavation and disposal methods and requirements pursuant to the regulation of Title 8 of CalOSHA and DTSC that regulates the removal, transportation, and disposal of hazardous waste to protect human health and the environment. With implementation of Mitigation Measure HAZ-1 impacts related to hazards of the onsite contaminated soils would be less than significant.

Septic Systems. Two septic systems were identified on the Project site during the Phase I and Phase II investigation, which determined that they are not a hazardous materials concern; however, removal and disposal of the tanks during construction of the Project would be required, pursuant to the permitting regulations and oversight of the San Bernardino County Division of Environmental Health Services, which would oversee the excavation and disposal of the septic systems (EHS 2021). Compliance with applicable laws and regulations that would be required per the County's permitting process would ensure that impacts related to removal and disposal of the septic systems would be less than significant.

Undocumented Hazardous Materials. As described previously, the Project site has a long history of various uses that includes use and storage of hazardous materials. As a result, there is the potential for undocumented hazardous material to exist onsite. However, the existing federal and state regulations related to hazardous materials and construction includes procedures to follow in the case hazardous materials are uncovered during construction activities.

Excavated soil containing hazardous substances and hazardous building materials would be classified as a hazardous waste if they exhibit the characteristics of ignitability, corrosivity, reactivity, or toxicity (CCR, Title 22, Division 4.5, Chapter 11, Article 3). State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These regulations are detailed previously and include, but are not limited to, the federal Resource Conservation and Recovery Act, the Occupational Safety and Health Act that is implemented by OSHA, and the Hazardous Materials Transportation Act. Additionally, the California Integrated Waste Management Board and the RWQCB specifically address management of hazardous materials and waste handling in their adopted regulations (CCR, Title 14 and CCR, Title 27). Furthermore, Mitigation Measure HAZ-1would reduce impacts related to other soil contamination, not identified previously. Thus, with implementation of existing regulations and Mitigation Measure HAZ-1, impacts related to upset or accident conditions involving the release of hazardous materials into the environment would be less than significant.

Operation

As described above, the risks related to upset or accident conditions involving the release of hazardous materials into the environment would be adequately addressed through compliance with existing federal, State, and local regulations. Development under the proposed Project would involve residential uses that would use and store common hazardous materials such as paints, solvents, and cleaning products. Also, building mechanical systems and grounds and landscape maintenance could also use a variety of products formulated with hazardous materials, including fuels, cleaners, lubricants, adhesives, sealers, and pesticides/herbicides.

As described previously, normal routine use of these products pursuant to existing regulations would not result in a significant hazard to the environment, residents, or workers in the vicinity of the Project. In addition, a Water Quality Management Plan (WQMP) is required to be implemented for the Project (as further discussed in Section 5.6, *Hydrology and Water Quality* and included as PPP WQ-1) The BMPs that would be implemented as part of the WQMP would protect human health and the environment should any accidental spills or releases of hazardous materials occur during operation of the Project. As a result, operation of the proposed Project would not result in 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, and impacts would be less than significant.

5.5.7 CUMULATIVE IMPACTS

Cumulative land use changes within the County would have the potential to expose future area residents, employees, and visitors to chemical hazards through redevelopment of sites and structures that may be contaminated from either historic or ongoing uses. The severity of potential hazards for individual projects would depend upon the location, type, and size of development and the specific hazards associated with individual sites. All hazardous materials users and transporters, as well as hazardous waste generators and disposers are subject to regulations that require proper transport, handling, use, storage, and disposal of such materials to ensure public safety. Thus, if hazardous materials are found to be present on present or future Project sites appropriate remediation activities would be required pursuant to standard federal, state, and regional regulations. Compliance with the relevant federal, state, and local regulations during the construction and operation of related projects would ensure that cumulative impacts from hazardous materials would be less than significant.

5.5.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

Federal

- United States Code of Federal Regulations Title 42, Sections 6901 et seq.: Resource Conservation and Recovery Act
- United States Code of Federal Regulations Title 42, Sections 11001 et seq.: Emergency Planning & Community Right to Know Act
- United States Code of Federal Regulations Title 49, Parts 101 et seq.: Regulations implementing the Hazardous Materials Transportation Act (United States Code of Federal Regulations Title 49 Sections 5101 et seq.)
- United States Code of Federal Regulations Title 15, Sections 2601 et seq.: Toxic Substances Control Act
- US Environmental Protection Agency Asbestos Hazard Emergency Response Act, 40 United States Code of Regulations Section 763
- United States Code of Federal Regulations Title 49, Chapter I
- United States Code of Federal Regulations Title 29, Section 1926.62
- United States Code of Federal Regulations Title 40, Part 761
- United States Code of Federal Regulations Title 29, Section 1910.120

State

- California Occupational Safety and Health Administration Regulation 29, CFR Standard 1926.62
- California Code of Regulations Title 24, Part 2: California Building Code
- California Code of Regulations Title 24, Part 9: California Fire Code
- California Code of Regulations Title 8, Section 1532.1: Lead in Construction Standard
- California Code of Regulations Title 23, Chapter 16: Underground Storage Tanks
- California Code of Regulations Title 8, Section 1529: Asbestos
- California Health and Safety Code Division 20, Chapter 6.9.1, Sections 25400.10 through 25400.47
- California Health and Safety Code Section 39650 et seq.

Regional

- South Coast Air Quality Management District Rule 1403: Asbestos

Local

- SBCDC, Section 83.01.060, *Fire Hazards*
- SBCDC, Section 23.0107, *Storage of Hazardous Materials*
- SBCDC, Section 23.0602, *Current CUPA Operational Permit Required*
- SBCDC Section 33.0879, *Abandonment of Sewage Holding Tanks*

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.5.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, Impacts HAZ-1 and HAZ-2 would be **potentially significant**:

5.5.10 MITIGATION MEASURES

Mitigation Measure HAZ-1: Prior to issuance of a grading permit, a Site Management Plan (SMP) shall be prepared by a qualified hazardous materials consultant and shall detail procedures and protocols for excavation and disposal of onsite hazardous materials, including:

- A certified hazardous waste hauler shall remove all potentially hazardous soils. Excavation of contaminated soils shall be to the depth of approximately 5 feet below the existing ground surface in areas identified in the Phase I and Phase II Environmental Site Assessment (Tetra Tech 2016). In addition, sampling of soil shall be conducted during excavation in the southern and western portions of the site, in areas identified in the Phase I and Phase II Environmental Site Assessment (Tetra Tech 2016), to ensure residential Regional Screening Levels are not exceeded. Excavated materials shall be transported per California Hazardous Waste Regulations to a landfill permitted by the state to accept hazardous materials.
- Any subsurface materials exposed during construction activities that appear suspect of contamination, either from visual staining or suspect odors, shall require immediate cessation of excavation activities.

Soils suspected of contamination shall be segregated from other soils to be tested for potential contamination. If contamination is found to be present per Environmental Screening Levels (ESLs), any further proposed groundbreaking activities within areas of identified or suspected contamination shall be conducted according to California Hazardous Waste Regulations.

- A Health and Safety Plan (HSP) shall be prepared for each contractor that addresses potential safety and health hazards and includes the requirements and procedures for employee protection. The HSP shall also outline proper soil handling procedures and health and safety requirements to minimize worker and public exposure to hazardous materials during construction.
- All SMP measures shall be printed on the construction documents, contracts, and Project plans prior to issuance of grading permits.

5.5.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with hazardous materials for Impact HAZ-1 and HAZ-2 to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to hazards and hazardous materials would occur.

REFERENCES

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

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Phase I Environmental Site Assessment: 4664 and 4570 Francis Avenue Chino, California 91710 and Phase II Environmental Site Assessment: 4570 Francis Avenue Chino, California 91710, 2016. Prepared by Tetra Tech (Tetra Tech 2016). Appendix E.

San Bernardino County Environmental Health Services (EHS 2021). Accessed: https://wp.sbcounty.gov/dph/programs/ehs/

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5.6 Hydrology and Water Quality

5.6.1 INTRODUCTION

This section describes the environmental and regulatory settings and identifies potential impacts for hydrology and water quality resources. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan*, October 2020
- *Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, June 2019
- *County of San Bernardino Development Code*
- *Geotechnical Investigation Proposed Residential Development APN's 1013-211-21 And 1013-211-22 Northwest of Francis Avenue And Yorba Avenue City Of Chino, California, Leighton and Associates, Inc. (GEO 2019) July 16, 2019, Appendix F*
- *Preliminary Water Quality Management Plan for Tentative Tract No. 20394, MDS Consulting, (WQMP 2021), January 2021, Appendix H*
- *Preliminary Hydrology Study for Tentative Tract No. 20394, MDS Consulting, (MDS 2021) January 2021, Appendix G.*

5.6.2 REGULATORY SETTING

5.6.2.1 Federal Regulations

Clean Water Act

The United States Environmental Protection Agency (USEPA) is the federal agency that implements the Clean Water Act (CWA), which is responsible for water quality management. The purpose of the CWA is to protect and maintain the quality and integrity of the nation's waters by requiring states to develop and implement state water plans and policies.

CWA Section 303, Total Maximum Daily Loads (TMDL): Section 303 of the CWA requires states to establish water quality standards consisting of designated beneficial uses of water bodies and water quality standards to protect those uses for all Waters of the United States. Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are waters that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish a priority ranking for listed waters and develop action plans to improve their water quality. This process includes development of Total Maximum Daily Loads (TMDL) that set discharge limits for non-point source pollutants.

A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. The Ducheny Bill (AB 1740) requires the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) to post this list and to provide an estimated completion date for each TMDL.

CWA Section 402, National Pollutant Discharge Elimination System (NPDES) Permit: Direct discharges of pollutants into Waters of the United States are not allowed, except in accordance with the NPDES program

established in Section 402 of the CWA. The main goal of the NPDES program is to protect human health and the environment. Pursuant to the NPDES program, permits that apply to storm water discharges from municipal storm drain systems, specific industrial activities, and construction activities (one acre [ac] or more) have been issued. NPDES permits establish enforceable effluent limitations on discharges, require monitoring of discharges, designate reporting requirements, and require the permittee to include use of Best Management Practices (BMPs). Industrial (point source) storm water permits are required to meet effluent limitations, while municipal and construction permits are governed by the maximum extent practicable (MEP) or the Best Available Technology (BAT)/Best Control Technology (BCT) application of BMPs. SWRCBs are required to ensure that state-specific permits comply with the NPDES Permit.

5.6.2.2 State Regulations

Porter-Cologne Act

The Porter-Cologne Water Quality Control Act of 1969, codified as Division 7 of the California Water Code, authorizes the State Water Resources Control Board (SWRCB) to provide comprehensive protection for California's waters through water allocation and water quality protection. The SWRCB implements the requirements of CWA and establishes water quality standards that have to be set for certain waters by adopting water quality control plans under the Porter-Cologne Act. The Porter-Cologne Act establishes the responsibilities and authorities of the 9 Regional Water Quality Control Boards (RWQCB), including preparing water quality plans for areas in the region, and identifying water quality objectives and waste discharge requirements (WDRs). Water quality objectives are defined as limits or levels of water quality constituents and characteristics established for reasonable protection of beneficial uses or prevention of nuisance. Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife.

The Project site is within the Santa Ana River Watershed. The Santa Ana River Basin Water Quality Control Plan was adopted in February 2016. This Basin Plan gives direction on the beneficial uses of the waters, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the established standards.

California Anti-Degradation Policy

A key policy of California's water quality program is the State's Anti-Degradation Policy. This policy, formally known as the Statement of Policy with Respect to Maintaining High Quality Waters in California (SWRCB Resolution No. 68-16), restricts degradation of surface and ground waters. In particular, this policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses. Under the Anti-Degradation Policy, any actions that can adversely affect water quality in all surface and ground waters must (1) be consistent with maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of the water; and (3) not result in water quality less than that prescribed in water quality plans and policies (i.e., will not result in exceedances of water quality objectives).

California Construction General Permit

The State of California adopted a Statewide NPDES Permit for General Construction Activity (Construction General Permit) on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The last Construction General Permit amendment became effective on July 17, 2012. The Construction General Permit regulates construction site stormwater management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain

coverage under the general permit for discharges of stormwater associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular operational maintenance activities.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Stormwater Pollution Prevention Plan (SWPPP), and other compliance-related documents, including a risk-level assessment for construction sites, an active stormwater effluent monitoring and reporting program during construction, rain event action plans, and numeric action levels for pH and turbidity as well as requirements for qualified professionals to prepare and implement the plan. An appropriate permit fee must also be mailed to SWRCB.

The Construction General Permit requires project applicants to file a Notice of Intent with the SWRCB to discharge stormwater, and to prepare and implement a SWPPP for projects that will disturb greater than 1 acre of soil. The SWPPP would include a site map, description of stormwater discharge activities, and best management practices (BMPs) taken from the menu of BMPs set forth in the California Stormwater Quality Association BMP Handbook that will be employed to prevent water pollution. The SWPPP is required to include BMPs that will be used to control soil erosion and discharges of other construction-related pollutants (e.g., petroleum products, solvents, paints, cement) that could contaminate nearby water resources. It must demonstrate compliance with local and regional erosion and sediment control standards, identify responsible parties, provide a detailed construction timeline, and implement a BMP monitoring and maintenance schedule. The Construction General Permit also requires the SWPPP to identify BMPs that will be implemented to reduce controlling potential chemical contaminants from impacting water quality. Types of BMPs include erosion control (e.g., preservation of vegetation), sediment control (e.g., fiber rolls), non-stormwater management (e.g., water conservation), and waste management. The SWPPP is also required to include BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs).

California Water Resources Control Board Low Impact Development Policy

The SWRCB adopted the Low Impact Development (LID) Policy which, at its core, promotes the idea of "sustainability" as a key parameter to be prioritized during the design and planning process for future development. The SWRCB has directed its staff to consider sustainability in all future policies, guidelines, and regulatory actions. LID is a proven approach to manage stormwater. The RWQCBs are advancing LID in California in various ways, including provisions for LID requirements in renewed Phase I municipal stormwater NPDES permits.

5.6.2.3 Regional Regulations

Santa Ana Regional Water Quality Control Board Water Quality Control Plan

The unincorporated areas of the County of San Bernardino is within the jurisdiction of the Santa Ana RWQCB. The RWQCB sets water quality standards for all ground and surface waters within its region through implementation of a Water Quality Control Plan (Basin Plan). The Basin Plan describes existing water quality conditions and establishes water quality goals and policies. The Basin Plan is also the basis for the Regional Board's regulatory programs. To this end, the Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," as used in the federal Clean Water Act, includes both the beneficial uses of specific water bodies and the levels of quality which must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions that are necessary to achieve and maintain target water quality standards. The Santa Ana Basin Plan has been in place since 1995, (with updates in 2008, 2011, 2016, and 2019). The goal of the Basin

Plan is to protect public health and welfare and maintain or enhance water quality and potential beneficial uses of the water.

Municipal Regional Stormwater NPDES Permit

Within the San Bernardino County area of the Santa Ana River Basin, management and control of the municipal separate storm sewer system (MS4) is shared by a number of agencies, including the San Bernardino County Flood Control District, San Bernardino County, and the cities of Big Bear Lake, Chino, Chino Hills, Colton, Fontana, Grand Terrace, Highland, Lom a Linda, Montclair, Ontario, Rancho Cucamonga, Redlands, Rialto, San Bernardino, Upland, and Yucaipa. The San Bernardino County Public Works Department is the local enforcing agency of the MS4 NPDES Permit.

On January 29, 2010, the Santa Ana RWQCB issued an area wide MS4 permit to the County and municipalities in San Bernardino County. Waste discharge requirements for stormwater entering municipal storm drainage systems are set forth in the MS4 permit, Order No. R8-2010-0036, NPDES No. CAS618036. This permit expired on January 29, 2015. On August 1, 2014, the San Bernardino County Flood Control District submitted a Report of Waste Discharge (ROWD) on behalf of San Bernardino County and the 16 incorporated cities within San Bernardino County. The submitted ROWD serves as the permit renewal application for the fifth term MS4 permit for San Bernardino County.

5.6.2.4 Local Regulations

San Bernardino County Stormwater Program

The Technical Guidance Document for Water Quality Management Plans (WQMPs) for the Santa Ana Region of San Bernardino County is the guidance document for the Project's stormwater design in compliance with Santa Ana RWQCB requirements for Priority Projects or Transportation Projects. The MS4 Permit requires that a preliminary project-specific WQMP be prepared for review early in the project development process and that a Final WQMP be submitted prior to the start of construction. A project specific WQMP is required to address the following:

- Develop site design measures using Low Impact Development (LID) principles
- Evaluate feasibility of on-site LID Best Management Practices (BMPs)
- Maximum hydrologic source control, infiltration, and biotreatment BMPs
- Select applicable source control BMPs
- Address post-construction BMP maintenance requirements

County of San Bernardino Countywide Plan

The following goals and policies from the newly adopted Countywide Plan are relevant to the proposed Project:

Goal CO 5: The County will protect and preserve water resources for the maintenance, enhancement, and restoration of environmental resources.

Policy CO 5.4: Drainage courses will be kept in their natural condition to the greatest extent feasible to retain habitat, allow some recharge of groundwater basins and resultant savings. The feasibility of retaining features of existing drainage courses will be determined by evaluating the engineering feasibility and overall costs of the improvements to the drainage courses balanced with the extent of the retention of existing habitat and recharge potential.

Goal CI 11: The County will coordinate and cooperate with governmental agencies at all levels to ensure safe, reliable, and high-quality water supply for all residents and ensure prevention of surface and ground water pollution.

Policy CI 11.1: Apply federal and state water quality standards for surface and groundwater and wastewater discharge requirements in the review of development proposals that relate to type, location and size of the proposed project to safeguard public health.

Policy CI 11.12: Prior to approval of new development, ensure that adequate and reliable water supplies and conveyance systems will be available to support the development, consistent with coordination between land use planning and water system planning.

Policy CI 11.13: Prevent surface and groundwater pollution and continue the cleanup of contaminated waters and watersheds.

Policy CI 11.13: Prior to approval of new development, ensure that adequate and reliable water supplies and conveyance systems will be available to support the development, consistent with coordination between land use planning and water system planning.

Policy CI 12.11: Prior to approval of new development, ensure that adequate and reliable wastewater systems will be available to support the development, consistent with coordination between land use planning and wastewater system planning.

Goal CI 13: The County will minimize impacts to stormwater quality in a manner that contributes to improvement of water quality and enhances environmental quality.

Policy CI 13.1: Utilize site-design, source-control, and treatment control best management practices (BMPs) on applicable projects, to achieve compliance with the County Municipal Stormwater NPDES Permit.

Policy CI 13.2: Promote the implementation of low impact design principles to help control the quantity and improve the quality of urban runoff.

County of San Bernardino Development Code

Chapter 35.01; Pollutant Discharge Elimination System Regulations: This chapter requires the County to participate as a "Co-permittee" under the NPDES Permit program to accomplish the requirements of the CWA. Pursuant to this chapter, the County is required to participate in the improvement of water quality and comply with federal requirements for the control of urban pollutants to stormwater runoff.

Chapter 83.15; Conditional Compliance for Water Quality Management Plans: The purpose of this chapter is to ensure compliance with conditions of approval on projects involving Water Quality Management Plan features.

Chapter 85.11; Pre-Construction Flood Hazard and Soil Erosion Pollution Prevention Inspection: The purpose of this chapter is to control soil erosion pollution and regulate construction of proposed structures that are subject to flood hazards due to storm events within local flood hazard areas that are not within a designated Flood Plain Safety (FP) Overlay District or Floodway (FW) Land Use Zoning District.

Chapter 89.01; Drainage Facilities Financing: The purpose of this Chapter is to require the payment of drainage fees for most new construction that is within an adopted Local Area Drainage Plan. The fees shall be paid prior to the issuance of Building Permits for the purposes of defraying the actual or estimated costs of constructing planned drainage facilities.

5.6.3 ENVIRONMENTAL SETTING

Watershed

The Project site is located within the Santa Ana River Watershed. The watershed is located south and east of Los Angeles and includes much of Orange County, the northwestern corner of Riverside County, the southwestern corner of San Bernardino County, and a small portion of Los Angeles County. The watershed is bounded on the south by the Santa Margarita watershed, on the east by the Salton Sea and Southern Mojave watersheds, and on the north and west by the Mojave and San Gabriel watersheds. The Santa Ana River watershed is divided into smaller specific watersheds. This watershed is in an arid region and therefore has little natural perennial surface water. Surface waters start in the upper erosion zone of the watershed, primarily in the San Bernardino and San Gabriel mountains. This upper zone has the highest gradient and soils and geology that do not allow large quantities of percolation of surface water into the ground. A variety of downstream water storage reservoirs (Lake Perris, Lake Mathews, and Big Bear Lake) and flood control areas (Prado Dam area and Seven Oaks Dam area) have been created to hold surface water.

The Santa Ana River watershed is regulated by the Santa Ana RWQCB. The Santa Ana RWQCB manages a large watershed area, which includes most of San Bernardino County to the east and then southwest through northern Orange County to the Pacific Ocean. The Santa Ana RWQCB's jurisdiction encompasses 2,800 square miles.

Groundwater Basin

The Project site is located in the Chino Subbasin of the Upper Santa Ana Groundwater Basin. The Chino Basin is one of the largest groundwater basins in southern California and encompasses about 235 square miles of the Upper Santa Ana River watershed. It lies within portions of San Bernardino, Riverside, and Los Angeles counties. The Chino Basin has approximately 5 to 7 million-acre feet of water in storage and an estimated 1 million acre-feet of additional unused storage capacity. Prior to 1978, the Basin was in overdraft. After 1978, the Basin has been managed via adjudication by the Chino Basin Watermaster

Water Quality

Water Quality Impairments: Section 303(d) of the federal CWA requires states to identify water bodies that are "impaired," or those that do not meet water quality standards and are not supporting their beneficial uses. Total Maximum Daily Loads (TMDLs) are then designed to serve as pollution control plans for these specific pollutants.

Receiving waters for the Project site include the San Antonio Channel, Chino Creek Reach 1B, Prado Dam, Santa Ana River Reach 1, Santa Ana River Reach 2, Newport Slough, and Pacific Ocean. The Newport Slough has been placed on the 303(d) list for indicator bacteria and the Chino Creek Reach 1B has been placed on the 303(d) list for nutrients.

The County of San Bernardino has adopted the EPA's National Pollutant Discharge Elimination System (NPDES) regulations, which aims to reduce pollutants in urban runoff and stormwater flows. The Santa Ana RWQCB issued the County a Municipal Separate Storm Sewer System (MS4) Permit (Order No. R8-2010-0036), which establishes pollution prevention requirements for planned developments. The County participates in an Area-wide Urban Stormwater Runoff Management Program to comply with the MS4 Permit requirements. Runoff from the development upland site is managed and regulated under the NDPES MS4 Permit and associated Storm Water Management Program.

Groundwater Supply

Groundwater from the Chino Basin provides approximately 50 percent of the water supply for the Monte Vista Water District whose service area includes the Project site. The remaining supply for Monte Vista Water District is imported water. The Chino Basin was adjudicated by the California Superior Court in 1978 to regulate the amount of groundwater that can be pumped from the basin by creating the Chino Basin Watermaster to oversee management of water rights. The Monte Vista Water District currently has base water rights of 4,824 AFY. The District also owns the Monte Vista Irrigation Company, which has 677 AFY of base rights and receives its share of unpumped agricultural rights. In addition, the District has rights to "carry over" supplies of water that was previously not used.

Storm Drainage Facilities

The Project site is currently 40 percent impervious and 60 percent pervious (WQMP 2021). The existing topography of the Project site is relatively flat and generally drains from the north to the south. There is no existing storm drain system near the Project site and existing stormwater that does not infiltrate into the site's pervious surfaces runs via sheet flow onto Francis Avenue.

Soil Infiltration

Onsite soils infiltration testing was performed during preparation of the Geotechnical Report, which determined that soils at a depth of 15 feet (bottom of detention basin) to 35 feet have a design infiltration rate of 0.5 inches per hour and soils that extend at a depth from 35 feet to 45 feet have a design infiltration rate of 10 inches per hour. Based on these infiltration rates, the onsite silty soils or soils with a higher fines content are not considered feasible for infiltration. Sandy soils with a low fines content are anticipated to have higher infiltration rates; however, sandy soils underlain by finer-grained soils are not considered suitable (GEO 2019).

Flood Zone, Tsunami, Seiche

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) for the Project area (06059C0279J) shows that the Project site is located within "Zone X," which is an area of minimal flood hazard potential outside of the 0.2 percent annual chance flood.

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The Project site is over 30 miles from the Pacific Ocean, and outside of the Tsunami Hazard Zone identified by the California Department of Conservation (DOC 2020).

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water. There are no water bodies in the vicinity of the Project site, and no existing risks related to seiche flood hazards exist on or near the site.

5.6.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a project could have a significant effect if it were to:

WQ-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

WQ-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

WQ-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in a substantial erosion or siltation on- or off-site;

WQ-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

WQ-5 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 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;

WQ-6 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 impede or redirect flood flows;

WQ-7 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or

WQ-8 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The Initial Study established that the proposed Project would result in no impact related to Threshold WQ-6 and WQ-7; no further assessment of this impact is required in this Draft EIR.

5.6.5 METHODOLOGY

This evaluation of the significance of potential impacts related to hydrology and water quality is based on a review of published information and reports regarding regional hydrology, groundwater conditions, and surface water quality. The potential impacts on hydrology and water quality were evaluated by considering the general type of pollutants that operation of the Project would generate during construction and operation. In determining the level of significance, the analysis recognizes that development under the proposed Project would be required to comply with relevant federal, state, and regional laws and regulations that are designed to ensure compliance with applicable water quality standards and waste discharge requirements. Because the regional and local regulations related to water quality standards have been developed to reduce the potential of pollutants in the water resources (as described in the Regulatory Setting Section above), and are implemented to specific waterbodies, implementation of all relevant water quality and hydrology requirements would limit the potential of the proposed Project to result in any significant impact.

5.6.6 ENVIRONMENTAL IMPACTS

IMPACTS WQ-1: WOULD THE PROJECT VIOLATE ANY WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS OR OTHERWISE SUBSTANTIALLY DEGRADE SURFACE OR GROUNDWATER QUALITY?

Less than Significant Impact.

Construction

Implementation of the proposed Project includes development involving demolition of the existing structures and pavement, site preparation, construction of new buildings, and infrastructure improvements. Demolition of existing structures, removal of existing contaminated soils, grading, stockpiling of materials, excavation and the import/export of soil and building materials, construction of new structures, and landscaping activities would expose and loosen sediment and building materials, which have the potential to mix with stormwater and urban runoff and degrade surface and receiving water quality.

Additionally, construction generally requires the use of heavy equipment and construction-related materials and chemicals, such as concrete, cement, asphalt, fuels, oils, antifreeze, transmission fluid, grease, solvents, and paints. In the absence of proper controls, these potentially harmful materials could be accidentally spilled or improperly disposed of during construction activities and could therefore pollute surface waters or groundwater, resulting in a significant impact to water quality.

Pollutants of concern during construction activities generally include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction, which would have the potential to be transported via storm runoff into nearby receiving waters and eventually may affect surface or groundwater quality. During construction activities, excavated soil would be exposed, thereby increasing the potential for soil erosion and sedimentation to occur compared to existing conditions. In addition, during construction, vehicles and equipment are prone to tracking soil and/or spoil from work areas to paved roadways, which is another form of erosion that could affect water quality.

These types of water quality impacts during construction of the Project would be prevented through the requirements of the NPDES stormwater permit (NPDES Permit No. CAS618036 and RWCB Order R8-2010-0036 for San Bernardino County), which establishes minimum stormwater management requirements and controls that are required to be implemented for construction of the proposed Project, including preparation of a SWPPP by a Qualified SWPPP Developer (QSD), which is included as plan, program, or policy (PPP) HYD-1 and GEO-2. Throughout this section, reference is made to existing Plans, Programs, or Policies (PPPs) currently in place which effectively reduce environmental impacts. Where applicable, PPPs are listed to show their effect in reducing potential environmental impacts. In addition, an erosion control plan is required by Chapter 85.11.030 of the County's Development Code, which implements the requirements of the SWPPP. The SWPPP is required for plan check and approval by the Building Official with the concurrence of the Planning Division and the Land Development Division, prior to provision of permits for the Project, and would include construction BMPs such as:

- Silt fencing, fiber rolls, or gravel bags
- Street sweeping and vacuuming
- Storm drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseeding
- Material delivery and storage
- Stockpile management
- Spill prevention and control
- Solid waste management
- Concrete waste management

Adherence to the existing requirements and implementation of the appropriate BMPs that are required by the County's permitting process and included as PPP WQ-1, would ensure that potential water quality

degradation associated with construction activities would be minimized, and impacts would be less than significant.

Operation

The existing Project site includes concrete slabs and is currently vacant. The proposed Project includes operation of single-family residential use. Potential pollutants associated with the proposed uses include various chemicals from cleaners, pathogens from pet wastes, nutrients from fertilizer, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. If these pollutants discharge into surface waters, it could result in degradation of water quality. As described previously, the Chino Creek Reach 1B and the Newport Slough, to which the Project site drains, are currently listed as impaired on the EPA's 303(d) list for various pollutants. Therefore, additional pollutant discharge could create new, or exacerbate existing impairments within these waterbodies, which could result in a significant impact related to water quality.

However, operation of the proposed Project would be required to comply with the requirements of the Santa Ana RWQCB MS4 Permit to develop of a project-specific WQMP (included as PPP WQ-2) that would include implementation of operational LID infrastructure and non-structural, structural, and source control and treatment control BMPs to protect surface water quality. A Preliminary WQMP has been developed (included as Appendix H) and recommends various post construction BMPs to be incorporated into the Project. The final WQMP is required to be approved prior to the issuance of a building or grading permit. The types of BMPs that would be implemented for the proposed Project are listed in Table HWQ-1.

Table HWQ-1: Types of BMPs Incorporated into the Project Design

Type of BMP	Description of BMPs
LID Site Design	**Optimize the site design:** The site has been designed so that onsite runoff would be conveyed through proposed on-site storm drainpipes into the proposed infiltration/detention facilities which would detain precipitation from the 100-year storm event to 80 percent of the undeveloped storm flow conditions.
	Minimize impervious areas: The street widths have been designed to minimize impervious areas.
	Maximize natural infiltration: Underground infiltration chambers would promote natural infiltration.
	Preserve existing drainage patterns: Proposed development would match the existing drainage pattern and implement BMPs to aid in longer time of concentration by introducing more pervious areas and natural infiltrating capabilities.
Source Control	**Storm drain stenciling and signage:** Storm drain stencils would be highly visible source control messages, typically placed directly adjacent to storm drain inlets.
	Trash and waste storage areas: Trash and waste storage areas would be designed to reduce pollution introductions. Trash bins would be kept closed and equipped with water-tight lids.

Type of BMP	Description of BMPs
	Landscape design and efficient irrigation systems: HOA and homeowner may employ and of the following: • Install rain shutoff devices to prevent irrigation after precipitation. • Maintain and fix broken sprinklers or lines. • Implement landscape plans consistent with County Water Conservation Resolution or County Equivalent. • Group plants with similar water requirements. • Choose drought tolerant plants. • Design irrigation systems to each landscape area's specific water requirements. • Private lots shall be maintained by HOA.
Treatment Control	**Infiltration Basin:** The proposed infiltration basin would detain and filter runoff prior to discharge.
	Landscaping: Landscaping consisting of drought-tolerant plants would be provided throughout the Project site.

The Project includes two basin alternatives that would provide similar water quality and stormwater detention systems. Both alternatives would incorporate post construction BMPs as described within Table HWQ-1, minimizing potential water quality impacts as a result of Project operation. The final WQMP, which would include operational LID infrastructure and non-structural, structural, and source control and treatment control BMPs to protect surface water quality, is required to be approved prior to the issuance of a building or grading permit. The Project's WQMP would be reviewed and approved by the County to ensure it complies with the Santa Ana RWQCB MS4 Permit regulations. In addition, the County's permitting process would ensure that all BMPs in the WQMP would be implemented with the Project.

Overall, implementation of the WQMP pursuant to the existing regulations would ensure that operation of the proposed Project would not violate any water quality standards, waste discharge requirements, or otherwise degrade water quality; and impacts would be less than significant.

IMPACT WQ-2: 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 Impact.

Water supplies to the Project site are currently provided by the Monte Vista Water District. In 2015, the District obtained 50 percent of its water supply from groundwater from the Chino basin and 42 percent of its supply was imported water through the Metropolitan Water District (UWMP 2015). The Chino Basin was adjudicated by the California Superior Court in 1978 to regulate the amount of groundwater that can be pumped from the basin by creating the Chino Basin Watermaster to oversee management of water rights.

The Monte Vista Water District currently has base water rights of 4,824 acre-feet per year (AFY). The District also owns the Monte Vista Irrigation Company, which has rights to 677 AFY. The District has rights to "carry over" supplies of water that were previously not used. Due to the existing regulations related to groundwater pumping that are implemented by the Chino Basin Watermaster, the Monte Vista Water District would not pump substantial groundwater amounts that could result in a substantial depletion of groundwater supplies. In addition, the Water District has provided a Will-Serve Letter included as Appendix J indicating the ability to serve the proposed Project, in addition to its existing and planned future service requirements. As a result, impacts to groundwater supplies would be less than significant.

The Project site is underlain by groundwater resources associated with the Chino Groundwater Basin. According to the Chino Basin Watermaster, groundwater elevations are approximately 90 to 120 feet below the ground surface. Soils underlying the Project site consists of Tujunga loamy sand, which are infiltrating soils (MDS 2021).

The proposed Project would include two drainage conveyance systems. The northern off-site tributary storm flows would be collected along the northern boundary of the Project and would be conveyed in a private storm drainpipe which would include an outlet onto Francis Avenue at the southwest corner of the Project curb outlet drain. The in-tract storm flows would be collected in a second private drainpipe system and conveyed to the detention basin at the southeast corner of the Project site which would both detain 2-year stormwater flows and percolate first flush stormwater into the onsite soils. As described by the Project's Hydrology Report and preliminary Water Quality Management Plan (MDS 2021), the storm drains and underground infiltration chambers have been designed to capture and filter the existing volume of water that infiltrates the existing Project site. In addition, the Project would mitigate the 2-year onsite storm flow and detain the 100-year storm flows to 80 percent of undeveloped conditions in consistency with the County's NPDES permit requirements; therefore, the Project would not substantially interfere with groundwater recharge, and impacts would be less than significant.

IMPACT WQ-3: WOULD THE PROJECT SUBSTANTIALLY ALTER THE EXISTING DRAINAGE PATTERN OF THE AREA, INCLUDING THROUGH THE ALTERATION OF THE COURSE OF A STREAM OR RIVER, IN A MANNER WHICH WOULD RESULT IN SUBSTANTIAL EROSION OR SILTATION ON- OR OFF-SITE?

Less than Significant Impact. The Project site does not include, and is not adjacent to, a stream or river. Implementation of the Project would not alter the course of a stream or river. As described above, the existing drainage pattern through the site is a north-south sheet flow to Francis Avenue. There is no existing storm drain system near the Project site. The proposed Project would divert offsite stormwater that currently flows through the Project site, to flow through a storm drainage system and a standard County curb outlet structure onto Francis Avenue, which would not generate erosion.

Construction

Construction of the proposed Project would require demolition of the existing structures, including foundations and floor slabs, that would expose and loosen building materials and sediment, which has the potential to mix with storm water runoff and result in erosion or siltation off-site. However, the Project site does not include any slopes, which reduces the erosion potential, and the large majority of soil disturbance would be related to excavation and backfill for installation of building foundations and underground utilities.

The existing NPDES Construction General Permit requires preparation and implementation of a SWPPP by a QSD for the proposed construction activities (included as PPP WQ-1). The SWPPP is required to address site-specific conditions related to potential sources of sedimentation and erosion and would list the required

BMPs that are necessary to reduce or eliminate the potential for erosion or alteration of a drainage pattern during construction activities. Common types of construction BMPs include:

- Silt fencing, fiber rolls, or gravel bags
- Street sweeping and vacuuming
- Storm drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseeding
- Material delivery and storage
- Stockpile management
- Spill prevention and control
- Solid waste management
- Concrete waste management

In addition, pursuant Chapter 35.01 of the County's Development Code, the Project Applicant would also be required to implement an erosion control plan to minimize water and windborne erosion. Mandatory compliance with the SWPPP and the erosion control plan would ensure that the Project's implementation does not violate any water quality standards or waste discharge requirements during construction activities.

As part of the permitting approval process, construction plans would be required to demonstrate compliance with these regulations to minimize the potential of the Project to result in a degradation of the quality of receiving waters. Plans for grading, drainage, erosion control and water quality would be reviewed by the County's Public Works Department prior to issuance of grading permits to ensure that the applicable and required BMPs are constructed during implementation of the Project.

Therefore, compliance with the San Bernardino County Stormwater Program, MS4 Permit, and other applicable requirements, which would be verified during the County's construction permitting process, would ensure that Project impacts related to construction activities resulting in a degradation of water quality would be less than significant.

Operation

The Project site currently includes 4.76 acres of impermeable surfaces, which equates to 40 percent of the site. After completion of Project construction, the site would have a greater amount of impermeable surfaces (5.36 acres or 45 percent of the site). As shown on Table 5.6-2, the increase in impervious surfaces would result in an increase the 2-year, 24-hour storm volume by 4.76 percent, peak runoff would increase by 22.92 percent, and the time of concentration (Tc) would increase by 10.32 percent.

Table 5.6-2: 2-Year, 24-Hour Storm Summary

Condition	Time of concentration (min)	Peak Runoff (cfs)	Volume (ft^3)
Pre-Development	27.41	9.73	49,737
Post-Development	30.24	11.96	52,106
Difference	+2.83	+2.23	+2,369
Percent Change	+10.32%	+22.92%	+4.76%

Source: WQMP, 2021

Although the Project related runoff conditions (flow rate, time of concentration, and volume) would increase from predevelopment conditions (shown in Table 5.6-2), the Project would manage the increased flow

through compliance with the requirements of the Santa Ana RWQCB MS4 Permit to develop of a project-specific WQMP (included as PPP WQ-2) that would include implementation of operational LID infrastructure and non-structural, structural, and source control and treatment control BMPs. A Preliminary WQMP has been developed (included as Appendix H) and recommends various post construction BMPs to be incorporated into the Project. The final WQMP is required to be approved prior to the issuance of a building or grading permit. The types of BMPs that would be implemented for the proposed Project are listed in Table HWQ-1. The Project includes two alternatives that would treat the first flush flows and would detain the 100-year 24-hour storm flows. The two alternatives would infiltrate the design capture volume and 2-year 24-hour storm volume and have been sized pursuant to the Hydrology Study prepared for the proposed Project (MDS 2021). In addition, a 10-foot expanded landscape lot would be provided along Francis Avenue and a 5-foot landscaped lot would be provided along Yorba Avenue, both within the Project site boundaries to provide additional areas for infiltration. The drainage system and detention basin for the Project has been designed such that discharge of stormwater runoff from the Project site would not increase with implementation of the proposed Project. Additionally, the Project would maintain offsite stormwater drainage patterns. Therefore, the proposed Project would not increase the volume or rate of runoff, and impacts related to increases in runoff would not occur.

The MS4 permit requires any new development project to prepare a WQMP (included as PPP WQ-2) that includes BMPs to reduce the potential of erosion and/or sedimentation through site design and structural treatment control BMPs. The Preliminary WQMP has been completed and is included as Appendix H. As part of the permitting approval process, the proposed drainage and water quality design and engineering plans would be reviewed by the County's Engineering Division to ensure that the site-specific design limits the potential for erosion and siltation. Overall, the proposed drainage system and adherence to the existing regulations would ensure that Project impacts related to alteration of a drainage pattern and erosion/siltation from operational activities would be less than significant.

IMPACT WQ-4: 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 SUBSTANTIALLY INCREASE THE RATE OR AMOUNT OF SURFACE RUNOFF IN A MANNER WHICH WOULD RESULT IN FLOODING ON- OR OFF-SITE?

Less than Significant Impact. As described previously, the Project site does not include, and is not adjacent to, a stream or river. Implementation of the Project would not alter the course of a stream or river.

Construction

Construction of the proposed Project would require demolition of the existing building structures, including foundations, floor slabs, and utilities systems. These activities could temporarily alter the existing drainage pattern of the site and could result in flooding on- or off-site if drainage is not properly controlled. However, as described previously, implementation of the Project requires a SWPPP (included as PPP HYD-1and PPP GEO-2) that would address site specific drainage issues related to construction of the Project and include BMPs to eliminate the potential of flooding or alteration of a drainage pattern during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP (per PPP HYD-1 and PPP GEO-2) as verified by the County through the construction permitting process would prevent construction-related impacts related to potential alteration of a drainage pattern or flooding on or off-site from development activities. Therefore, impacts would be less than significant.

Operation

As described previously, and detailed in Table 5.6-1, the proposed Project would increase impervious surfaces that would result in an increase of the 2-year, 24-hour storm volume. The Project would manage the increased on-site runoff flows through detention and infiltration facilities as described in Table HWQ-1. The detention and water quality basin would infiltrate the first flush stormwater and detain the stormwaters. At the time of large flows, the stormwater would gravity flow through a standard County curb outlet structure onto Francis Avenue.

Additionally, as part of the permitting approval process, the proposed drainage design and engineering plans would be reviewed by the County's Engineering Division to ensure that the proposed drainage would accommodate the appropriate design flows. Overall, the proposed drainage system and adherence to the existing MS4 permit regulations would ensure that Project impacts related to alteration of a drainage pattern or flooding from operational activities would be less than significant.

IMPACT WQ-5: 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 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?

Less than Significant Impact. As described previously, the Project site does not include, and is not adjacent to, a stream or river. Implementation of the Project would not alter the course of a stream or river.

Construction

As described in Impact WQ-4, construction of the proposed Project would require demolition and excavation activities that could temporarily alter the existing drainage pattern of the site and could result in increased runoff and polluted runoff if drainage is not properly controlled. However, as described previously, implementation of the Project requires a SWPPP (included as PPP HYD-1 and GEO-2) that would address site specific pollutant and drainage issues related to construction of the Project and include BMPs to eliminate the potential of polluted runoff and increased runoff during construction activities. This includes regular monitoring and visual inspections during construction activities. Compliance with the Construction General Permit and a SWPPP prepared by a QSD and implemented by a QSP (per PPP HYD-1 and GEO-2) as verified by the County through the construction permitting process would prevent construction-related impacts related to increases in runoff and pollution from development activities. Therefore, impacts would be less than significant.

Operation

The existing topography of the Project site is relatively flat and generally drains from the north to the south. There is no existing storm drain system near the Project site and existing stormwater that does not infiltrate into the site's pervious surfaces runs via sheet flow onto Francis Avenue. The proposed Project would result in an increase of the 2-year, 24-hour storm volume and the time of concentration. As mentioned previously, the Project would manage the increased onsite runoff flows through a storm drain system that would discharge into proposed infiltration/detention facilities which would detain precipitation from the 100-year storm event to 80 percent of the undeveloped storm flow conditions. At the time of large flows, the stormwater would gravity flow through a standard County curb outlet structure onto Francis Avenue. The infiltration basin and storm drain system (alternatives one and two) would been designed to accommodate the increased volume pursuant to the County's MS4 permit requirements. Off-site runoff would be captured prior to entering the

Project site and diverted via a proposed storm drain, which would ultimately be discharged to Francis Avenue. Therefore, the Project would not result in substantial alteration of the existing drainage pattern or the site and would contribute less stormwater than the existing conditions due to the proposed detention.

As part of the permitting approval process, the proposed drainage design and engineering plans would be reviewed by the County's Engineering Division to ensure that the proposed drainage would accommodate the appropriate design flows. Additionally, the County permitting process would ensure that the drainage system specifications adhere to the existing MS4 permit regulations, which would ensure that pollutants are removed prior to discharge. Overall, with compliance to the existing regulations as verified by the County's permitting process, Project impacts related to the capacity of the drainage system and polluted runoff would be less than significant.

IMPACT WQ-8: WOULD THE PROJECT CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF A WATER QUALITY CONTROL PLAN OR SUSTAINABLE GROUNDWATER MANAGEMENT PLAN?

Less than Significant Impact. The proposed Project includes installation of landscaping throughout the Project site and areas of loose topsoil that could erode by wind or water, would not exist upon operation of the proposed residential uses. In addition, the hydrologic features of the proposed Project have been designed to slow, filter, and retain stormwater within landscaping and infiltration basin on the Project site, which would aid in managing groundwater and water quality. Furthermore, pursuant to County Development Code Section 13.25.500, implementation of the Project requires a Water Quality Management Plan (WQMP), which has already been prepared for the proposed Project, and is included in Appendix H herein and as PPP GEO-3. The WQMP describes the operational BMPs that would be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil during operation of the Project. As a result, potential impacts related to substantial soil erosion or loss of topsoil would be less than significant.

Additionally, the proposed Project is located within the Santa Ana River watershed, and under the jurisdiction of the Santa Ana RWQCB, which sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act to include both the beneficial uses of specific water bodies and the levels of water quality that must be met and maintained to protect those uses (water quality objectives). Water quality standards for all ground and surface waters overseen by the Santa Ana RWQCB are documented in its Basin Plan, and the regulatory program of the Santa Ana RWQCB is designed to minimize and control discharges to surface and groundwater, largely through permitting, such that water quality standards are effectively attained. Thus, Project impacts involving conflict with, or obstructing implementation of a water quality control plan or sustainable groundwater management plan would be less than significant.

5.6.7 CUMULATIVE IMPACTS

Water Quality: The geographic scope for cumulative impacts related to hydrology and water quality includes the Santa Ana Watershed because cumulative projects and developments pursuant to the proposed Project could incrementally exacerbate the existing impaired condition and could result in new pollutant related impairments.

Related developments within the watershed would be required to implement water quality control measures pursuant to the same NPDES General Construction Permit that requires implementation of a SWPPP (for construction), a WQMP (for operation) and BMPs to eliminate or reduce the discharge of pollutants in stormwater discharges, reduce runoff, reduce erosion and sedimentation, and increase filtration and infiltration, in areas permitted. The NPDES permit requirements have been set by the SWRCB and implemented by the RWQCB to reduce incremental effects of individual projects so that they would not

become cumulatively considerable. Therefore, overall potential impacts to water quality associated with present and future development in the watershed would not be cumulatively considerable with compliance with all applicable laws, permits, ordinances and plans. As detailed previously, the proposed Project would be implemented in compliance with all regulations, as would be verified during the permitting process. Therefore, cumulative impacts related to water quality would be less than significant.

Drainage: The geographic scope for cumulative impacts related to stormwater drainage includes the geographic area served by the existing stormwater infrastructure for the Project area, from capture of runoff through final discharge points. As described above, the proposed Project would consist of an infiltration basin that would detain stormwaters decreasing off-site runoff. As a result, the proposed Project would not generate runoff that could combine with additional runoff from cumulative Projects that could cumulatively combine to impact drainage. Thus, cumulative impacts related to drainage would be less than significant.

Groundwater Basin: The geographic scope for cumulative impacts related to the groundwater basin is the Chino Basin. As described previously, the volume of water needed to meet Project demands could be supplied without exceeding existing groundwater pumping rights. Therefore, the Project would not result in changes to the projected groundwater pumping that would decrease groundwater supplies. As a result, the proposed Project would not generate impacts related to the groundwater basin that have the potential to combine with effects from other projects to become cumulatively considerable. Therefore, cumulative impacts related to the groundwater basin would be less than significant.

5.6.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- Construction General Permit, Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ
- California Water Resources Control Board Low Impact Development (LID) Policy
- Regional MS4 Permit (Order No. R8-2010-0036)
- County Code Chapter 35.01; Pollutant Discharge Elimination System Regulations
- County Code Chapter 83.15; Conditional Compliance for Water Quality Management Plans
- County Code Chapter 85.11; Pre-Construction Flood Hazard and Soil Erosion Pollution Prevention Inspection
- County Code Chapter 89.01; Drainage Facilities Financing

Standard Conditions

None.

Plans, Programs, or Policies

PPP HYD-1 **National Pollutant Discharge Elimination System (NPDES).** Projects will be constructed in accordance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, NPDES No. CAS000002. Compliance requires a risk assessment, a SWPPP, and associated BMPs.

PPP HYD-2 **Santa Ana RWQCB MS4 Permit.** Projects will be constructed and operated in accordance with the Santa Ana RWQCB Municipal Stormwater (MS4) Permit for the part of the Santa

Ana Basin in San Bernardino County in 2010 (Order No. R8-2010-0036). The MS4 Permit requires new development and redevelopment projects to adopt a WQMP to:

- Control contaminants into storm drain systems
- Educate the public about stormwater impacts
- Detect and eliminate illicit discharges
- Control runoff from construction sites
- Implement BMPs and site-specific runoff controls and treatments

5.6.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements Impacts WQ-1 through WQ-5 and WQ-8 would be less than significant.

5.6.10 MITIGATION MEASURES

No mitigation measures are required.

5.6.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No significant unavoidable adverse impacts related to hydrology and water quality have been identified and impacts would be less than significant.

REFERENCES

California Department of Conservation California Official Tsunami Inundation Maps (DOC 2020). Accessed: https://www.conservation.ca.gov/cgs/tsunami/maps

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

FEMA Flood Map Service Center. Accessed: https://msc.fema.gov/portal/search

Geotechnical EIR Due-Diligence Level Report (Geotechnical Report). Prepared by LGC Geotechnical. 2019 (GEO 2019). Appendix F.

Monte Vista Water District Urban Water Management Plan (UWMP 2015). Accessed: https://www.mvwd.org/277/Planning-Documents

Will-Serve Letter. Prepared by Monte Vista Water District. 2020. Appendix J.

Preliminary Hydrology Study for Tentative Tract No. 20394 (MDS 2021). Prepared by MDS Consulting, September 2021. Appendix G.

Preliminary Water Quality Management Plan for Tentative Tract No. 20394 (APN 1013-211-21 and 1013-211-22) (WQMP 2021). Prepared by MDS Consulting, 2021. Appendix H.

5.7 Land Use and Planning

5.7.1 INTRODUCTION

This section provides an analysis of the consistency of the proposed Project with applicable land use plans, policies, and regulations that guide development of the Project site and evaluates the relationship of the Project with surrounding land uses. The analysis in this section is based, in part, on the following documents and resources:

- *County of San Bernardino Countywide Plan, October 2020*
- *Countywide Plan Environmental Impact Report (Plan EIR), PlaceWorks, 2019*
- *San Bernardino County Development Code*

5.7.2 REGULATORY SETTING

5.11.2.1 Regional Regulations

SCAG Regional Transportation Plan and Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is designated by federal law as a Metropolitan Planning Organization (MPO) and under State law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG region encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities in an area covering more than 38,000 square miles. SCAG develops transportation and housing strategies for southern California as a whole. On September 3, 2020, SCAG's Regional Council adopted Connect SoCal - The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS), which includes long-range regional transportation plans, regional transportation improvement programs, regional housing needs allocations, and other plans for the region. Most of the plan's goals are related to regional transportation infrastructure and the efficiency of transportation in the region.

5.11.2.1 Local Regulations

San Bernardino Countywide Plan

San Bernardino County adopted the Countywide Plan on October 27, 2020. The Countywide Plan serves as a guide for County decision-making, financial planning, and communications. It includes:

- The County Policy Plan serves in part as the County's General Plan for the unincorporated areas and also provides guidance for regional county services. The Policy Plan establishes goals and policies for the entire county, as well as subregions and communities.
- The County Business Plan contains governance policies and operational metrics that outline the County's approach to providing municipal and regional services. The Business Plan includes a governance element and an implementation plan, and two new implementation tools: a tracking and feedback system and fiscal analysis model that will be finalized during the first year after adoption.
- Community Action Guides articulate what is important to each Community. Decisions of the Community Action Guides have been incorporated into the Policy Plan of the Countywide Plan.

The Countywide Plan is made up of the following 11 elements:

1. The land use element designates the distribution, location, intensity, and balance of land uses for the unincorporated areas of the county; establishes goals for where, when, and how the county grows, which is also guided by policies in other elements; provides direction for new development on community design, land use compatibility, and interagency coordination; and provides guidance for orderly expansion of incorporated areas.
2. The housing element identifies sites to facilitate and encourage housing for households of all economic levels, including persons with disabilities; removes governmental constraints to housing production, maintenance, and improvement as legally feasible and appropriate; assists the development of adequate housing for low- and moderate-income households; preserves publicly assisted multiple-family housing developments in each community; conserves and improving conditions in existing housing and neighborhoods, including affordable housing; and promotes a range of housing opportunities for all individual and households consistent with fair and equal housing opportunity
3. The infrastructure and utilities element provides guidance on where, when, and how infrastructure and utilities are improved and expanded; establishes goals and policies to maintain an adequate supply of potable water and the safe disposal, treatment, and recycling of wastewater, and the recycling and safe disposal of solid waste; and provides direction on system irrigation, resource conservation, and the protection of the natural environment.
4. The transportation and mobility element establishes the location and operational conditions of the roadway network; coordinates the transportation and mobility system with future land use patterns and projected growth; provides guidance for the County's responsibility to satisfy the local and subregional mobility needs of residents, visitors, and businesses in unincorporated areas; and addresses access and connectivity among the various communities, cities, towns, and regions, as well as the range and suitability of mobility options: vehicular, trucking, freight and passenger rail, air, pedestrian, bicycle, and transit.
5. The natural resources element establishes policies that preserve and enhance the beauty and resiliency of our natural resources; provides guidance on coordinating with others to manage, conserve, and protect natural resources such as watersheds, wildlife habitat areas and corridors, and other natural and open space areas; promotes clean air and a supply of water for human consumption and the natural environment; supports the maintenance and enhancement of a countywide system of open space, parks, and recreation assets; provides guidance and support for mining operations and the preservation of viable agricultural and grazing lands; and provides guidance on the location and distribution of new development to protect natural resources.
6. The renewable energy and conservation element clarifies the County's collective community, environmental, and economic values for RE development and conservation; articulates what the County will strive to achieve and avoid through energy conservation, energy efficiency, and RE development; establishes goals and policies to manage RE development and conservation of the natural environment; and sets a framework for Development Code standards for RE development.
7. The tribal and historic resources element establishes direction on notification, coordination, and partnerships to preserve and conserve cultural resources; provides guidance on how new development can avoid or minimize impacts on cultural resources; and provides direction on increasing public awareness and education efforts about cultural resources.
8. The hazards element identifies potential natural and human-generated hazards, including increased risk due to climate change; provides direction to address risks to residents, businesses, workers, and visitors; and prioritizes resources and reducing pollution exposure in unincorporated disadvantaged communities.
9. The personal and property protection element promotes continuous improvement in the provision of public safety and administration of justice; supports coordinated and effective interagency response to emergencies and natural disasters; provides policy direction to engage communities and respond

to identified needs; fosters collaboration among the Board of Supervisors-directed agencies and departments and the elected Sheriff and District Attorney; and augments, rather than replaces, state- and federally-mandated goals and objective.

10. The economic development element provides direction for County efforts to attract private investment in nonresidential development in unincorporated areas of the county, focuses countywide investments in workforce development on growing occupations and industries, establishes the County's intent to invest in economic development in order to improve the countywide jobs-housing ratio, and identifies the means through which the County promotes countywide economic development.
11. The health and wellness element provides guidance on addressing issues that by their nature require extensive coordination and collaboration within the County and with outside agencies and organizations, establishes a holistic approach to the continuum of care, identifies the County's policy focus regarding its use of state and federal funds to improve the physical and behavioral health of residents, and describes the County's priorities and roles in serving the health and social needs of vulnerable populations.

San Bernardino County Development Code

Chapter 82.01, Land Use Plan, Land Use Zoning Districts, and Overlays

The County's Municipal Code Chapter 82.01, Land Use Plan, Land Use Zoning Districts, and Overlays establishes the primary and overlay land use zoning districts applied to property within the county.

Chapter 82.06, Industrial and Special Purpose Land Use Zoning Districts

Chapter 82.06 of the County's Municipal Code lists the land uses that may be allowed within the industrial and special purpose land use zoning districts established by the General Plan and listed in Chapter 82.01 (Land Use Plan, Land Use Zoning Districts, and Overlays), determines the type of planning permit/approval required for each use, and provides basic standards for site layout and building size.

5.7.3 ENVIRONMENTAL SETTING

Project Site

The Project site is located within an urban area that consists of fully developed areas and areas that are planned for urban development. As shown in Figure 3-9, Existing Zoning Designations, the Project Site has a land use designation of Very Low Density Residential (VLDR). The Land Use Element describes that the VLDR land use designation has a primary purpose to allow for very low density residential uses when developed as single-family neighborhoods that can share common infrastructure, public facilities, and services. Typical uses include single-family residential uses, public facilities, and incidental agriculture. Development within the VLDR category has a maximum of 2 units per acre. The Project site is zoned Single Residential 1-Acre Minimum (RS-1) that allows 1 dwelling unit per acre. The Single Residential land use zoning district provides sites for single-family residential uses, incidental agricultural and residential uses, and similar and compatible uses.

The Project in situated in the unincorporated area of the County and is surrounded by built-out urbanized areas. This unincorporated area includes scattered subdivisions and older private ranchette properties. The residential subdivision lots range from 8,100 to 10,000 square feet (SF) and the ranchettes range from 20,000 SF to multiple acres and are developed for a variety of uses including single-family residential, general commercial, commercial nurseries, and storage. Very few homes have livestock.

The City of Montclair boundary is about 0.3 mile north of the Project site. The uses to the north of the Project site in the City of Montclair are mostly built out with traditional single-family homes on lots generally ranging in size from 6,550 to 10,000 SF.

The City of Pomona boundary is about 1.1 miles west of the Project site. The area to the west of the Project site, within the City of Pomona, is mostly developed with commercial and industrial uses.

The City of Chino boundary is about 0.63 mile east of the Project. The uses to the south and southeast of the Project site in the City of Chino are mostly built out with commercial and multifamily uses and described below.

The Project site consists of two parcels totaling 13.35--acres comprised of disturbed vacant land with concrete slabs from previous developments. The site has scattered trees throughout with various shrubs and grasses.

The adjacent land uses, described below, consist of residential housing, commercial, and agricultural uses. Figure 3-3, *Aerial View* shows the existing and surrounding uses at the Project site.

West and North: Along the west and north property line there are residential homes (some on smaller non-conforming lots), commercial storage, truck storage, and one property on 27,550 SF with goat keeping.

South: Francis Avenue bounds the site to the south, followed by a non-conforming residential subdivision of single-family homes within the City of Chino with varying lot sizes ranging 14,000 to 27,250 SF.

East: Yorba Avenue bounds the Project site to the east, followed by parcels with single-family homes with several homes per lot.

Southeast: Southeast of the intersection of Yorba and Francis Avenue is a large area of residential single-family homes within the City of Chino with lot sizes between 7,000 to 8,000 SF which is the predominant density within this area of Chino.

5.7.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

LU-1 Physically divide an established community; or

LU-2 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.

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the land use/planning issue area below (refer to Thresholds of Significance list above). For the issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds LU-2

Therefore, no further assessment of this impact is required in this Draft EIR.

5.7.5 METHODOLOGY

The analysis of land use consistency impacts considers whether the proposed Project would physically divide an established community and whether the Project would be inconsistent with (or conflict with) regional and local plans, policies, and regulations that are applicable to the proposed Project and Project site, including the: Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy (SCAG RTP/SCS); San Bernardino Countywide Plan; and the County zoning code. Consistent with the scope and purpose of this Draft EIR, this discussion primarily focuses on those goals and policies that relate to avoiding or mitigating environmental impacts, and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment. Thus, a Project's inconsistency with a policy is only considered significant if such inconsistency would cause significant physical environmental impacts (as defined by CEQA Guidelines Section 15382).

CEQA Guidelines Section 15125(d) requires that an EIR discuss inconsistencies with applicable plans that the decision-makers should address. A Project need not be consistent with each and every policy and objective in a planning document. Rather, a Project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary goals of the land use plan or policy.

5.7.6 ENVIRONMENTAL IMPACTS

IMPACT LU-2: WOULD THE PROJECT CAUSE SIGNIFICANT ENVIRONMENTAL IMPACTS DUE TO CONFLICTS WITH ANY LAND USE PLAN, POLICY, OR REGULATION ADOPTED FOR THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL EFFECT?

Less than Significant Impact.

SCAG Regional Transportation Plan/Sustainable Communities Strategy

The 2020 RTP/SCS Goals that are relevant to the proposed Project focus largely on maximizing mobility, encouraging development patterns and densities that reduce infrastructure costs, and provide for efficiency.

The proposed Project would be consistent with the applicable SCAG's 2020 RTP/SCS goals, as detailed in Table 5.7-1. Therefore, implementation of the proposed Project would not result in conflict with RTP/SCS goals, and impacts would not occur.

Table 5.7-1: Consistency with SCAG Regional Transportation Plan/Sustainable Communities Strategy

RTP/SCS Goal Statements	Proposed Project Consistency with Applicable Goals
RTP/SCS G1: Encourage regional economic prosperity and global competitiveness.	**Not Applicable.** the Project would provide 45 single family residences within the region. As an individual development, the Project is limited in its ability to directly contribute to regional economic prosperity and global competitiveness.
RTP/SCS G2: Improve mobility, accessibility, reliability, and travel safety for people and goods.	**Consistent.** As an individual development, the Project is limited in its ability to maximize mobility and access for people and goods in the SCAG region. However, the Project would not create substantial traffic impediments that would affect the accessibility of goods in the region and it would provide added mobility in the immediate vicinity of the Project through the incorporation of sidewalks.

RTP/SCS Goal Statements	Proposed Project Consistency with Applicable Goals
RTP/SCS G3: Enhance the preservation, security, and resilience of the regional transportation system.	**Not Applicable.** As an individual development, the Project is limited in its ability to ensure security and resilience of the regional transportation system. There are no components of the Project that would result in the deterioration of the transportation system.
RTP/SCS G4: Increase person and goods movement and travel choices within the transportation system.	**Not Applicable.** As an individual development, the Project is limited in its ability to maximize the goods movement and travel choices within the SCAG region. The Project would not create substantial traffic impediments and would not affect the accessibility of goods to the surrounding area.
RTP/SCS G5: Reduce greenhouse gas emissions and improve air quality.	**Not Applicable.** While the Project would not improve air quality or reduce greenhouse gas emissions, it would not prevent SCAG from implementing actions that would improve air quality within the region and the Project would incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy, pursuant to Title 24 CALGreen Code and Building Energy Efficiency Standards and Consistent with Policy NR-1.9.
RTP/SCS G6: Support healthy and equitable communities.	**Consistent.** The Project would comply with Countywide goal and policies to support healthy and equitable communities. Additionally, the Project would construct frontage improvements, including sidewalks, which would encourage walking in the Project area.
RTP/SCS G7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.	**Consistent.** This policy would be implemented by cities and the counties within the SCAG region as part of their overall planning efforts; the Project however is consistent with residential use planned for the area.
RTP/SCS G8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	**Not Applicable.** This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would not conflict with this goal.
RTP/SCS G9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	**Consistent.** The proposed Project would contribute to meeting the regional goal of developing residential housing in an area that is supported by multiple transportation options which includes bus services in addition to personal vehicles. Services are provided by OmniTrans and there is an existing bus stop in front of the Project site on Francis Avenue.
RTP/SCS G10: Promote conservation of natural and agricultural lands and restoration of habitats	**Consistent.** The proposed Project would be consistent with goals and policies of the Countywide Plan and would not cause significant environmental impacts to agricultural lands or biological resources.

Countywide Plan

Land Use Consistency:

As mentioned above, the site currently has a Countywide Plan Designation of VLDR (Very Low Density Residential). As described by the General Plan Land Use Element, the VLDR designation is for single-family

residential uses, public and quasi-public facilities such as parks, religious facilities, schools, sheriff's stations, and fire stations.

Areas southeast of Francis Avenue from the Project site are located within the City of Chino and have a General Plan Land Use Designation of RD-2 (maximum 2 units per acre) and RD-4.5 (maximum 4.5 units per acre). The City of Chino General Plan Land Use Element describes that the residential land use designations vary in density and permit certain non-residential uses including places of worship, day care centers, schools, libraries, and recreational facilities.

Residential areas and densities within a 0.5 mile radius (shown as a red dashed line) of the Project site are shown on Figure 5.7-1, Surrounding Land Use Densities. Lot sizes of various residential use are also shown; most in the area are consistent in size and type of use. Commercial, institutional, and significantly denser residential uses such as a mobile home park and smaller lot size subdivisions exist within a 0.3 mile radius of the Project.

Development of the Project site with single-family residential homes conform with current and historic growth patterns in the region and would integrate into the planned development of these adjacent and nearby areas. The site would provide housing for local employees working nearby in Chino, Montclair, and unincorporated San Bernardino County. The site would provide both vehicular and pedestrian access along the Project's frontage which would provide access to the Omnitrans bus stop on Francis Avenue and would integrate into the land uses of the area.

Implementation of the proposed Project would require a Policy Plan Amendment to change the land use designation from VLDR to LDR to allow for an increase in density and a Zoning Amendment to change the zoning from RS-1 to RS. The General Plan Land Use Element states that LDR includes single-family residential uses and Public and quasi-public facilities such as parks, religious facilities, schools, sheriff's stations, and fire stations.

Overall, the Project would not result in a land use inconsistency. Rather, developing 45 single-family residences similar to the existing surrounding areas would create a cohesive neighborhood. Furthermore, the proposed land use designation change from VLDR to LDR would not conflict with a policy or plan adopted for the purpose of avoiding or mitigating an environmental effect. As described throughout this Draft EIR, the proposed Project would not result in significant environmental impacts, such as light, noise, or air quality to the adjacent existing and planned land uses. Therefore, impacts related to land use inconsistency would be less than significant.

San Bernardino Countywide Plan Policies. The proposed Project has been prepared in conformance with the goals and policies of the County of San Bernardino Countywide Plan. Table 5.11-2 lists the General Plan policies that are applicable to the proposed Project and were adopted for the purpose of avoiding or mitigating an environmental effect. The table evaluates the Project's compliance with each policy. As described, the proposed Project would be consistent with most of the applicable General Plan policies; however, the Project would conflict with the policy related to industrial amendments near schools and parks, as detailed below in Table 5.7-2.

Table 5.7-2: Project Consistency with Applicable General Plan Policies

General Plan Policy	Proposed Project
Land Use Element	

Goal LU-1: Growth and development that builds thriving communities, contributes to our Complete County, and is fiscally sustainable.	**Consistent.** The proposed Project would develop 45 single-family homes that would provide housing for residents within the County on an existing vacant and underutilized lot.
Policy LU-1.1 Growth. We support growth and development that is fiscally sustainable for the County. We accommodate growth in the unincorporated county when it benefits existing communities, provides a regional housing option for rural lifestyles, or supports the regional economy.	**Consistent.** The proposed Project would provide the development of 45 single-family residences. This would provide housing opportunity in the unincorporated County benefitting the community. Thus, the proposed Project is consistent with Policy LU-1.1.
Policy LU-1.2: Infill development. We prefer new development to take place on existing vacant and underutilized lots where public services and infrastructure are available.	**Consistent.** The proposed Project would be an infill development on existing vacant lots that are underutilized. New water and sewer infrastructure would be installed, connecting to existing water and sewer lines in Yorba Avenue. Thus, the proposed Project is consistent with Policy LU-1.2.
Goal LU-2: An arrangement of land uses that balances the lifestyle of existing residents, the needs of future generations, opportunities for commercial and industrial development, and the value of the natural environment.	**Consistent.** The proposed Project would develop 45 single-family residences that would provide housing for existing residents and future generations. Thus, the proposed Project would be consistent with Goal LU-2.
Policy LU-2.1 Compatibility with existing uses. We require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. We also require that new residential developments are located, scaled, buffered, and designed so as to not hinder the viability and continuity of existing conforming nonresidential development.	**Consistent.** The proposed Project would be similar to the existing residential land uses surrounding the Project site. The new single-family residences would be located, scaled, and buffered pursuant to the Development Code. Thus, the proposed Project is consistent with Policy LU-2.1.
Policy LU-2.3 Compatibility with natural environment. We require that new development is located, scaled, buffered, and designed for compatibility with the surrounding natural environment and biodiversity.	**Consistent.** As described in Section 5.1 Aesthetics, the proposed Project includes landscaping throughout the Project site and along the Yorba Avenue and Francis Avenue frontage. In addition, the Project would be designed to be compatible with the surrounding environment and the landscaping would enhance compatibility with the natural environment. Thus, the proposed Project is consistent with Policy LU-2.3.
Policy LU-2.4 Land Use Map consistency. We consider proposed development that is consistent with the Land Use Map (i.e., it does not require a change in Land Use Category), to be generally compatible and consistent with surrounding land uses and a community's identity. Additional site, building, and landscape design treatment, per other policies in the Policy Plan and development standards in the Development Code, may be	**Consistent.** A Policy Plan amendment would be required to increase the allowable residential land use density for the Project. The increase in density would be consistent with surrounding land uses. The development standards would be consistent with the Development Code. Landscape plans are consistent with the development standards to maximize compatibility with surrounding land. Thus, the proposed Project is consistent with Policy LU-2.4.

required to maximize compatibility with surrounding land uses and community identity.	
Policy LU-2.6 Coordination with adjacent entities. We require that new and amended development projects notify and coordinate with adjacent local, state, and federal entities to maximize land use compatibility, inform future planning and implementation, and realize mutually beneficial outcomes.	**Consistent.** Coordination would occur with the neighboring City of Chino due to the southern neighboring land being within the City of Chino. Chino would be notified and informed for future planning and implementation. Coordination would also occur with the Regional Water Quality Control Board (RWQCB) and the California Department of Fish and Wildlife (CDFW). Thus, the proposed Project is consistent with Policy LU-2.6.
Policy LU-2.7 Countywide jobs-housing balance. We prioritize growth that furthers a countywide balance of jobs and housing to reduce vehicle miles traveled, increase job opportunities and household income, and improve quality of life. We also strive for growth that furthers a balance of jobs and housing in the North Desert region and the Valley region.	**Consistent.** The proposed Project would contribute to housing growth by developing 45 single-family residences on an underutilized property. This would not improve the jobs-housing ratio by adding additional jobs in the County. However, the Project is consistent with the County VMT standards and would provide 45 residential homes which would allow for growth within the area. Thus, the proposed Project is consistent with Policy ED-3.1.
Policy LU-2.9: Suburban lifestyles in the Valley region. We intend that new residential development in the unincorporated Valley region offer a suburban lifestyle that is similar to that of adjacent cities.	**Consistent.** The proposed Project would develop 45 single-story residences that would offer similar residential development to the surrounding areas and cities. Thus, the proposed Project is consistent with Policy LU-2.9.
Goal LU-4: Preservation and enhancement of unique community identities and their relationship with the natural environment.	**Consistent.** As mentioned in Section 5.1 *Aesthetics*, the proposed Project would consist of 3 different architectural elevation options for the 3 residential floor plans. The architectural designs would provide architectural compatibility by using consistent buildings enhancing the community identity. Landscaping materials pursuant to the Development Code would enhance the relationship with the natural environment. Thus, the proposed Project is consistent with Goal LU-4.
Policy LU-4.3 Native or drought-tolerant landscaping. We require new development, when outside of high and very high fire hazard severity zones, to install and maintain drought-tolerant landscaping and encourage the use of native species.	**Consistent.** As mentioned in Section *5.7 Hazards*, according to California's Fire Hazard Severity Zones (FHSZ), the Project site is not within a FHSZ. This development would however provide landscaping pursuant to the Development Code. Thus, the proposed Project is consistent with Policy LU-4.3.
Policy LU-4.5 Community identity. We require that new development be consistent with and reinforce the physical and historical character and identity of our unincorporated communities, as described in Table LU-3 and in the values section of Community Action Guides. In addition, we consider the	**Consistent.** Table LU-3 defines the Project area community character as a suburban lifestyle characterized by a mix of lot sizes and/or land uses in proximity to urban services and facilities as well as economic activity that benefits local residents and/or serves the local economy. The proposed Project is consistent with providing a mix of lot sizes

aspirations section of Community Action Guides in our review of new development.	for the 45 single-family homes. The addition of approximately 152 residents within the County would benefit the local economy. The Project includes mixed lot sizes and land uses. Thus, the proposed Project is consistent with Policy LU-4.5.
Policy LU-4.8: Public gathering spaces. We require the development of safe and attractive public gathering spaces that facilitate social interaction, community events, and physical activity in master planned communities, large residential developments, and large commercial developments.	**Not Applicable.** The proposed Project would include a private pocket park that would serve as a gathering space for community interaction within the gated community. However, the proposed Project is a small residential development and would pay additional development impact fees that would contribute to public gathering spaces within the County.
Policy LU-4.9: CPTED. We require public gathering spaces to use CPTED (crime prevention through environmental design) principles and ensure sufficient access for public safety services.	**Not Applicable.** Policy LU-4.9 does not apply to TTMs. However, the proposed Project would include plan checks to ensure sufficient access is provided. The single-story design, open fencing, and limited access are all components of CPTED
Goals H-1: A broad range of housing types in sufficient quantity, location, and affordability levels that meet the lifestyle needs of current and future residents, including those with special needs.	**Consistent.** As mentioned above, the proposed Project would develop 45 single-family residences that would consist of 9 different architectural elevation options for the 3 residential floor plans which would meet the lifestyle needs of current and future residents.
Policy H-1.1: Appropriate range of housing. We encourage the production and location of a range of housing types, densities, and affordability levels in a manner that recognizes the unique characteristics, issues, and opportunities for each community.	**Consistent**. As mentioned above, the proposed Project would develop 45 single-family residences that would consist of 9 different architectural elevation options for the 3 residential floor plans providing a range of housing types within the County.
Policy H-1.2: Concurrent infrastructure. We support the integrated planning and provision of appropriate infrastructure (including water, sewer, and roadways) concurrent with and as a condition of residential development to create more livable communities.	**Consistent.** As mentioned above, the Project would install new onsite infrastructure. The Yorba Avenue westerly right-of-way and the Francis Avenue northerly right-of-way would be improved with installation of new pavement resulting in a more livable community. As the site was previously developed, certain infrastructure already exists. Thus, the Project is consistent with Policy H-1.2.
Goal H-3: Neighborhoods that protect the health, safety, and welfare of the community, and enhance public and private efforts in maintaining, reinvesting in, and upgrading the existing housing stock.	**Consistent.** The proposed Project would develop 45 single-family residences which would upgrade the existing housing stock. Developing pursuant to the Development Code would protect the health, safety, and welfare of the community. Thus, the Project is consistent with Goal H-3.
Policy H-3.3: Housing maintenance. We enforce all applicable state and county health, safety, building, and zoning laws directed at housing and property maintenance to maintain healthful, sound, and attractive residential properties.	**Consistent.** The proposed Project would be compliant with all applicable state and county health, safety, building, and zoning laws. In addition, a Homeowners Association would be established and would be responsible for ensuring park and other common area maintenance within

	the community. Thus, the Project is consistent with Policy H-3.3.
Policy H-3.6: Neighborhood improvements. We support comprehensive neighborhood efforts to address housing conditions, property maintenance, infrastructure repair, public safety, landscaping, and other issues affecting the livability of neighborhoods.	**Consistent.** As mentioned above, the proposed Project would install infrastructure, landscaping, and construct sidewalks along Francis Avenue and Yorba Avenue which would enhance the livability of the neighborhood. Thus, the Project is consistent with Policy H-3.6.
Goal V/H-1: Valley Region. A diversity of housing and neighborhood improvement and preservation strategies that address the needs of residents living in county islands and spheres of influence.	**Consistent.** As mentioned above, the proposed Project would provide 45 single-family residences increasing housing and improving the neighborhood with sidewalks for pedestrian use and landscaping. Thus, the proposed Project is consistent with Goal V/H-1.
Policy V/H-1.1: Housing compatibility. We encourage housing types and designs that are compatible with established land use patterns and the environment of the region, including single-family dwellings, mobile home parks/manufactured home land-leased communities, and apartment	**Consistent.** As mentioned above, the proposed Project would develop single-family residences 9 different architectural elevation options for the 3 residential floor plans 1.1.
Policy V/H-1.2: Rehabilitation target areas. We identify areas targeted for rehabilitation to enhance the housing inventory of the Valley Region. These areas may include but are not limited to: North Chino, West and South Fontana, South Montclair, Bloomington, Muscoy, and other, similar areas.	**Consistent.** Development of the proposed Project would enhance the housing inventory by 45 single-family residences in the Valley Region, specifically North Chino. Thus, the proposed Project would be consistent with Policy V/H-1.2.
Policy V/H-1.3: Preferred housing types. Within the Valley Region, we favor the following types of development: urban infill, single family detached (specifically adjacent to the Foothill Freeway corridors), clustered development with single-family appearance, and single- family detached on large lots.	**Consistent.** As mentioned in Section 3.0 *Project Description*, the proposed Project would be an infill development with 45 single-family residences which is within the preferred housing types. Thus, the proposed Project is consistent with Policy V/H-1.3.
Policy IU-1.1 Water supply. We require that new development be connected to a public water system or a County-approved well to ensure a clean and resilient supply of potable water, even during cases of prolonged drought.	**Consistent.** Domestic water services are provided to the Project area by the Monte Vista Water District (MVWD) and would provide water to the Project site. MVWD currently uses local groundwater and imported water with adequate supplies to meet the future demands within their service area. Thus, the proposed Project would be consistent with Policy IU-1.1.
Policy IU-3.1 Regional flood control. We maintain a regional flood control system and regularly evaluate the need for and implement upgrades based on changing land coverage and hydrologic conditions in order to manage and reduce flood	**Not applicable.** According to the Flood Insurance Rate Map (FIRM), published by the Federal Emergency Management Agency (FEMA) (06071C8666H and 06071C8667H), the Specific Plan is primarily located in "Zone X", which is an

risk. We require any public and private projects proposed anywhere in the county to address and mitigate any adverse impacts on the carrying capacity and stormwater velocity of regional stormwater drainage systems.	area located outside of the 100-year and 500-year flood plains. Thus, Policy IU-3.1 is not applicable.
Policy IU-3.2 Local flood control. We require new development to install and maintain stormwater management facilities that maintain predevelopment hydrology and hydraulic conditions.	**Consistent.** The proposed Project would construct stormwater drainage facilities necessary to maintain on-site stormwater flows from impacting off-site properties. Development pursuant to the proposed Project would construct a stormwater drainage system to convey runoff from the site in a manner consistent with County requirements. Thus, the proposed Project is consistent with Policy IU-3.2.
Policy TM-2.2: Roadway improvements. We require roadway improvements that reinforce the character of the area, such as curbs and gutters, sidewalks, landscaping, street lighting, and pedestrian and bicycle facilities. We require fewer improvements in rural areas and more improvements in urbanized areas, consistent with the Development Code. Additional standards may be required in municipal spheres of influence.	**Consistent.** The proposed Project consists of roadway improvements including curbs, gutters, sidewalks, and landscaping along the Yorba and Francis Avenue frontage that would be consistent with the Development Code. Thus, the proposed Project would be consistent with Policy TM-2.2.
Policy NR-1.1 Land use. We promote compact and transit-oriented development countywide and regulate the types and locations of development in unincorporated areas to minimize vehicle miles traveled and greenhouse gas emissions.	**Consistent.** The proposed Project would be an urban infill residential Project but transit services do not exist in the vicinity. The Project screens out from requiring a Vehicle Miles Traveled analysis due to its size. The Project would not have a significant impact regarding greenhouse gas emissions. Thus, the Project would be consistent with NR-1.1.
Policy NR-1.2 Indoor air quality. We promote the improvement of indoor air quality through the California Building and Energy Codes and through the provision of public health programs and services.	**Consistent.** As described in Section 5.6 *Greenhouse Gas Emissions*, The Project would comply with the CALGreen standards that are applicable to the proposed Project. Thus, the proposed Project is consistent with Policy NR-1.2.
Policy NR-1.7 Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.	**Consistent.** As mentioned in Section 5.6 *Greenhouse Gas Emissions,* the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGS. Thus, the Project is consistent with Policy NR-1.7.
Policy NR-1.9 Building design and upgrades. We use the CALGreen Code to meet energy efficiency standards for new buildings and encourage the upgrading of existing buildings to incorporate design elements, building materials, and fixtures that improve environmental sustainability and reduce emissions.	**Consistent.** As mentioned in Section 5.6 *Greenhouse Gas Emissions*, compliance with current Title 24 and California Building Standards for building design would be in effect at the time of building permit issuance. Thus, the proposed Project is consistent with Policy NR-1.7.
Policy NR-2.5 Stormwater discharge. We ensure compliance with the County's Municipal Stormwater	**Consistent.** As mentioned in Section 5.8 *Hydrology and Water Quality*, San Bernardino County

NPDES (National Pollutant Discharge Elimination System) Permit by requiring new development and significant redevelopment to protect the quality of water and drainage systems through site design, source controls, stormwater treatment, runoff reduction measures, best management practices, low impact development strategies, and technological advances. For existing development, we monitor businesses and coordinate with municipalities.	submitted Report of Waste Discharge (ROWD) on behalf of the County, and it serves as the permit renewal application for the fifth term MS4 NPDES permit for San Bernardino County. The Technical Guidance Document for Water Quality Management Plans (WQMPs) for the Santa Ana Region of San Bernardino County is the guidance document for the Project's stormwater design in compliance with Santa Ana RWQCB requirements for Priority Projects or Transportation Projects. The MS4 Permit requires that a preliminary Project specific WQMP be prepared for review early in the Project development process and that a Final WQMP be submitted prior to the start of construction. Thus, the Project is consistent with Policy NR-2.5
	Not Applicable. The Project does not involve residential areas near a freeway, gas station, or truck stop. The Project is a residential development and would not attract the use of diesel engine trucks that would increase the risk of cancer from Diesel Particulate Matter.
Policy HZ-3.3 Community emissions reduction plans. We assist the air quality management districts in establishing community emissions reduction plans for unincorporated environmental justice focus areas and implement, as feasible, those parts of the plans, that are within the jurisdiction and authority of the County, with particular emphasis in addressing the types of pollution identified in the Hazard Element tables.	**Consistent.** The Project's maximum daily emissions for construction and operation of the Project would not exceed SCAQMD's regional thresholds of significance. In addition, all construction activities would comply with applicable SCAQMD rules and regulations, including Rule 403 to minimize fugitive PM dust emissions.
Policy ED-3.1 Countywide jobs-housing ratio. We strive to achieve countywide job growth in excess of household growth to improve the jobs-housing ratio, reduce out-commuting, and enhance quality of life	**Not Applicable.** As mentioned previously, the proposed Project would contribute to job growth by developing 45 single-family residences. However, the Project would develop housing in an area designated for residential housing and creating jobs is not consistent with a residentially zoned site. While Policy ED-3.1 is not applicable to the Project, construction of the proposed Project would create 172 temporary jobs within the County.

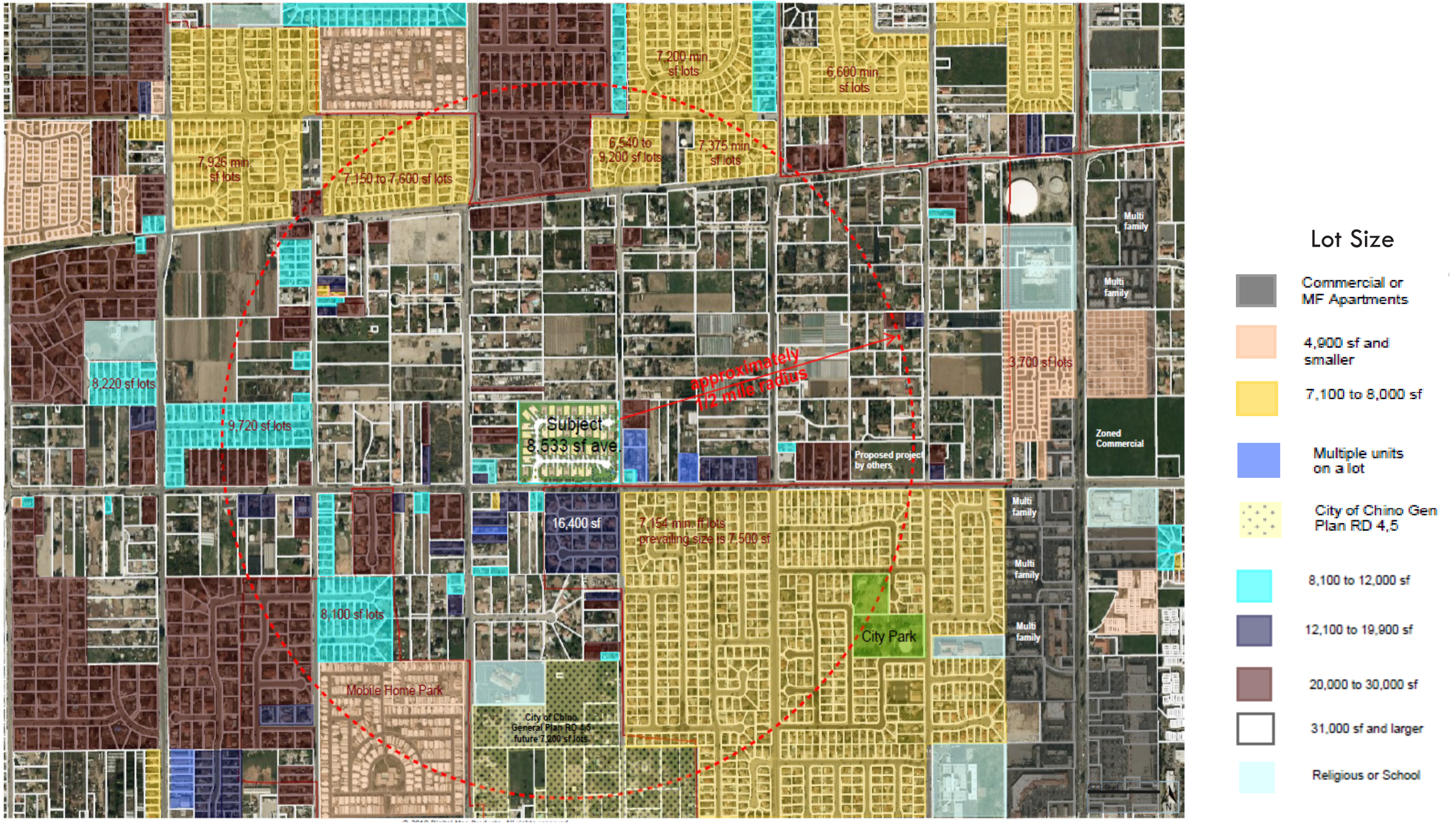
County Development Code

The proposed Project includes a Zoning Map Amendment that would change the existing zoning designation from RS-1 (Single Residential 1-Acre Minimum) to RS (Single Residential) to implement the proposed residential Project.

The RS zone is designated for single-family residential uses with a maximum density of 4 units per acre. As mentioned previously, the proposed Project consists of development of 45 single-family residences. Although

the density of the residences exceeds the allowed density by the existing RS-1 zone, with implementation of the proposed RS zoning designation, the proposed Project would not conflict with the zoning code.

The proposed Project would create an attractive, cohesive residential community through the three architectural styles to be provided including Spanish Colonial, California Ranch, and Hacienda Ranch. In addition, landscaping throughout the site and the use of consistent building materials would provide architectural compatibility. As required by the Development Code, the proposed Project's development plans would be reviewed by the County to ensure consistency with development standards. Thus, impacts related to zoning would not occur from the proposed Project.


7,200 min sf lots
6,600 min sf lots
6,540 to 9,200 sf lots
7,375 min sf lots
7,926 min sf lots
7,150 to 7,600 sf lots
Multi family
Multi family
8,220 sf lots
9,720 sf lots
approximately 1/2 mile radius
Subject 8,533 sf ave.
3,700 sf lots
Proposed project by others
Zoned Commercial
16,400 sf
7,154 min sf lots prevailing size is 7,500 sf
Multi family
Multi family
Multi family
8,100 sf lots
City Park
Mobile Home Park
City of Chino General Plan RD 4/5 future 7,200 sf lots
Lot Size
Commercial or MF Apartments
4,900 sf and smaller
7,100 to 8,000 sf
Multiple units on a lot
City of Chino Gen Plan RD 4,5
8,100 to 12,000 sf
12,100 to 19,900 sf
20,000 to 30,000 sf
31,000 sf and larger
Religious or School

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5.7.7 CUMULATIVE IMPACTS

According to the Plan EIR, cumulative projects in San Bernardino County would have the potential to result in a cumulative impact if they would, in combination, conflict with existing land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental impact. Similar to the proposed Countywide Plan, cumulative projects in the San Bernardino County region would utilize regional planning documents such as SCAG's RTP/SCS during planning, and the general plans of cities would be consistent with the regional plans, to the extent that they are applicable. Cumulative projects in these jurisdictions would be required to comply with the applicable land use plan or they would not be approved without a Policy Plan Amendment.

While cumulative projects could include Policy Plan Amendments and/or Zoning Amendment, modifications to existing land uses do not necessarily represent an inherent negative effect on the environment, particularly if the proposed changes involve changes in types and intensity of uses, rather than eliminating application of policies that were specifically adopted for the purpose of avoiding or mitigating environmental effects. Past and present cumulative projects do not involve amendments that would eliminate application of policies that were adopted for the purpose of avoiding or mitigating environmental effects. Determining whether any future Project might include such amendments and determining the cumulative effects of any such amendments would be speculative since it cannot be known what applications that are not currently filed might request. Thus, it is expected that the land uses of cumulative projects would be consistent with policies that avoid an environmental effect; therefore, cumulatively considerable impacts from cumulative projects related to policy consistency would be less than significant.

5.7.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- County of San Bernardino Development Code

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.7.3 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Impact LU-2 would be less than significant.

5.7.10 MITIGATION MEASURES

No mitigation measures are required.

5.7.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Less than significant. REFERENCES

County of San Bernardino Countywide Plan. Accessed: http://countywideplan.com/wp-content/uploads/2020/08/CWP_PolicyPlan_PubHrngDraft_HardCopy_2020_July.pdf

County of San Bernardino Development Code. Accessed: http://www.sbcounty.gov/Uploads/lus/DevelopmentCode/DCWebsite.pdf

County of San Bernardino Municipal Code. Accessed: https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-90905

SCAG Final 2020 Regional Transportation Plan/Sustainable Communities Strategy. Accessed: https://scag.ca.gov/read-plan-adopted-final-plan

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5.8 Noise

5.8.1 INTRODUCTION

This Draft EIR section evaluates the potential noise and vibration impacts that would result from implementation of the proposed development of 45 single-family residences. It discusses the existing noise environment within and around the Project site as well as the regulatory framework for regulation of noise. This section analyzes the effect of the proposed Project on the existing ambient noise environment during demolition, construction, and operational activities; and evaluates the proposed Project's noise effects for consistency with relevant local agency noise policies and regulations. This section includes data from the following County documents and report prepared by Vista Environmental:

- *County of San Bernardino Countywide Plan*, October 2020
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, August 2020
- *County of San Bernardino Development Code*
- *San Bernardino County Yorba Villas Noise Report,* Vista Environmental, 28 June 2021 (Appendix I)
- *Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis Memorandum, EPD Solutions, Inc., 12 August 2021 (Appendix K)*

Noise and Vibration Terminology

Various noise descriptors are utilized in this EIR analysis, and are summarized as follows:

dB: Decibel, the standard unit of measurement for sound pressure level.

dBA: A-weighted decibel, an overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear.

Leq: The equivalent sound level, which is used to describe noise over a specified period of time, typically 1 hour, in terms of a single numerical value. The Leq of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The Leq may also be referred to as the average sound level.

Lmax: The instantaneous maximum noise level experienced during a given period of time.

Lmin: The instantaneous minimum noise level experienced during a given period of time.

Lx: The sound level that is equaled or exceeded "x" percent of a specified time period. The "x" thus represents the percentage of time a noise level is exceeded. For instance, L50 and L90 represents the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

Ldn: Also termed the "day-night" average noise level (DNL), Ldn is a measure of the average of A-weighted sound levels occurring during a 24-hour period, accounting for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (penalizing" nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted by adding 10 dBA to take into account the greater annoyance of nighttime noises.

CNEL: The Community Noise Equivalent Level, which, similar to the Ldn, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 p.m. to 10:00 p.m. and after an addition of 10 dBA to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

The "ambient noise level" is the background noise level associated with a given environment at a specified time and is usually a composite of sound from many sources from many directions.

Effects of Noise

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance)
- Interference effects (e.g., communication, sleep, and learning interference)
- Physiological effects (e.g., startle response)
- Physical effects (e.g., hearing loss)

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects refer to interruption of daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be by those hearing it. With regard to increases in A-weighted noise levels, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3-dBA change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dBA is considered to be a readily perceivable difference.
- A change in noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

Noise Attenuation

Stationary point sources of noise, including mobile sources such as idling vehicles, attenuate (lessen) at a rate of 6 dBA per doubling of distance from the source over hard surfaces to 7.5 dBA per doubling of distance from the source over hard surfaces, depending on the topography of the area and environmental conditions (e.g., atmospheric conditions, noise barriers [either vegetative or manufactured]). Thus, a noise measured at 90 dBA 50 feet from the source would attenuate to about 84 dBA at 100 feet, 78 dBA at 200 feet, 72 dBA at 400 feet, and so forth. Widely distributed noise, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate, approximately 4 to 6 dBA per doubling of distance from the source.

Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise

from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement.

Fundamentals of Vibration

Vibration is energy transmitted in waves through the ground or man-made structures. These energy waves generally dissipate with distance from the vibration source. There are several different methods that are 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 but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. VdB serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

5.8.2 REGULATORY SETTING

Federal Highway Administration

Proposed federal or federal-aid highway construction projects at a new location, or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes, requires an assessment of noise and consideration of noise abatement per 23 CFR Part 772, "Procedures for Abatement of Highway Traffic Noise and Construction Noise." The Federal Highway Administration (FHWA) has adopted noise abatement criteria (NAC) for sensitive receivers such as picnic areas, recreation areas, playgrounds, active sport areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals when "worst-hour" noise levels approach or exceed 67 dBA Leq. Caltrans has further defined approaching the NAC to be 1 dBA below the NAC for noise-sensitive receivers identified as Category B activity areas (e.g., 66 dBA Leq is considered approaching the NAC).

US Environmental Protection Agency

In addition to FHWA standards, the United States Environmental Protection Agency (EPA) has identified the relationship between noise levels and human response. The EPA has determined that over a 24-hour period, an Leq of 70 dBA will result in some hearing loss. Interference with activity and annoyance will not occur if exterior levels are maintained at an Leq of 55 dBA and interior levels at or below 45 dBA. While these levels are relevant for planning and design and useful for informational purposes, they are not land

use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community.

The EPA also set 55 dBA Ldn as the basic goal for exterior residential noise intrusion. However, other federal agencies, in consideration of their own program requirements and goals, as well as difficulty of actually achieving a goal of 55 dBA Ldn, have settled on the 65 dBA Ldn level as their standard. At 65 dBA Ldn, activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can realistically be achieved.

5.12.1.3 Local Regulations

San Bernardino Countywide Plan

The Countywide Plan Hazards Element contains the following policies related to noise that are applicable to the Project:

Goal HZ-2 People and the natural environment protected from exposure to hazardous materials, excessive noise, and other human-generated hazards.

Policy HZ-2.8 We limit or restrict new noise sensitive land uses in proximity to existing conforming noise generating uses and planned industrial areas.

Policy HZ-2.9 We prioritize noise mitigation measures that control sound at the source before buffers, sound walls, and other perimeter measures.

San Bernardino County Development Code

The County of San Bernardino Development Code Section 83.01.010 establishes uniform performance standards for development within the County designed to mitigate the environmental impacts of existing and proposed land uses within a community. Section 83.01.080, Noise, provides noise standards for various land uses that are listed in Table 5.8-1.

Table 5.8-1: County of San Bernardino Noise Standards for Stationary Noise Sources

Affected Land Uses (Receiving Noise)	7 a.m. – 10 p.m. Leq	10 p.m. – 7 p.m. Leq
Residential	55 dB(A)	45 dB(A)

Note:
Leq = (Equivalent Energy Level). The sound level corresponding to a steady-state sound level containing the same total energy as a time varying signal over a given sample period, typically 1, 8 or 24 hours.
dB(A) = (A-weighted Sound Pressure Level). The sound pressure level, in decibels, as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, placing greater emphasis on those frequencies within the sensitivity range of the human ear.
Ldn = (Day-Night Noise Level). The average equivalent A-weighted sound level during a 24-hour day obtained by adding 10 decibels to the hourly noise levels measured during the night (from 10 pm to 7 am). In this way Ldn takes into account the lower tolerance of people for noise during nighttime periods.
Source: County of San Bernardino Development Code Section 83.01.080.

In addition, the code provides noise standards based on the volume of noise and the period of time of the noise, as listed below:

a) The noise standard for the receiving land use as specified in Table 5.8-1 for a cumulative period of more than 30 minutes in any hour.

b) The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour.

c) The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour.

d) The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour.

e) The noise standard plus 20 dB(A) for any period of time.

The County Development Code Section 83.01.080 also provides noise standards for mobile noise sources as listed in Table 5.8-2.

Table 5.8-2: County of San Bernardino Noise Standards for Mobile Noise Sources

Land Use		**Ldn (or CNEL) dB(A)**	
Categories	**Uses**	**Interior (1)**	**Exterior (2)**
Residential	Single and multi-family, duplex, mobile homes	45	60 (3)
Commercial	Hotel, motel, transient housing	45	60 (3)
	Commercial, retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	65
Institutional/Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65

Notes:
(1) The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.
(2) The outdoor environment shall be limited to: Hospital/office building patios, Hotel and motel recreation areas, Mobile home parks, Multi-family private patios or balconies, Park picnic areas, Private yard of single-family dwellings, School playgrounds
(3) An exterior noise level of up to 65 dB(A) (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.
CNEL = (Community Noise Equivalent Level). The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 a.m. and 10 decibels to sound levels in the night from 10:00 p.m. to 7:00 a.m.
Source: County of San Bernardino Development Code Section 83.01.080

Increases in Allowable Noise Levels. If the measured ambient level exceeds any of the first four noise limit categories in Table 5.8-2 the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the ambient noise level exceeds the fifth noise limit category the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

Exempt Noise. The following sources of noise shall be exempt from the regulations of this Section:

a) Emergency equipment, vehicles and devices.

b) Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays.

In addition, the average of the maximum levels on the loudest intrusive sounds occurring during a 24-hour period shall not exceed 65 dBA interior.

5.8.3 ENVIRONMENTAL SETTING

Existing Noise Levels

To assess the existing noise levels, 24-hour noise level measurements were taken in the vicinity of the Project site as shown in Figure 5.8-1. The field survey noted that noise within the proposed Project area is generally characterized by vehicle traffic on Francis Avenue that is adjacent to the south side of the Project site and Yorba Avenue that is adjacent to the east side of the Project site. A description of these locations and the existing noise levels are provided in Table 5.8-4.

Table 5.8-4: Existing Ambient Noise Measurement Results

Site No.	Site Description	Average (dBA L_{eq})	Maximum (dBA L_{max})	(dBA $L_{eq\ 1\text{-}hour}$/Time)		Average (dBA CNEL)
				Minimum	Maximum	
A	Located on the Project site perimeter fence, approximately 35 feet west of the Yorba Avenue centerline and 140 feet south of the northeast corner of the Project site.	55.9	80.9	45.6 1:50 a.m.	60.1 3:07 p.m.	60.5
B	Located on the Project site perimeter fence, approximately 35 feet north of the Francis Avenue centerline and 320 feet west of the southeast corner of the Project site.	63.3	91.0	50.6 1:48 a.m.	67.8 5:25 p.m.	66.7

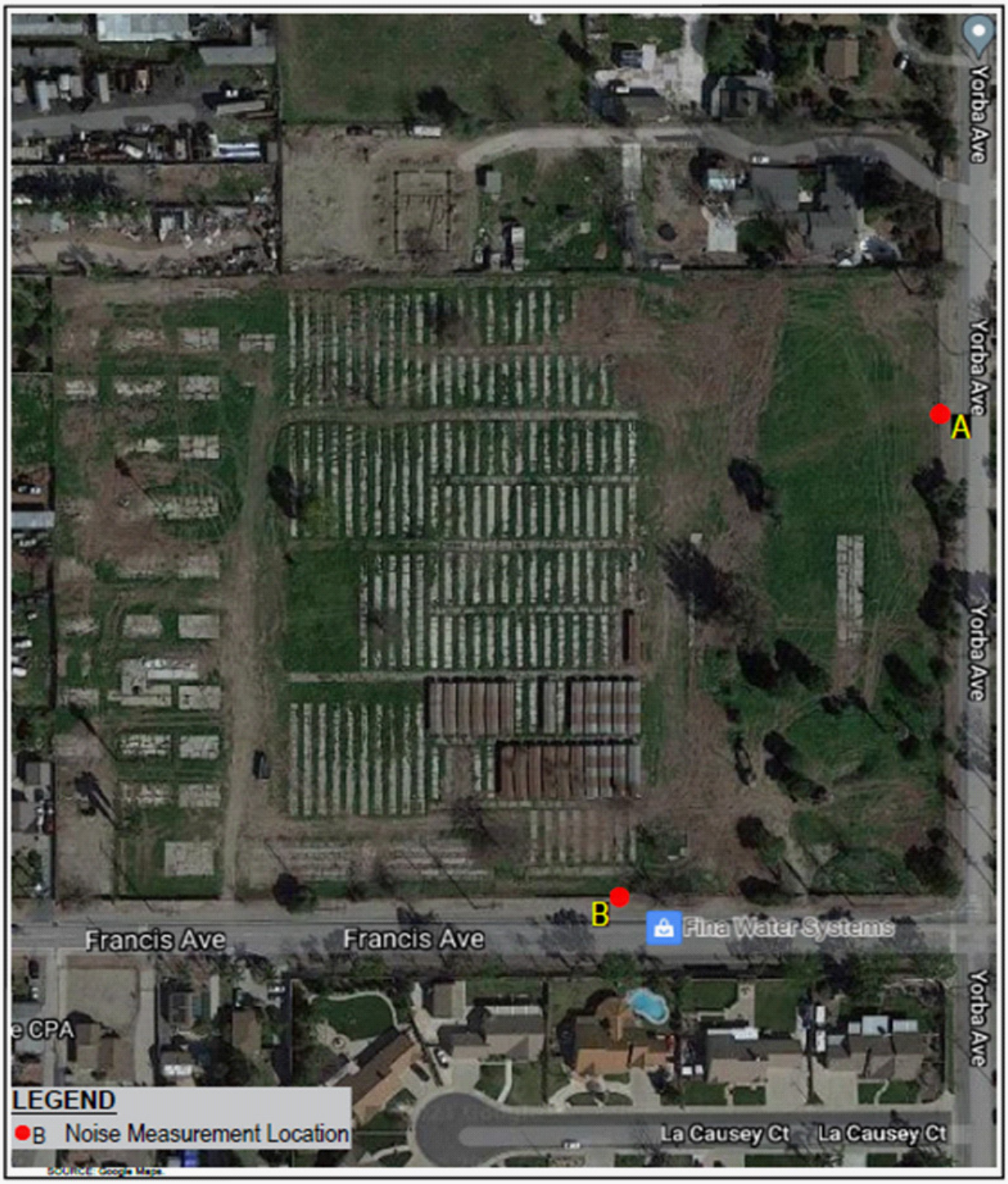
Note: Noise measurements were taken with two Extech Model 407780 Type 2 sound level meters from Tuesday, June 22, 2021 to Wednesday, June 23, 2021.

Source: Vista Environmental, 2021. Appendix I

Sensitive Receptors

Noise sensitive receptors are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: residences, schools, hospitals, and recreation areas. The nearest sensitive receptor to the Project site is a single-family home located approximately 15 feet to the north of the Project site. There is also a single-family home located approximately 20 feet west of the Project site. The nearest school is EJ Marshall Elementary School that is located approximately 0.6 mile to the southeast of the Project site.

Noise Measurement Locations



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5.8.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to:

NOI-1 Generation of a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

NOI-2 Generate excessive groundborne vibration or groundborne noise levels;

NOI-3 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.

Issues Found to Have No Impact or Less Than Significant Impact: The Initial Study for the proposed Project determined the Project would not have the potential to result in significant impacts in the noise issue area below (refer to Thresholds of Significance listed above). For the issue, an explanation of the impact and a determination that mitigation measures were not needed was provided in the Initial Study, included as Appendix A herein.

- Thresholds NOI-3

Therefore, no further assessment of these impacts is required in this Draft EIR.

Construction Noise and Vibration

- Significant impacts would occur if Project related construction activities:
    - Occur between the hours of 7:00 p.m. and 7:00 a.m. of the next day, on Sundays or federal holidays (Development Code Section 83.01.090(a)); or
    - Create noise levels which exceed the 80 dBA Leq acceptable noise level threshold at the nearby sensitive receiver locations (FTA, 2006);
- If Project-related construction activities generate vibration levels which exceed the Development Code, Section 83.01.090(a)), vibration threshold of 0.2 PPV in/sec at receiver locations.

Off-Site Traffic Noise

- Significant impacts would occur if the Project creates an increase of 3 dBA CNEL or greater at an existing or future noise-sensitive land use.

Operational Noise

- Significant impact would occur if Project related operational (stationary source) noise levels:
    - Exceed the exterior 55 dBA Leq daytime or 45 dBA Leq nighttime noise level standards at nearby sensitive residential receiver locations (Development Code, Title 8, Section 83.01.080).
- Significant impacts would occur if the Project creates an increase of 3 dBA CNEL or greater at an existing or future noise-sensitive land use.

5.8.5 METHODOLOGY

Construction Noise

To identify the temporary construction noise contribution to the existing ambient noise environment, the construction noise levels anticipated from usage of construction equipment needed to implement the proposed Project were analyzed through use of the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). The construction noise levels were compared against the thresholds listed previously to assess the level of significance associated with temporary construction noise level impacts.

Operational Noise

The primary source of noise associated with the operation of the proposed Project would be from vehicular trips. The expected roadway noise level increases from vehicular traffic were calculated using the Federal Highway Administration (FHWA) traffic noise prediction model and the trip generation prepared for the proposed Project. The trip generation is included in the VMT Memo as Appendix K.

As detailed in the Noise Impact Analysis, the proposed Project is anticipated to generate 425 daily trips, which were added to Francis Avenue for the with Project conditions as the proposed Project would not have any driveways on Yorba Avenue. The increase in noise levels generated by the vehicular trips have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance listed previously.

Vibration

Aside from noise levels, groundborne vibration would also be generated during construction of the Project by various construction-related activities and equipment; and could be generated by truck traffic traveling to and from the Project area. The potential ground-borne vibration levels resulting from construction activities occurring from the proposed Project were estimated by data published by the Federal Transit Administration (FTA). Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to the applicable thresholds of significance listed previously.

5.8.6 ENVIRONMENTAL IMPACTS

IMPACT NOI-1: 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

Less than Significant. Construction of the proposed Project is anticipated to include demolition of the rectangular concrete pads, removal of the existing residential utility infrastructure, site preparation, grading, excavation and recompaction of soils, utility and infrastructure installation, building construction of the 45 single-family homes, paving of the onsite roads and driveways, and application of architectural coatings. Noise generated by construction activities would result from a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and timing and duration of the construction activities. Noise levels generated by heavy construction equipment can range from approximately 74 dBA to 84 dBA when measured at 50 feet, as shown on Table 5.8-5.

Table 5.8-5: Construction Equipment Noise Emissions and Usage

Equipment Description	Number of Equipment	Acoustical Use Factor[1] (percent)	Spec 721.560 Lmax at 50 feet[2] (dBA, slow[3])	Actual Measured Lmax at 50 feet[4] (dBA, slow[3])
Site Preparation				
Rubber Tired Dozers	3	40	85	82
Tractor, Loader, or Backhoes	4	40	84	N/A
Grading				
Excavators	2	40	85	81
Grader	1	40	85	83
Rubber Tired Dozer	1	40	85	82
Scrapers	2	40	85	84
Tractor, Loader, or Backhoes	2	40	85	82
Building Construction				
Crane	1	16	85	81
Forklift (Gradall)	3	40	85	83
Generator	1	50	82	81
Tractor, Loader or Backhoes	3	40	84	N/A
Welder	1	40	73	74
Paving				
Paver	2	50	85	77
Paving Equipment	2	50	85	77
Roller	2	20	85	80
Architectural Coating				
Air Compressor	1	40	80	78

Notes:
[1] Acoustical use factor is the percentage of time each piece of equipment is operational during a typical workday.
[2] Spec 721.560 is the equipment noise level utilized by the RCNM program.
[3] The "slow" response averages sound levels over 1-second increments. A "fast" response averages sound levels over 0.125-second increments.
[4] Actual Measured is the average noise level measured of each piece of equipment during the Central Artery/Tunnel project in Boston, Massachusetts primarily during the 1990s.
Source: Vista Environmental, 2021. Appendix I

Section 83.01.080(g)(3) of the County's Development Code allows construction noise to exceed the County noise standards provided that construction activities occur between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. However, the County construction noise standards do not provide any limits to the noise levels that may be created from construction activities and even with adherence to the County standards, the resultant construction noise levels may result in a significant substantial temporary noise increase to the nearby residents.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the FTA construction noise criteria thresholds detailed above have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 80 dBA during the daytime at any of the nearby homes. The nearest sensitive receptor to the Project site is a single-family home located approximately 15 feet to the north of the Project site. There is also a single-family home located approximately 20 feet west of the Project site. Table 5.8-6 below shows construction levels would reach a maximum of 72 dBA L_{eq} at the nearest home to the north and would not exceed the FTA noise standard of 80 dBA at the nearest homes. Therefore, through adherence to the limitation of allowable construction times provided in Section 83.01.080(g)(3) of the Development Code, construction-related noise levels would not exceed any standards established in the Countywide Plan nor would construction activities create a substantial temporary increase in ambient noise levels from construction of the proposed Project. Therefore, construction noise impacts would be less than significant.

Table 5.8-6: Construction Noise Levels at the Nearest Sensitive Receptors

Construction Phase	Construction Noise Level (dBA Leq) at:	
	Nearest Home to the North[1]	Nearest Home to the West[2]
Site Preparation	71	70
Grading	72	71
Building Construction	72	71
Paving	66	65
Painting	58	57
FTA Construction Noise Threshold[4]	**80**	**80**
Exceed Thresholds?	No	No

[1] The nearest home to the north is located as near as 310 feet from the center of the Project site.
[2] The nearest home to the west is located as near as 335 feet from the center of the Project site.
[4] The FTA Construction noise thresholds are detailed above in Table 5.8-5.
Source: Vista Environmental, 2021. Appendix I

Operation

Operational-Related Noise

Less than Significant. The proposed Project would consist of the development of 45 single-family homes. Potential noise impacts associated with the operations of the proposed Project would be from Project-generated vehicular traffic on the nearby roadways. In addition, the proposed development would be adjacent to Francis Avenue and Yorba Avenue, which may create exterior and interior noise levels in excess of County standards at the Project proposed homes.

Vehicle noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors (1) the volume of traffic, (2) the speed of traffic, and (3) the number of trucks in the flow of traffic. The proposed residential uses would not require a substantial number of truck trips and the proposed Project would not alter the speed limit on any existing roadway so the proposed Project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed Project.

The County Policy Plan Hazards Element Goal HZ-2 requires the protection of people from excessive noise exposure. However, the General Plan does not quantify what is a significant roadway noise increase. As such, the roadway noise threshold utilized in the *Countywide Plan Environmental Impact Report (Plan EIR)*, has been utilized, which details that a significant noise increase would occur when the traffic noise increases by 3 dBA CNEL.

As detailed in Appendix I, the proposed Project is anticipated to generate 425 daily trips which were added to Francis Avenue for the with Project conditions. Table 5.8-7 shows that these vehicular trips would result in a 0.5 dBA noise level increase, which is below the 3 dBA noise level threshold. Therefore, impacts would be less than significant.

Table 5.8-7: Existing Project Traffic Noise Contributions

Roadway	Segment	dBA CNEL at Nearest Receptor[1]			Exceed +3 dBA CNEL Threshold[2]
		Existing	Existing Plus Project	Project Contribution	
Francis Avenue	West of Yorba Avenue	59.2	59.7	0.5	No
Yorba Avenue	North of Francis Avenue	50.9	50.9	0.0	No

Source: Vista Environmental, 2021 Appendix I

The proposed Project's potential offsite traffic noise impacts have been calculated through a comparison of the future year 2035 scenario to the future year 2035 with Project scenario. The results of this comparison are shown in Table 5.8-8 below. The proposed Project would not exceed the 3 dBA noise level threshold. Thus, off-site traffic noise impacts in the 2035 plus Project condition would be less than significant.

Table 5.8-8: Future Year 2035 Project Traffic Noise Contributions

		dBA CNEL at Nearest Receptor[1]			Exceed +3 dBA CNEL Threshold[2]
Roadway	Segment	Year 2035	Year 2035 Plus Project	Project Contribution	
Francis Avenue	West of Yorba Avenue	61.1	61.4	0.3	No
Yorba Avenue	North of Francis Avenue	51.6	51.6	0.0	No

Notes:
[1] Distance to nearest sensitive receptors does not take into account existing noise barriers.
[2] +3 dBA Increase Threshold obtained from Placeworks, 2019.
Source: Vista Environmental, 2021. Appendix I

Exterior and Interior Noise

Less than Significant. Using the FHWA traffic noise prediction model, the Noise Impact Analysis determined that the exterior noise levels at the Project proposed homes would range from 43 to 51 dBA CNEL which would not exceed the Development Code standard of 60 dBA CNEL as shown in Table 5.8-9. The interior noise levels were analyzed by the Nosie Impact Analysis to identify if the interior noise would exceed the Municipal Code Standard interior noise level standard of 45 dBA CNEL. As shown in Table 5.8-9, the interior noise levels at the proposed homes would range from 43-51 dBA with the proposed 6-foot walls. Thus, the proposed Project would be below the County's exterior and interior noise standards. Therefore, impacts related to exterior and interior noise would be less than significant.

Table 5.8-9: Proposed Homes Exterior Backyard Noise Levels from Nearby Roads

Building Number	Roadway	Exterior Backyard Noise Levels (dBA CNEL)		Sound Wall Height[1] (feet)
		Without Sound Wall	With Sound Wall	
1	Yorba Avenue	53	43	6.0
18	Francis Avenue	59	51	6.0
29	Yorba Avenue	53	44	6.0
40	Francis Avenue	59	51	6.0
42	Francis Avenue	59	51	6.0
45	Francis Avenue	59	51	6.0

Notes:
[1] Project Design Feature is included that requires construction of a 6-foot high cmu wall between nearest homes to roadways.
Source: Vista Environmental, 2021. Appendix I

Table 5.8-10: Proposed Homes Interior Noise Levels from Nearby Roads

Lot Number	Roadway	Floor	Exterior Noise Level at Building Façade (dBA CNEL)	Interior Noise Levels (dBA CNEL)	
				Windows Open[1]	Windows Closed[2]
1	Yorba Avenue	1	46	36	21

		2	53	28	23
18	Francis Avenue	1	50	40	25
		2	58	33	28
29	Francis Avenue	1	45	35	20
		2	53	28	23
40	Francis Avenue	1	51	41	26
		2	59	34	29
42	Francis Avenue	1	52	42	27
		2	59	34	29
45	Francis Avenue	1	52	42	27
		2	59	34	29

Notes:
[1] Windows open interior noise levels based on 10 dBA of noise reduction.
[2] Windows closed Interior noise levels based on 25 dBA of noise reduction.
Source: Vista Environmental, 2021. Appendix I

IMPACT NOI-2: WOULD THE PROJECT RESULT IN GENERATION OF EXCESSIVE GROUNDBORNE VIBRATION OR GROUNDBORNE NOISE LEVELS?

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Construction

Less than Significant. Construction activities for the proposed Project are anticipated to include site preparation (including demolition) and grading of the Project site, building construction of the 45 single-family homes, paving of the onsite roads and driveways, and application of architectural coatings. Vibration impacts from construction activities associated with the proposed Project would typically be created from the operation of heavy off-road equipment. The nearest sensitive receptor to the Project site is a single-family home located approximately 15 feet to the north of the Project site.

Section 83.01.090 of the County's Development Code restricts the creation of vibration which produces a particle velocity greater than 0.2 inch-per-second PPV. The primary source of vibration during construction would be from the operation of a bulldozer. As shown in Table 5.8-10 below, a large bulldozer would create a vibration level of 0.089 inch per second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite home (15 feet to north) would be 0.156 inch per second PPV. The vibration level at the nearest offsite home would be below the County's 0.2 inch per second PPV threshold. Thus, impacts related to construction vibration would be less than significant.

Table 5.8-10: Vibration Source Levels for Construction Equipment

Equipment		Peak Particle Velocity (inches/second)	Approximate Vibration Level (L_v)at 25 feet
Pile driver (impact)	Upper range	1.518	112
	typical	0.644	104
Pile driver (sonic)	Upper range	0.734	105
	typical	0.170	93
Clam shovel drop (slurry wall)		0.202	94
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drill		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Vista Environmental, 2021. Appendix I

Operation

Less than Significant. The proposed Project would consist of the development of 45 single-family homes. The on-going operation of the proposed Project would not include the operation of any known vibration sources other than typical onsite vehicle operations for a residential development. Therefore, impacts related to operational vibration would be less than significant.

5.8.7 CUMULATIVE IMPACTS

Cumulative noise assessment considers development of the proposed Project in combination with ambient growth and other development projects within the vicinity of the Project area. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the proposed Project to result in cumulative noise impacts. The majority of the nearby area is already developed and any new projects would likely be redevelopment of existing uses.

Development of the proposed Project in combination with the related projects would result in an increase in construction-related and traffic-related noise. However, Section 83.01.080 of the County Development Code requires construction activities to not occur within the hours of 7:00 p.m. and 7:00 a.m. on weekdays or anytime on Sundays and federal holidays. Also, construction noise and vibration are localized in nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise and vibration levels, more than one source emitting high levels of construction noise would need to be in close proximity to the proposed Project construction. As the surrounding area is developed with residential homes, there are no cumulative projects within hearing distance of the Project area. Thus, construction noise and vibration levels from the projects would not combine to become cumulatively considerable, and cumulative noise and vibration impacts associated with construction activities would be less than significant.

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed Project and related projects within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed Project in the opening year and the year 2035 cumulative traffic volumes on the roadways in the Project vicinity. The noise levels associated with these traffic volumes with the proposed Project were identified previously in Tables 5.8-7 and 5.8-8. As shown, cumulative development along with the proposed Project would increase local noise levels by a maximum of 0.5 dBA CNEL. As the increase is much lower than the 3.0 dBA threshold, cumulative impacts associated with traffic noise would be less than significant.

5.8.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- California Code of Regulations, Title 24 included in the County's Development Code in Section 63.0501.
- County's Development Code Section 83.01.080, Noise Standards
- County's Development Code Section 83.01.090, Vibration Standards

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.8.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, Impacts NOI-1 and NOI-2 would be less than significant.

5.8.10 MITIGATION MEASURES

No mitigation measures are required.

REFERENCES

Caltrans Guidance for Compliance. Accessed: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-12-noise

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Federal Transit Administration Transit Noise and Vibration Impact Assessment, May 2006 (FTA, 2006). Accessed: https://docs.vcrma.org/images/pdf/planning/ceqa/FTA_Noise_and_Vibration_Manual.pdf

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Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis. Prepared by EPD Solutions, Inc., 2021 (VMT Memo, 2021). Appendix K.

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5.9 Tribal Cultural Resources

5.9.1 INTRODUCTION

This section addresses potential impacts to tribal cultural resources (TCR) associated with implementation of the Project. The analysis in this section is based, in part, on the following documents and resources:

- *Phase I Cultural Resources Assessment: Chino Yorba and Francis Residential Project City of Chino, San Bernardino County, California, Material Culture Consulting, December 2020, Appendix C*
- *Phase I Environmental Site Assessment: 4664 and 4570 Francis Avenue Chino, California 91710 and Phase II Environmental Site Assessment: 4570 Francis Avenue Chino, California 91710, Tetra Tech, September 2016, Appendix E*
- *County of San Bernardino Countywide Plan*, October 2020
- *San Bernardino Countywide Plan Environmental Impact Report* (Plan EIR), PlaceWorks, August 2020
- *County of San Bernardino Development Code*

Additionally, part of this analysis is based upon Project-specific coordination and consultation with California Native American tribes that are traditionally and culturally affiliated with the Project region.

5.9.2 REGULATORY SETTING

5.9.2.1 State Regulations

California Senate Bill 18

Senate Bill 18 (SB 18) (California Government Code Section 65352.3) sets forth requirements for local governments to consult with California Native American tribes identified by the California Native American Heritage Commission (NAHC) to aid in the protection of tribal cultural resources. The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning to protect, or mitigate impacts on, tribal cultural resources. The Tribal Consultation Guidelines: Supplement to General Plan Guidelines (OPR, 2005), identifies the following contact and notification responsibilities of local governments:

- Prior to the adoption or any amendment of a general plan or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3).
- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45-day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local government must send a notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Because the proposed Project includes a General Plan Amendment, it is subject to the statutory requirements of SB 18 Tribal Consultation Guidelines.

California Assembly Bill 52

Assembly Bill 52 (AB 52) established a requirement under CEQA California Public Resources Code Sections 21073 et seq. to consider "tribal cultural values, as well as scientific and archaeological values when determining impacts and mitigation." Public Resources Code (PRC) Section 21074(a) defines "tribal cultural resources" (TCRs) as "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are either "[i]ncluded or determined to be eligible for inclusion in the California Register of Historical Resources" or "in a local register of historical resources." Additionally, defined cultural landscapes, historical resources, and archaeological resources may be considered tribal cultural resources. PRC Section 21074(b), (c). The lead agency may also in its discretion treat a resource as a TCR if it is supported with substantial evidence.

Projects for which a notice of preparation for a Draft EIR was filed on or after July 1, 2015 are required to have lead agencies offer California Native American tribes traditionally and culturally affiliated with the Project area consultation on CEQA documents prior to submitting an EIR in order to protect TCRs. PRC Section 21080.3.1(b) defines "consultation" as "the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement." Consultation must "be conducted in a way that is mutually respectful of each party's sovereignty [and] recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance." The consultation process is outlined as follows:

1. California Native American tribes traditionally and culturally affiliated with the Project area submit written requests to participate in consultations.
2. Lead agencies are required to provide formal notice to the California Native American tribes that requested to participate within 14 days of the lead agency's determination that an application package is complete or decision to undertake a Project.
3. California Native American tribes have 30 days from receipt of notification to request consultation on a Project.
4. Lead agencies initiate consultations within 30 days of receiving a California Native American tribe's request for consultation on a Project.
5. Consultations are complete when the lead agencies and California Native tribes participating have agreed on measures to mitigate or avoid a significant impact on a TCR, or after a reasonable effort in good faith has been made and a party concludes that a mutual agreement cannot be reached (PRC Sections 21082.3(a), (b)(1)-(2); 21080.3.1(b)(1)).

AB 52 requires that the CEQA document disclose significant impacts on TCRs and discuss feasible alternatives or mitigation to avoid or lessen an impact.

California Health and Safety Code, Section 7050.5

This code requires that if human remains are discovered on a Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and recognizes or has reason to believe the human remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

California Public Resources Code, Sections 5097.9 to 5097.991

PRC Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the NAHC. These sections also require notification to descendants of discoveries of Native American human remains and provide for treatment and disposition of human remains and associated grave goods.

5.9.2.2 Local Regulations

San Bernardino Countywide Plan

The Cultural Resources Element of the Countywide Plan contains the following policies that are applicable to the Project:

Goal CR-1 Tribal cultural resources that are preserved and celebrated out of respect for Native American beliefs and traditions.

Policy CR 1.1 We notify and coordinate with tribal representatives in accordance with state and federal laws to strengthen our working relationship with area tribes, avoid inadvertent discoveries of Native American archaeological sites and burials, assist with the treatment and disposition of inadvertent discoveries, and explore options of avoidance of cultural resources early in the planning process.

Policy CR-1.2 We will collaborate with local tribes on countywide planning efforts and, as permitted or required, planning efforts initiated by local tribes.

Policy CR 1.3 We consult with local tribes to establish appropriate Project-specific mitigation measures and resource-specific treatment of potential cultural resources. We require Project applicants to design projects to avoid known tribal cultural resources, whenever possible. If avoidance is not possible, we require appropriate mitigation to minimize Project impacts on tribal cultural resources.

Policy CR 1.4 We encourage active participation by local tribes as monitors in surveys, testing, excavation, and grading phases of development projects with potential impacts on tribal resources.

5.9.3 ENVIRONMENTAL SETTING

Native American Tribes

The territory of the Gabrieleño at the time of Spanish contact covers much of current-day Los Angeles, San Bernardino, and Orange Counties, which includes the Project site in the County of San Bernardino. The southern region of this cultural area is bound by Aliso Creek, the eastern region is located east of San Bernardino along the Santa Ana River, the northern region includes the San Fernando Valley, and the western region includes portions of the Santa Monica Mountains. The Gabrieleño also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in southern California. Trade of materials and resources controlled by the Gabrieleño extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California.

The Gabrieleño lived in permanent villages and smaller, resource-gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages comprised of several families or clans, while smaller, seasonal camps typically housed smaller family units. Gabrieleño houses were domed,

circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses—semicircular, earth covered buildings—were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a yuvar, an open-air structure built near the chief's house.

Hunting implements included wooden clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wooden paddles and bowls. Baskets were made from rush (*Juncus sp.*), deer grass (*Muhlenbergia rigens*), and skunkbush (*Rhus trilobata*).

The social structure of the Gabrieleño is little known; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays.

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting tribute from the village(s) under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, a representation of the link between the material and spiritual realms and the embodiment of power. Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding of the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain. Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages. Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing.

Rivers and streams were used as trading routes and travel routes as they provided resources. Thus, many tribal cultural resources are found along rivers, streams, and other known travel or trade routes. The Project site does not include, and is not located near a river, stream, or identified corridor that could have been a travel or trade route.

Project Site Ground Disturbances

The Phase I Environmental Site Assessment that was prepared for the Project site describes that between the years of 1938 to 1960, the vacant parcel of the site was used for orchards and dry farming. In 1960, the central portion of the subject site was developed as a rabbit farm that operated until 2002. Numerous structures, presumably residences, occupied the western portion of the Project site from at least 1938 until 1997. The structures were demolished circa 1997. The eastern portion of the Project site was occupied by a residence from at least 1938 until 1977, when it was demolished and has remained vacant land to the present day. After closure of the rabbit farm in 2002, the vacant parcel of the Project site has been utilized as grazing land by an adjacent goat farm.

Prior to development of the site structures that were demolished in 2018, the Project site and adjacent areas were used for agriculture, which resulted in shallow soil disturbances.

The Geotechnical Report that was prepared for the Project describes that the site is underlain by alluvial soil deposits mantled in areas of the site by minor amounts of goat manure. Shallow soil disturbances occurred in agricultural areas. Shallow remnant foundations reside in the western portion of the site.

5.9.4 THRESHOLDS OF SIGNIFICANCE

Appendix G of State CEQA Guidelines indicates that a Project could have a significant effect if it were to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

TCR-1: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or

TCR-2: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, that considers the significance of the resource to a California Native American tribe.

5.9.5 METHODOLOGY

A Sacred Lands File search was requested from the NAHC in 2016 when the Project was being processed by the City of Chino. The NAHC responded stating that there are no known/known sacred lands within 0.5 mile of the Project area and requested that 12 Native American individuals be contacted for further information regarding the general area vicinity. The City of Chino received one response to the City's AB 52 outreach letters, which was from the Gabrieleno Band of Mission Indians Kizh-Nation requesting consultation. Likewise, the only response from the outreach conducted during the preparation of the Phase I Cultural Resource Assessment was from the Gabrieleno Band of Mission Indians Kizh-Nation on October 14, 2016, who requested the presence of Native American monitors during ground disturbance and provided information on the proximity of known Native American village sites (MCC 2016). Mitigation measures were agreed upon for the Project site with Gabrieleno Band of Mission Indians Kizh-Nation.

In 2021 a new Sacred Lands File search was requested from NAHC by the County of San Bernadino. In compliance with SB 18, AB 52, and the NAHC request, on April 6, 2021, the County sent letters to the following Native American tribes that may have knowledge regarding tribal cultural resources in the Project vicinity and informing them that the Project is being processed by the County.

- AhaMakav Cultural Society
- Colorado River Indian Tribes
- Gabrieleño Band of Mission Indians – Kizh Nation
- Gabrieleño Band of Mission Indians – Tongva Nation
- Morongo Band of Mission Indians
- Soboba Band of Luiseno Indians

As of May 6, 2021, no responses were received. However, Mr. Andrew Salas, Chariman of the Gabrieleno Band of Mission Indians – Kizh Nation previously requested the presence of Native American monitors during ground disturbance and provided information on the proximity of known Native American village sites to the proposed Project area.

5.9.6 ENVIRONMENTAL IMPACTS

IMPACT TCR-1: WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PUBLIC RESOURCES CODE SECTION 21074 AS EITHER A SITE, FEATURE, PLACE, CULTURAL LANDSCAPE THAT IS GEOGRAPHICALLY DEFINED IN TERMS OF THE SIZE AND SCOPE OF THE

LANDSCAPE, SACRED PLACE, OR OBJECT WITH CULTURAL VALUE TO A CALIFORNIA NATIVE AMERICAN TRIBE, AND THAT IS LISTED OR ELIGIBLE FOR LISTING IN THE CALIFORNIA REGISTER OF HISTORICAL RESOURCES, OR IN A LOCAL REGISTER OF HISTORICAL RESOURCES AS DEFINED IN PUBLIC RESOURCES CODE SECTION 5020.1(K)?

No Impact. SB 18 and AB 52 require meaningful consultation between lead agencies and California Native American tribes regarding potential impacts on TCRs. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (PRC Section 21074). As outlined above, the County sent letters to 6 Native American representatives identified by NAHC, notifying them of the proposed Project in accordance with SB 18 and AB 52. Formal consultation was not conducted with the Native American representatives as no requests for consultation with the County's per AB 52 and SB 18 were received.

As described in response to Impacts 5a) and 5b) in the Section 5.3, *Cultural Resources*, the Project site was historically used for agriculture and residential uses and does not contain any historic resources. The most recent building demolition activities were permitted and authorized by the City of Chino. The Project site currently does not contain any buildings. The site contains concrete slabs from former residences, which are not considered a historic resource. In addition, there are no previously recorded cultural resources within a 0.5-mile of the Project site; however, five previously identified archaeological or historical resources are located within one mile of the Project site (MCC 2016). Furthermore, no information regarding known or potential TCRs in the Project vicinity was received during the SB 18 and AB 52 consultation period. Thus, the Project site does not contain any historic resources eligible for listing in the California Register of Historical Resources, or as defined by Section 5020.1(k) (MCC 2016) or TCRs; and impacts related to TCRs would not occur from implementation of the proposed Project.

IMPACT TCR-2:WOULD THE PROJECT CAUSE A SUBSTANTIAL ADVERSE CHANGE IN THE SIGNIFICANCE OF A TRIBAL CULTURAL RESOURCE, DEFINED IN PUBLIC RESOURCES CODE SECTION 21074 AS EITHER A SITE, FEATURE, PLACE, CULTURAL LANDSCAPE THAT IS GEOGRAPHICALLY DEFINED IN TERMS OF THE SIZE AND SCOPE OF THE LANDSCAPE, SACRED PLACE, OR OBJECT WITH CULTURAL VALUE TO A CALIFORNIA NATIVE AMERICAN TRIBE, AND THAT IS 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?

Less than Significant Impact with Mitigation. As described in the previous response, the Project site has been heavily disturbed. The proposed Project involves excavation; however, as discussed in Impact TCR-1 above, no substantial evidence exists that TCRs are present in the Project site. Although, no TCRs have been identified, the Gabrieleño Band of Mission Indians – Kizh Nation has previously requested Native American monitoring during ground disturbance and provided information on the proximity of known Native American village sites to the proposed Project area. In addition, to avoid potential adverse effects to undiscovered tribal cultural resources, Mitigation Measure TCR-1 has been included to provide for Native American resource sensitivity training and to prescribe activities should any inadvertent discoveries of tribal cultural resources be unearthed by Project construction activities.

California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an

investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of Mitigation Measure TCR-1 and the existing regulations, impacts to TCRs would be less than significant.

5.9.7 CUMULATIVE IMPACTS

The cumulative study area for tribal cultural resources includes the southern California region, which contains the same general tribal historic setting of the Gabrieleño, as detailed previously in Section 5.9.3, *Environmental Setting*. Other projects in the vicinity of the Project would involve ground disturbances that could reveal buried TCRs.

Cumulative impacts to TCRs would be reduced by compliance with applicable regulations and consultations required by either SB 18 and/or AB 52. As described above, the Project site and vicinity is not known to contain TCRs (MCC 2020); however, Mitigation Measure TCR-1 would be implemented to ensure that impacts would not occur in the case of an inadvertent discovery of a potential TCR. This mitigation measure would provide that the Project would not contribute to a cumulative loss of TCRs. Therefore, cumulatively impacts would be less than significant.

5.9.8 EXISTING REGULATIONS, STANDARD CONDITIONS, AND PLANS, PROGRAMS, OR POLICIES

Existing Regulations

- California Government Code Sections 5097.9-5097.991
- California Health and Safety Code Section 7050.5
- California Public Resources Code Sections 21073 et seq. (AB 52)

Standard Conditions

None.

Plans, Programs, or Policies

None.

5.9.9 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, Impact TCR-1 would have no impact.

Without mitigation, Impact TCR-2 would be **potentially significant**:

5.9.10 MITIGATION MEASURES

Mitigation Measure CUL-1: Archaeological Resources, listed previously.

Mitigation Measure TCR-1: Prior to commencement of any excavation activities, or the issuance of a grading permit and/or action that would permit site disturbance (whichever occurs first), the Project

developer/applicant shall provide a letter to the County of San Bernardino Planning Division, or designee, and retain a Native American Monitor from the Gabrieleño Band of Mission Indians Kizh-Nation to:

- Provide on-call services to address unanticipated prehistoric or tribal resources. The Native American Monitor shall be present at the pre-grading conference to establish procedures for tribal cultural resource surveillance.
- Conduct a Native American Indian Sensitivity Training for construction personnel. The training session shall include a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered, the duties of the Native American Monitor of Gabrieleño Ancestry, and the general steps the Monitor would follow in conducting a salvage investigation.
- Monitor all Project-related, ground-disturbing construction activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, trenching, and grubbing) of previously undisturbed native soils. The Native American Monitor(s) shall be present on-site during the construction phases that involve ground disturbing previously undisturbed native soils and shall complete monitoring logs on a daily basis. The logs shall provide descriptions of the daily activities, including construction activities, locations, soil, and any cultural materials identified. The monitor(s) shall possess Hazardous Waste Operations and Emergency Response (HAZWOPER) certification. The on-site monitoring shall end when the Project site grading and excavation activities of previously undisturbed native soils are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for tribal cultural resources. (**HAZWOPER certification is needed only if the site has hazardous concerns related to Mitigation Measure HAZ-1).
- Consult on unanticipated discovery of human remains and associated funerary objects:
    - Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Gabrieleno Band of Mission Indians – Kizh Nation (Tribe).
    - As specified by California Health and Safety Code Section 7050.5, if human remains are found on the Project site during construction or during archaeological work, the County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98 The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside of working hours. If the remains are Native American, the Tribe shall make every effort to recommend diverting the Project and keeping the remains in situ and

protected. If the Project cannot be diverted, it may be determined that burials shall be removed and the Project applicant/developer shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects, if possible. The Tribe shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes 4 or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The Project applicant/developer shall consult with the Tribe regarding avoidance of all cemetery sites. Once complete, a final report of all activities shall be submitted to the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive diagnostics on human remains.

- Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container on site if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the Project site but at a location mitigated between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

5.9.11 LEVEL OF SIGNIFICANCE AFTER MITIGATION

The mitigation measure and existing regulatory programs described previously would reduce potential impacts associated with TCRs for Impact TCR-2 to a level that is less than significant. Therefore, no significant unavoidable adverse impacts related to TCRs would occur.

REFERENCES

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National Park Service (NPS 2018) Archaeology Program. The Archaeological Resources Protection Act of 1979. https://www.nps.gov/archeology/tools/laws/arpa.htm.

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5.10 Other CEQA Considerations

5.10.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires an EIR to describe "any significant impacts, including those which can be mitigated but not reduced to a level of insignificance." Potential environmental effects of the proposed Project and mitigation measures are discussed in detail in Sections 5.1 through 5.9 of this Draft EIR. As presented therein, the proposed Project would not result any potential environmental impacts that cannot be reduced to a level of insignificance with mitigation.

5.10.2 GROWTH INDUCEMENT

This section analyzes the growth inducement potential of the proposed Project and the associated secondary effects of growth the Project might permit. As required by CEQA Guidelines Section 15126.2(d), an EIR must:

> "Discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Thus, based on CEQA, a Project could have a direct effect on population growth, for example, if it would involve construction of substantial new housing. A Project could also have indirect growth-inducement potential if it would:

- Establish substantial new permanent employment opportunities (e.g., commercial, industrial, governmental, or other employment-generating enterprises) or otherwise stimulate economic activity such that it would result in the need for additional housing, businesses, and services to support increased economic activities;
- Remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the Project area, or would add substantial capacity that could accommodate additional unplanned growth;
- Remove obstacles to growth through changes in existing regulations pertaining to land development;
- Result in the need to expand one or more public service facilities to maintain desired levels of service; or
- Involve some other action that could encourage and facilitate other activities that could significantly affect the environment.

As CEQA Guidelines Section 15126.2(d) states that growth-inducing effects are not to be construed as necessarily beneficial, detrimental or of little significance to the environment; the following information is provided as additional information on ways in which the proposed Project could contribute to significant

changes in the environment beyond the direct consequences of developing the land use concepts examined in the preceding sections of this Draft EIR.

Establish substantial new permanent employment opportunities or otherwise stimulate economic activity such that it would result in the need for additional housing, businesses, and services to support increased economic activities?

As discussed in Section 3.0, *Project Description*, the Project site consists of two parcels totaling 13.35-acres. The parcel on the corner of Francis and Yorba Avenue (the southeastern most portion of the Project site) was previously developed with a single-family residence; a guest cottage, swimming pool, storage shed, mobile home, bird cage area, and a horse stable, but in 2018 the owner demolished all structures, and the site is currently an empty lot.

The second parcel is coterminous with the first and is roughly divided into three sections: 1) the western section, 2) the middle section, and 3) the eastern section. The western portion of the site was developed with approximately 28 small single-family residences between 1938 and 1997. The structures in this area were demolished in 1997 (Tetra Tech 2016); however, some of the concrete slabs remain onsite.

In 1960, the central portion of the site was developed into a rabbit farm that operated until 2002. Since the closure of the rabbit farm in 2002, the vacant portion of the site has been utilized as grazing land for goats raised on a nearby site. The middle section also contains numerous elongated slabs. The eastern section of the vacant parcel is undeveloped vacant land that was used for goat grazing.

The proposed Project would redevelop the Project site to provide 45 single-family residences in a residentially zoned area. As discussed in Section 5.7, *Land Use and Planning*, the Project would create 172 temporary construction jobs. However, the Project would develop housing in an area designated for residential uses and would be consistent with historic uses of the site. Additionally, the proposed single-family residences would be adequately served by existing commercial services within the vicinity of the Project. Overall, the Project would provide housing and would not establish substantial new permanent employment opportunities or result in the need for additional housing, businesses, or services to support increased economic activities.

Remove Obstacles to Growth, e.g., Through the Construction Or Extension of Major Infrastructure Facilities that do not Presently Exist in the Project Area or Would Add Substantial Capacity that Could Accommodate Additional Unplanned Growth?

The elimination of a physical obstacle to growth is considered to be a growth inducing impact. A physical obstacle to growth typically involves the lack of public service infrastructure. The proposed Project would induce growth if it would provide public services or infrastructure with excess capacity to serve lands that would otherwise not be developable or to expand the development potential of redevelopment areas.

The proposed Project would develop the onsite infrastructure necessary to serve the proposed single-family residential uses. A new water line infrastructure would be installed on the Project site that would connect to the existing 8-inch water main in Yorba Avenue. The new onsite water line would be solely for purposes of providing water supplies to the proposed residences and landscaping through plumbing/landscaping fixtures that are compliant with the CalGreen Plumbing Code for efficient use of water.

Also, a new sewer line would be installed onsite and upon annexation of the Yorba Avenue sewer collection system into the MVWD and approval by IEUA of the MVWD to become a wastewater contracting agency, would connect to the existing 21-inch Regional Sewage System interceptor in Yorba Avenue. The new sewer lines installed to serve the proposed Project would not result in any increased capacity in the public sewer collection system. Wastewater generated from the Project site and collected in the Regional Sewage System interceptor would be treated by the Inland Empire Utilities Agency at the Regional Water Recycling Plant

No. 1. As discussed in the Initial Study, the Regional Water Recycling Plant No.1 provides primary, secondary, and tertiary treatment for a design capacity of 44 million gallons of wastewater per day (mgd). The Regional Water Recycling Plant currently processes an average flow of 28 mgd of wastewater, resulting in a remaining capacity of approximately 16 mgd. This remaining capacity is adequate to serve the proposed Project and the proposed Project would not contribute to any increase in wastewater treatment capacity.

Overall, the proposed Project would install new onsite infrastructure systems and upon approvals, would connect to existing off-site systems that currently have capacity to serve the Project area. The new onsite infrastructure would not provide additional capacity beyond what is needed to serve the proposed Project. In addition, development of the proposed Project would not result in an expansion of overall capacity, or extension of major infrastructure. Therefore, infrastructure improvements would not result in significant growth inducing impacts.

Remove Obstacles to Growth Through Changes in Existing Regulations Pertaining to Land Development?

The Project site has a Countywide Plan land use designation of Very Low Density Residential (VLDR) and a zoning designation of Single Residential 1-Acre Minimum (RS-1). A Project could directly induce growth if it would remove barriers to population growth such as change to a jurisdiction's general plan and zoning code, which allows new development to occur in underutilized areas. The proposed Project includes amendments to the Countywide Plan and to the Zoning Map to allow for the redevelopment of the site to provide a higher density residential development. The Project proposes a Policy Plan Amendment from VLDR to Low Density Residential (LDR), which would allow specific development requirements for the proposed residential use. In addition, the Project includes a proposed zoning change from RS-1 to Single Residential (RS), which would also provide specific development regulations for the residential development.

The proposed Project has been used for residential development since 1938 and is surround by single-family residences or areas planned for urban development. The proposed Project would involve a change to development regulations and would result in area specific population growth. However, the zoning and land use changes are parcel specific and would not result in growth outside of the Project site, because the areas are either completely developed or planned for development in adopted land use plans. Changes to the Project site's land use and zoning designations would not result in removing an obstacle to growth within the Project vicinity.

In addition, based on the California Department of Finance data, with an estimate of 3.37 persons per household within San Bernardino County (CDF 2020), the proposed Project would result in a net increase of approximately 152 new persons. Overall, the Southern California Association of Governments' (SCAG) 2019-2045 Population, Households, and Employment Projections household growth forecast from 2019 through 2045 for the County envisions an increase of 218,300 households yielding an approximately 33% growth rate in households. The proposed Project would increase households in the County by approximately 0.02 percent of the projected increase in households for the County. Therefore, impacts related to growth from changes in existing regulations pertaining to land development would be less than significant.

Result in the Need to Expand One or More Public Service Facilities to Maintain Desired Levels of Service?

The proposed Project is expected to incrementally increase the demand for fire protection and emergency response, police protection, and school services. However, as discussed in the Initial Study prepared for this Project, the 152 new persons associated with the proposed Project would not require development of additional facilities or expansion of existing facilities to maintain existing levels of service. Based on service ratios and build out projections, the proposed Project would not create a demand for services beyond the capacity of existing facilities. Therefore, an indirect growth inducing impact as a result of expanded or new

public facilities that could support other development in addition to the proposed Project would not occur. The proposed Project would not have significant growth inducing consequences that would require the need to expand public services to maintain desired levels of service.

Involve Some Other Action that Could Encourage and Facilitate Other Activities that Could Significantly Affect the Environment?

The proposed Project involves amendments to the County of San Bernardino General Plan and Development Code for zoning districts, but those amendments are specific to the proposed land use density on the Project site itself. The proposed Project does not propose changes to any of the County's building safety standards (i.e., building, grading, plumbing, mechanical, electrical, or fire codes). The proposed Project would comply with all applicable County plans, policies, and ordinances. In addition, Project features and mitigation measures have been identified within this Draft EIR to ensure that the Project minimizes environmental impacts. The proposed Project would not involve any precedent-setting action that could encourage and facilitate other activities that significantly affect the environment.

5.10.3 SIGNIFICANT IRREVERSIBLE EFFECTS

State CEQA Guidelines require the EIR to consider whether "uses of nonrenewable resources during the initial and continued phases of the Project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely…. Also, irreversible damage can result from environmental accidents associated with the Project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." (CEQA Guidelines Section 15126.2(c)). "Nonrenewable resource" refers to the physical features of the natural environment, such as land, waterways, mineral resources, etc. These irreversible environmental changes may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses.

Generally, a Project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The Project would involve a large commitment of nonrenewable resources;
- The Project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the Project; or
- The proposed irretrievable commitments of nonrenewable resources is not justified (e.g., the Project involves the wasteful use of energy).

The proposed Project would not result in or contribute to any of the significant environmental changes mentioned above. As discussed in the Initial Study prepared for the Project, the Project would not involve a large commitment of nonrenewable resources as impacts related to energy were less than significant and would not involve the wasteful use of energy or result in an irreversible damage from any potential environmental accidents associated with the Project. The Project would develop residential homes that would not involve the use of hazardous materials. The proposed development would incorporate energy-generating and conserving Project design features, including those required by the California Building Code, California Energy Code Title 24, which specify green building standards for new developments. In addition, the Project would not result in irreversible damages that could result from any potential environmental accidents as associated with the Project.

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6.0 Alternatives

This section addresses alternatives to the proposed Project and describes the rationale for including them in the Draft EIR. The section also discusses the environmental impacts associated with each alternative and compares the relative impacts of each alternative to those of the proposed Project. In addition, this section describes the extent to which each alternative meets the Project objectives.

6.1 INTRODUCTION

The identification and analysis of alternatives to a Project is a fundamental part of the environmental review process pursuant to CEQA. Public Resources Code (PRC) Section 21002.1(a) establishes the need to address alternatives in an EIR by stating that in addition to determining a Project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is . . . to identify alternatives to the Project."

Pursuant to *CEQA Guidelines* Section 15126.6(a), an EIR must describe a reasonable range of alternatives to the proposed Project or to the Project's location that would feasibly avoid or lessen its significant environmental impacts while attaining most of the proposed Project's objectives. *CEQA Guidelines* Section 15126.6(b) emphasizes that the selection of Project alternatives be based primarily on the ability to reduce impacts relative to the proposed Project. In addition, *CEQA Guidelines* Section 15126.6(e)(2) requires the identification and evaluation of an "Environmentally Superior Alternative."

Pursuant to *CEQA Guidelines* Section 15126.6(d), discussion of each alternative presented in this Draft EIR Section is intended "to allow meaningful evaluation, analysis, and comparison with the proposed Project." As permitted by CEQA, the significant effects of each alternative are discussed in less detail than those of the proposed Project, but in enough detail to provide perspective and allow for a reasoned choice among alternatives to the proposed Project.

In addition, the "range of alternatives" to be evaluated is governed by the "rule of reason" and feasibility, which requires the Draft EIR to set forth only those alternatives that are feasible and necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (*CEQA Guidelines* Section 15126.6(f)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors and other considerations (*CEQA Guidelines* Sections 15091(a)(3), 15364).

Based on the CEQA requirements described above, the alternatives addressed in this Draft EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative could avoid or substantially lessen any of the identified significant environmental effects of the proposed Project;
- The extent to which the alternative could accomplish the objectives of the proposed Project;
- The potential feasibility of the alternative;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives that would allow an informed comparison of relative advantages and disadvantages of the proposed Project and potential alternatives to it; and

- The requirement of the *CEQA Guidelines* to consider a "no Project" alternative; and to identify an "environmentally superior" alternative in addition to the no Project alternative (*CEQA Guidelines* Section 15126.6(e)).

Neither the CEQA statute, the *CEQA Guidelines*, nor recent court cases specify a specific number of alternatives to be evaluated in an EIR. Rather, "the range of alternatives required in an EIR is governed by the rule of reason that sets forth only those alternatives necessary to permit a reasoned choice" (*CEQA Guidelines* 15126(f)).

6.2 ENVIRONMENTAL IMPACTS

CEQA requires the alternatives selected for comparison in an EIR to avoid or substantially lessen one or more significant effects of the Project being evaluated. In order to identify alternatives that would avoid or substantially lessen any of the identified significant environmental effects of implementation of the proposed Project, the significant impacts must be considered, although it is recognized that alternatives aimed at reducing the significant and unavoidable impacts would also avoid or reduce impacts that were found to be less than significant or reduced to below a level of significance with implementation of mitigation measures. The analysis in Chapter 5 of this Draft EIR determined that there are no significant and unavoidable impacts, and all potentially significant impacts of the Project can be mitigated to a less than significant level.

Impact BIO-4: Project Impacts on 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.
As detailed, in Section 5.2, *Biological Resources*, the proposed Project includes trees that may provide nesting habitat for birds and would require mitigation to reduce potential impacts. Mitigation Measures would lessen impacts associated with Impact BIO-4. Mitigation Measure BIO-1 requires that vegetation removal occur during the non-nesting season to avoid impacts to nesting birds or, if vegetation removal occurs during nesting season, a pre-construction nesting bird survey shall be conducted.

Impact CUL-2: Project impacts on causing a substantial adverse change in the significance of an archaeological resource pursuant to CEQA guidelines section 15064.5.
As detailed, in Section 5.3, *Cultural Resources*, five previously identified archaeological or historical resources were located within one mile of the Project site. Mitigation has been included to ensure that inadvertent discovery of resources during ground-disturbing activities are less than significant. Mitigation Measure CUL-1 requires the Applicant to retain an archaeologist to provide on-call services in the event archaeological resources are discovered.

Impact GEO-6: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
As detailed, in Section 5.4, *Geology and Soils*, surface soil deposits onsite consist of younger alluvium, derived as alluvial fan deposits from San Gabriel Mountains to the north that are usually underlain by older Quaternary alluvium that may contain significant fossil vertebrate remains below five feet below the ground surface. Mitigation has been included to ensure a paleontologist has been selected to provide services for the Project. Mitigation Measure PAL-1 requires the Applicant retain a paleontologist to develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite.

Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials.

As detailed in Section 5.5, *Hazards and Hazardous Materials,* the Project site contains soil contaminated with OCPs and dieldrin that would require excavation and disposal as part of excavation and grading activities. The contaminated soils would need to be excavated during Project excavation and grading activities as required by the California Integrated Waste Management Board and the RWQCB. Mitigation Measure HAZ-1 requires preparation of a Site Management Plan that shall detail procedures and protocols for excavation and disposal of onsite hazardous materials.

Impact HAZ-2: Create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment

Due to the existence of the contaminated soils, implementation of the proposed Project has the potential to result in the accidental release of hazardous materials into the environment. Construction workers and the public could be exposed to the substances that are present within the onsite soils. As a result, Mitigation Measure HAZ-1 would be implemented to reduce the potential risks related to accidental release and exposure of people and the environment to the contaminated soils. Mitigation Measure HAZ-1 requires that a qualified consultant prepare a Soil Management Plan (SMP) to be used by construction workers to remove and dispose of the contaminated soil identified in the Phase I and Phase II Environmental Site Assessment.

Impact TCR-2: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, that considers the significance of the resource to a California Native American tribe

As discussed in Section 5.9, *Tribal Cultural Resources,* no Tribal Cultural Resources have been identified onsite; however, the Gabrieleño Band of Mission Indians – Kizh Nation has previously requested Native American monitoring during ground disturbance and provided information on the proximity of known Native American village sites to the proposed Project area. In addition, to avoid potential adverse effects to tribal cultural resources, Mitigation Measure TCR-1 has been included to provide for Native American resource sensitivity training and to prescribe activities should any inadvertent discoveries of tribal cultural resources be unearthed by Project construction activities.

6.3 PROJECT OBJECTIVES

The following objectives have been identified in order to aid decision makers in their review of the proposed Project and its associated environmental impacts.

- Provide for additional market-rate housing opportunities consistent with the County's Housing Element and State housing goals.
- Facilitate high-quality development, through the use of Planned Development Permit, that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development.
- Provide a new single-story single-family neighborhood that is scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods consistent with Countywide Plan Policy LU-2.1.
- Provide new sidewalks along Yorba Avenue westerly right-of-way and Francis Avenue northerly right-of-way to increase pedestrian facilities and create a walkable and bikeable environment.
- Ensure new residential development includes adequate open space and high-quality recreational amenities onsite for future residents.

6.4 ALTERNATIVES CONSIDERED BUT REJECTED

Pursuant to *CEQA Guidelines* Section 15126.6(c), an EIR must briefly describe the rationale for selection and rejection of alternatives. The lead agency may make an initial determination as to which alternatives are potentially feasible and, therefore, merit in-depth consideration, and which are infeasible and need not be considered further. Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, need not be considered (*CEQA Guidelines* Section 15126.6(f), (f)(3)). This section identifies alternatives considered by the lead agency but rejected as infeasible and provides a brief explanation of the reasons for their exclusion. Alternatives may be eliminated from detailed consideration in the Draft EIR if they fail to meet most of the Project objectives, are infeasible, or do not avoid any significant environmental effects.

- **Alternate Site Alternative:** An alternate site for the proposed Project was eliminated from further consideration. The Project Applicant is the owner of the Project site, and the Project site is underutilized in the existing condition. The Project objectives are to facilitate high-quality development that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development by providing 45 single-family homes and offsite roadway improvements along the Yorba Avenue westerly right-of-way and the Francis Avenue northerly right-of-way to increase pedestrian facilities and connectivity. CEQA specifies that the key question regarding alternative site consideration is "whether any of the significant effects of the Project would be avoided or substantially lessened by putting the Project at another location." Given the current location of the proposed Project and the Project objectives, it would likely be infeasible to develop and operate the Project on an alternative site with fewer environmental impacts. Additionally, this Draft EIR determined that there are no significant and unavoidable impacts, and all potentially significant impacts of the Project can be mitigated to a less than significant level. Therefore, the Alternative Site Alternative was rejected from further consideration.
- **Subdivision and Zoning Map Amendment without Policy Plan Amendment:** This alternative assumes that the site will be rezoned, subdivided and developed to be consistent with the Countywide Plan Land Use Designation, which allows up to 2 dwelling units per acre. This alternative would result in the development of 26 units. The Project under this alternative would also include 26 pre-constructed accessory dwelling units (ADU). As defined in Section 84.01.060 of the Development Code, ADUs shall be permitted on any lot that contains a proposed or existing dwelling. In addition, they are not intended for sale separate from the primary residence but may be rented separately. Thus, this alternative would result in a total of 52 dwelling units which exceeds the proposed Project and would not reduce any significant and unavoidable impacts or eliminate the need for any mitigation measures as the site would be fully built out. Thus, this alternative would require similar mitigation and have similar impacts as the proposed Project. Therefore, the Zoning Map Amendment without the Policy Plan Amendment was rejected from further consideration.

6.5 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Two alternatives to the proposed Project have been identified for further analysis as representing a reasonable range of alternatives that attain most of the objectives of the Project, may avoid or substantially lessen any of the significant effects of the proposed Project, and are feasible from a development perspective. These alternatives have been developed based on the criteria identified in Section 6.1, and are described below:

Alternative 1: No Project/No Build. Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the Draft EIR is required to "discuss the existing conditions at the time the notice of preparation is published, or if no

notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services."

Therefore, under this alternative, no development would occur on the Project site, and it would remain in its existing condition with concrete slabs and scattered trees throughout the site. Thus, this alternative compares impacts of the proposed Project with the existing vacant conditions.

Alternative 2: Reduced Project Alternative/Buildout of Existing Land Use and Zoning. Under this alternative, the proposed Project would not be built, and the site is assumed the to be developed according to the current land use and zoning designations. Under this alternative a reduction in the number of residential units would be built, which would result in increased setbacks and larger lots. The Project site has a Countywide Plan Land Use designation of Very Low Density Residential (VLDR) and is zoned Single Residential 1-Acre Minimum. Thus, the Alternative would be able to construct 13 residences under the existing zoning designation assuming the Project site would be subdivided. This Alternative assumes the development would be similar to the proposed Project and the residences would consist of 19-foot high, single-story residences consisting of the three architectural designs including Spanish Colonial, California Ranch, and Hacienda Ranch. The buildout of the site per the existing Countywide Plan designation and zoning would eliminate 32 units from the proposed Project.

Under the Reduced Project Alternative, parking spaces would be provided at the rate of 2 spaces per residential unit. The Reduced Project Alternative would also include a pocket park, consistent with that proposed by the Project.

This alternative would not require a Policy Plan Amendment or Zone Change and would be consistent with the Land Use Designation of Very Low Density Residential (VLDR) and Zoning Designation of Single Residential 1-Acre Minimum (RS-1).

6.6 ALTERNATIVE 1: NO PROJECT/NO BUILD

Under this alternative, the proposed Project would not be approved, and no development would occur. The existing conditions of concrete slabs and scattered trees would remain. In accordance with the CEQA Guidelines, the No Project/No Build Alternative for a development Project on an identifiable property consists of the circumstance under which the Project does not proceed. Section 15126.6(e)(3)(B) of the CEQA Guidelines states that, "In certain instances, the no Project alternative means 'no build' wherein the existing environmental setting is maintained." In addition, the no Project alternative includes what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services.

As the Project has been vacant within an urban area, it is reasonable to assume that the Project site would remain vacant with the existing conditions of concrete slabs and scattered trees throughout the site. Thus, this alternative compares impacts of the proposed Project with the existing conditions onsite. Accordingly, Alternative 1: No Project/No Build provides a comparison between the environmental impacts of the proposed Project in contrast to the result from not approving, or denying, the proposed Project. Thus, this alternative is intended to meet the requirements of CEQA Guidelines Section 15126.6(e) for evaluation of a no Project alternative.

6.6.1 ENVIRONMENTAL IMPACTS

Aesthetics

The No Project/No Build Alternative would maintain the existing visual character of the site which includes numerous concrete pads and vacant land with scattered ornamental trees and disturbed grasses. The Project site is surrounded by chain-link fencing that is visible from Yorba and Francis Avenue.

In comparison to the proposed Project, the No Project/No Build Alternative would not develop any single-family residences or change the visual character of the existing Project site. This alternative would not result in improvements along Yorba and Francis Avenue and would not result in any development onsite. The site would not be redeveloped to be consistent with the aesthetics of the surrounding residences. Overall, the No Project/No Build Alternative would not develop any residences on the Project site and views of the Project site would not change. In addition, lighting and glare would not increase and would remain the same as existing conditions.

Biological Resources

Under this alternative, the trees and vegetation onsite would not be disturbed and would remain in its existing conditions. There would be no potential impacts to nesting birds as the trees would remain onsite and would not require any removal. Although mitigation measures required of the Project would reduce biological resource impacts to less than significant levels, this alternative would generate less impacts to biological resources as compared with the Project and would not require mitigation.

Cultural Resources

Under this alternative, no grading would occur and there would be no potential impacts to unknown archaeological resources that may be buried below ground. The existing conditions would remain, and the site would not be rezoned to a higher density and no construction, including ground disturbing activities, would occur onsite. Although mitigation measures required for the Project would reduce cultural impacts to less than significant levels, this alternative would avoid impacts to cultural resources associated with the Project and would not require mitigation.

Geology and Soils

No new construction activities, including demolition and grading, would occur under the No Project/No Build Alternative. As the Project site consists of younger Quaternary alluvium, typically underlain by older Quaternary alluvium, they may contain significant fossil vertebrate remains below five feet below ground surface. Because the No Project/No Build Alternative does not involve grading or other ground disturbance activities, potential impacts to paleontological resources would not occur and mitigation would not be required. Additionally, this alternative would not result in the development of any residences, which would be required to comply with the CBC to ensure impacts related to seismicity are reduced. Thus, impacts under this alternative would be reduced compared to the less than significant impacts of the proposed Project.

Hazards and Hazardous Materials

The proposed Project would require excavation and disposal of soils contaminated with OCPs and dieldrin. The contaminated soils would need to be excavated and removed during excavation and grading activities as required by DTSC, California Integrated Waste Management Board, and the RWQCB. As a result, the Project requires Mitigation Measure HAZ-1 to reduce the potential risks related to accidental release and exposure of people and the environment to contaminated soils. The No Project/No Build Alternative would not require this mitigation because the existing onsite contaminated soils would remain in place. Thus, potential impacts related to removal and disposal of contaminated soils would be avoided by this alternative; however, the contaminated soils would remain on the Project site.

Hydrology and Water Quality

The Project is area designated as a Hydraulic Condition of Concern (HCOC) due to a lack of downstream storm water facilities. Existing water quality conditions, groundwater supplies, drainage patterns, and runoff water amounts would remain "as is" under the No Project/No Build Alternative because no new development would occur which would result in continued off-site flooding. This alternative would not introduce new sources of water pollutants from either construction on the site or new operations on the site, because no new development would occur. However, this alternative would not include installation of new low-impact development (LID), source control, site design, and treatment control best management practices (BMPs) to minimize runoff and water pollution, which would occur under the proposed Project. This alternative would not benefit the existing hydrologic conditions since the 2-year onsite storm flow would not be mitigated and the 100-year storm would not be detained as the existing site odes does not contain stormwater infrastructure. The storm water leaving the site would not be filtered and would continue to contain sediment and other potential pollutants associated with the existing conditions of the site. Therefore, the No Project/No Build Alternative would reduce impacts to hydrology and water quality that would occur from the proposed Project. However, the beneficial drainage improvements would not occur. Overall, hydrology and water quality impacts would be less than significant, and neutral in comparison to the proposed Project.

Land Use and Planning

The Project site has a Countywide Plan Land Use designation of Very Low Density Residential (VLDR) and is zoned Single Residential 1-Acre Minimum (RS-1). A Policy Plan Amendment and zoning map Amendment are required to allow for development of the 45 single-family residences. The Project is requesting to change the Countywide Plan land use designation to Low Density Residential (LDR) and a zoning Map Amendment to Single Residential (RS), approval of a TTM, and Planned Development Permit. Development of the site for 45 single-family residences would conform with normal current and historic growth patterns of the region and would integrate into the planned development of the adjacent and nearby areas. The site would also provide both vehicular and pedestrian access and would include off-site improvements along Francis and Yorba Avenue including sidewalks to increase walkability. The proposed land use designation change from VLDR to LDR would not conflict with a policy or plan adopted for the purpose of avoiding or mitigating an environmental effect. In addition, the proposed Project would implement many of the SCAG policies as discussed in Section 5.7.

The No Project/No Build Alternative would maintain the existing conditions on the Project site, which would not require a Policy Plan Amendment or Zoning Map Amendment. No impacts related to land use and planning would occur by retention of the existing onsite uses. However, this alternative would not include the proposed improvements along Francis and Yorba Avenue as included in the proposed Project. Overall, land use impacts related to this alternative would be less than the Project.

Noise

The proposed Project would result in a short-term increase in noise from construction and a long-term increase in noise from operation. The short-term construction noise and vibration impacts would be less than significant; and operation of the Project would also result in less than significant impacts.

The No Project/No Build Alternative would not generate noise sources as vehicle trips to and from the site would not occur. In addition, this alternative would not involve exterior construction related to noise and vibration as the vacant Project site would remain in place. Additionally, this alternative would not generate a residential population that could be impacted by roadway noise sources. As a result, the No Project/No Build Alternative would avoid potential impacts related to noise and would not generate any noise. Thus, impacts related to noise would be less than the proposed Project.

Tribal Cultural Resources

The proposed Project involves construction that could result in inadvertent impacts to unknown buried tribal cultural resources. Therefore, the Project requires mitigation to reduce the potential impacts to these resources that could occur during construction. However, the No Project/No Build Alternative would not involve ground disturbance; no excavation or grading would occur. Hence, this alternative would not have the potential to impact unknown buried tribal cultural resources and mitigation is not required. Thus, potential impacts to tribal cultural resources under the No Project/No Build Alternative would be less than the proposed Project.

6.6.2 CONCLUSION

Ability to Reduce Impacts

The No Project/No Build Alternative would not result in any changes to the existing conditions and no development would occur. As a result, this alternative would not require any of the mitigation measures that are included in the proposed Project as identified in Chapter 5 of this EIR. However, the environmental benefits of the Project would also not be realized, such as improvements to localized flooding, removal of contaminated soils, and improvements to housing availability within the region. The No Project/No Build Alternative would not install storm water filtration features in accordance with DAMP and LID design guidelines that would filter and slow the volume and rate of runoff which would reduce flooding; the contaminated soils would remain onsite; and this alternative would maintain an underutilized site that has the potential to provide housing within the region.

Ability to Achieve Project Objectives

As shown in Table 6-2, the No Project/ No Build Alternative would not meet any of the Project objectives. The site would not be redeveloped to construct single-family residential units, would not facilitate high-quality development that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development, or provide single-family homes that are compatible with the surrounding environment. Overall, this alternative would not meet any of the objectives of the proposed Project.

6.7 ALTERNATIVE 2: REDUCED PROJECT / BUILDOUT OF EXISTING LAND USE AND ZONING ALTERNATIVE

Under this alternative, a reduction in the number of residential units would be built according to the existing Countywide Plan Designation of VLDR and zoning of RS-1, which would result in a lower density, increased setbacks and larger lots. Pursuant to the VLDR designation and RS-1 zoning, the Reduced Project/Buildout of Existing Land Use and Zoning Alternative subdivide the site consistent with existing Countywide Plan Designation of VLDR and zoning of RS-1and would construct 13 residences at a rate of 1 dwelling unit per acre for the 13.35-acre site. Like the proposed Project, the residences would consist of single-story residences and would provide three architectural designs. This alternative would also include offsite improvements along Yorba and Francis Avenue, but due to size of the lots, would not include a pocket park and onsite private amenities such as turf play area, tot-lot, seating, barbecue area, bike racks, and park benches.

The buildout of the site per the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in 32 fewer single-family residences compared to the proposed Project. Under this alternative, parking spaces would be provided at the rate of 5 spaces per residential unit for a total of 65 spaces.

This alternative would not require a Policy Plan Amendment or Zoning Map Amendment and would be consistent with the existing Land Use Designation of Very Low Density Residential (VLDR) and Zoning Designation of Single Residential 1-Acre Minimum (RS-1) for the site.

6.7.1 ENVIRONMENTAL IMPACTS

Aesthetics

Under this alternative, the Project site would be developed with 13 single-family residences at a density of 0.97 dwelling units per acre as allowed by the existing zoning assuming the Project site would be subdivided. This alternative would also introduce new residences and landscaping to the area. Like the proposed Project, the visual character of the Project site would change under this alterative from a vacant underutilized site to a gated single-family residential neighborhood with single-story homes. Lot sizes would be larger in comparison to the proposed Project and would provide increased front and site setbacks for certain residences compared to the proposed Project. This Alternative would also be visually compatible with the existing residential land uses and would include architectural designs similar to the proposed Project. New sources of light and glare would be introduced during construction and operation and would also comply with the County's Development Code. Similar, but reduced sources of light and glare would be introduced to the Project area due to the decreased density. The proposed Project and the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would not conflict with applicable zoning and other regulations governing scenic quality. Thus, the proposed Project and the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would both result in less than significant impacts.

Biological Resources

Under this alternative, the 13.35-acre site would be developed with 13 residential units. As with the proposed Project, development of this alternative would also require removal of existing vegetation and trees and would require implementation of mitigation measures MM BIO-1 and BIO-2. As such, the impacts to biological resources would be reduced under the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative to less than significant with mitigation.

Cultural Resources

The Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would develop fewer residential units than the proposed Project but would require the same site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to the same extent as the proposed Project. Therefore, similar to the proposed Project this alternative would include mitigation measure CUL-1 to avoid impacts as a result of the inadvertent discovery of resources during ground-disturbing activities. As such, the impacts to cultural resources would be reduced under the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative to less than significant with mitigation.

Geology and Soils

Grading and development of the entire 13.3-arce site would still occur under this alternative, and therefore, impacts to geology and soils would be similar to those that would be generated from the proposed Project. The alternative would still result in additional persons and structures on the Project site that would be subject to risks associated with seismic ground shaking and geologic hazards. Therefore, this alternative would be required to meet the same regulatory requirements as the proposed Project. In addition, mitigation measure GEO-1 would still be required to reduce any potential impacts to paleontological resources as this alternative would result in the potential to adversely affect paleontological resources, despite the reduction in the number of units. As such, the impacts to geology and soils and paleontological resources would be reduced under the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative to less than significant with mitigation.

Hazards and Hazardous Materials

Development of the entire 13.35-arce site is proposed under this alternative. As such, the demolition, site preparation, grading, drainage/utilities/subgrade, and paving that would be needed to develop the

Reduced Project/Buildout of Existing Land Use and Zoning Alternative would require removal and disposal of contaminated soils during excavation and grading activities. As a result, this alternative would also require implementation of Mitigation Measure HAZ-1 to ensure that the contaminated soils are removed and disposed of appropriately. Therefore, impacts related to hazards and hazardous materials would be reduced under the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative to less than significant with mitigation.

Hydrology and Water Quality

The Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in similar construction impacts compared to the proposed Project because similar construction activities and soil disturbances would occur. As a result, this alternative would also implement standard BMPs through the County's standard permitting process to reduce potential impacts related to water quality during construction, which is similar to the proposed Project. Therefore, construction related hydrology and water quality impacts from the Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would be similar to those of the proposed Project.

The Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative is proposed fewer units to the acre and would result in a reduction of the total area of impervious surfaces compared to the proposed Project. However, like the proposed Project, this alternative would introduce new sources of water pollutants from construction and operation activities. Additionally, this alternative would be required to include onsite drainage, LID, source control, site design, and treatment control BMPs that are similar to those included in the proposed Project. Therefore, the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in impacts less than significant impacts to hydrology and water quality.

Land Use and Planning

The Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would implement single-family housing on the Project site and would not require a Policy Plan Land Use Amendment or Zoning Map Amendment. Similar to the proposed Project, this alternative would provide the residential land uses that would integrate into the planned development of the adjacent areas. However, the reduced development would provide fewer housing opportunities within the region as it would reduce the proposed Project by 32 residences, or 71 percent. This alternative would develop single-story residences similar to the proposed Project. Therefore, this alternative would be consistent with the SCAG RTP/SCS, County's Policy Plan, and zoning code. As a result, the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in impacts less than significant impacts to land use and planning.

Noise

The proposed Project and the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in construction noise related to development of the site and 13 residential units assuming the Project site would be subdivided. Compared to the proposed Project, this alternative would reduce the length of construction, which in turn would reduce the length of construction-related noise and vibration. As with the proposed Project, construction activities would not cause excessive noise and vibration and construction would occur within the hours allowable by the County Code Section 83.01.080, which states that construction shall occur only between the hours of 7 a.m. and 7 p.m. Monday through Saturday, with no construction allowed on Sundays and Federal holidays. As a result, the proposed Project and Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in impacts less than significant impacts to construction noise and vibration.

This alternative would generate noise from vehicular trips to and from the site and operation of the residential uses, such as exterior noise and mechanical equipment. The number of vehicular trips generated by this alternative would be fewer than those generated by the proposed Project, as would the number of units and amount of mechanical equipment. Hence, although less than significant under the proposed Project, traffic noise and operational noise under this alternative would be reduced. As a result, the proposed Project and the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would result in impacts less than significant impacts to operational and traffic noise.

Tribal Cultural Resources
The Reduced Project Alternative would require site preparation, grading, drainage/utilities/subgrade, which would disturb site soils to the same extent as the proposed Project; therefore, this alternative would require implementation of Mitigation Measure TCR-1 to reduce potential impacts related to unknown buried tribal cultural resources. Thus, impacts under both the Reduced Project/Buildout of Existing Land Use and Zoning Alternative and the proposed Project would be reduced to a less than significant level with incorporation of mitigation.

6.7.2 CONCLUSION

Ability to Reduce Impacts
The Reduced Project/Buildout of Existing Land Use and Zoning Alternative would reduce residential density on the site by 71 percent or by 32 residential units. With fewer units, this alternative would result in reduced light and glare from fewer residential structures, reduced construction noise from a shorter construction schedule and reduced operational noise from fewer residents and vehicles. While reduced, these impacts are less than significant without mitigation under both the alternative and the proposed Project. Furthermore, this alternative would require the same mitigation measures that are required for the proposed Project to reduce impacts to a less than significant level for biological, cultural, geology and soils, hazards and hazardous materials, and tribal cultural resources. Overall, this alternative would not eliminate the need for mitigation.

Ability to Achieve Project Objectives
As shown in Table 6-2, the Reduced Project/Buildout of Existing Land Use and Zoning Alternative would meet most of the Project objectives, but not to the same extent as the proposed Project. This alternative would not meet the objective to ensure new residential development includes adequate open space and high-quality recreational amenities for future residents and would not provide meet the region's need for housing to the extent that the proposed Project would because residential units are reduced by 32 units and 71 percent.

6.9 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires a lead agency to identify the "environmentally superior alternative" when significant environmental impacts result from a proposed Project. The Environmentally Superior Alternative for the proposed project would be the No Project/No Build Alternative. The No Project/No Build alternative would avoid the significant impacts requiring mitigation of the Project and all of the potential construction impacts, operational impacts, and would not be required to implement the mitigation measures that are identified in Chapter 5.0 of this EIR that are related to: biology, cultural resources, geology and soils, hazards and hazardous materials, and tribal cultural resources. However, this alternative would not meet any of the Project objectives.

Additionally, CEQA Guidelines Section 15126.6(3)(1) states:

> *The "no Project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental*

> *analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no Project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. (Emphasis added).*

Therefore, pursuant to CEQA, because the No Project/No Build Alternative has been identified as the Environmentally Superior Alternative, the Environmentally Superior Alternative would be the Reduced Project/Buildout of Existing Land Use and Zoning Alternative, which would involve redevelopment of the site with 13 single-family residences assuming the Project site would be subdivided.

The Reduced Project/Buildout of Existing Land Use and Zoning Alternative would implement the existing Policy Plan land use and zoning designations for the Project site and would not require a Policy Plan Amendment or Zoning Map amendment.

Although some of the of less than significant impacts would be reduced under the Reduced Project/Buildout of Existing Land Use and Zoning Alternative in comparison to the proposed Project, this alternative would not eliminate any of the mitigation measures. In addition, it would reduce the housing onsite by 32 units and not meet the region's demand for housing to same extent as the proposed Project. As shown in Table 6-2, this alternative would meet most of the Project objectives, but to a lesser extent compared to the proposed Project.

CEQA does not require the Lead Agency (the County of San Bernardino) to choose the environmentally superior alternative. Instead, CEQA requires the County to consider environmentally superior alternatives, weigh those considerations against the environmental impacts of the proposed Project, and make findings that the benefits of the Project considerations outweigh the harm. Table 6-1 provides, in summary format, a comparison between the level of impacts for each alternative and the proposed Project. In addition, Table 6-2 provides a comparison of the ability of each of the alternatives to meet the objectives of the proposed Project.

Table 6-1: Impact Comparison of the Proposed Project and Alternatives

	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: Reduced Project/Buildout of Existing Land Use and Zoning
Aesthetics	Less than significant	Same as proposed Project, less than significant	Same as proposed Project, less than significant
Cultural Resources	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project, less than significant with mitigation
Geology and Soils	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project, less than significant with mitigation
Hazards and Hazardous Materials	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project; less than significant with mitigation

	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: Reduced Project/Buildout of Existing Land Use and Zoning
Hydrology and Water Quality	Less than significant	Same as proposed Project, less than significant	Same as proposed Project, less than significant
Land Use and Planning	Less than significant	Less, no impacts, no mitigation required	Same as proposed Project; less than significant
Noise	Less than significant	Less, no impacts, no mitigation required	Same as proposed Project; less than significant
Tribal Cultural Resources	Less than significant with mitigation	Less, no impacts, no mitigation required	Same as proposed Project; less than significant with mitigation
Reduce Impacts of the Project?		Yes	Yes
Areas of Reduced Impacts Compared to the Project		8	1 (Noise)

Table 6-2: Comparison of the Proposed Project and Alternatives Ability to Meet Objectives

	Proposed Project	Alternative 1: No Project/No Build	Alternative 2: Reduced Project Using Existing Land Use and Zoning
Provide for additional market-rate housing opportunities consistent with the County's Housing Element and State housing goals	Yes	No	Yes, but not to the same extent as the proposed Project.
Facilitate high-quality development that is compatible with the existing surrounding residential neighborhoods on underutilized parcels planned for residential development.	Yes	No	Yes
Provide a new single-story single-family neighborhood that is scaled, buffered, and designed to minimize negative impacts on adjacent neighborhoods consistent with Countywide Plan Policy LU-2.1.	Yes	No	Yes
Provide new sidewalks along Yorba Avenue westerly right-of-way and Francis Avenue northerly right-of-way to increase pedestrian facilities and create a walkable and bikeable environment.	Yes	No	Yes
Ensure new residential development includes adequate open space and high-quality recreational amenities for future residents.	Yes	No	No

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7.0 EIR Preparers and Persons Contacted

7.1 EIR Preparers

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