**December 2021** 

**Lead Agency:** 



City of Chino Hills 14000 City Center Drive Chino Hills, CA 91709

Prepared by:



2861 Pullman Street Santa Ana, CA 92705



## **EXECUTIVE SUMMARY**

**Lead Agency:** City of Chino Hills

**Project Proponent:** Greening Family, LLC /Rolling Ridge Ranch

**Project Location:** The Rancho Cielito project site is located within the City of Chino Hills, in

San Bernardino County. The Project site is generally located north of Los Serranos Boulevard/Valle Vista Drive and south of the Lake Los Serranos Club. The Project site is located on approximately 48.37 acres (28.31 acres of dry and 18.87 acres of water surface area that make up Lake Los

Serranos).

## **Project Description:**

The Rancho Cielito Residential Development Project (Project) proposes to build 354 multifamily dwelling units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure (*Figure ES-1*). *Figure 5a. Architectural Site Plan* identifies four proposed separate parcels; Parcels 1, 2 and 3 would be developable parcels. Parcel 4, Lake Los Serranos, would remain a water body and that would be maintained as by the Rancho Cielito development.

#### **Project Summary**

Existing Parcels	Existing Parcels (APN)	Existing Acres	Proposed Parcels	Proposed Acres
Parcel A [includes Lake Serranos]	Parcel 3, TPM 4615 (APN 1025-561-04)	28.31 plus the additional 18.87- acre Lake Los Serranos identified below	Parcel 1, TPM 20343: East Village – 166 apartments (includes Lake Los Serranos	13.30
Parcel B	Portion of Lot 1, Tract 3027 (APN 1025-561-05)	0.60	Parcel 2, TPM 20343: West Village – 188 apartments (incudes Lake Los Serranos)	13.37
Parcel C	Portion of Lot 1, Tract 3027 (APN 1025-561-06)	0.60	Parcel 3, TPM 20343: Los Serranos Club office and residence – not part of the Project	1.05
Lake Los Serranos	Parcel 3 of TPM 4615 (APN 1025-561-04))	18.87	Parcel 4, TPM 20343 Lake Los Serranos would remain as is and would be maintained by as part of the Rancho Cielito development.	20.74
Project Total		48.37		48.4 <b>6</b> ¹

<sup>&</sup>lt;sup>1</sup>The increase in proposed acres (.091 acre) is the result of right-of-way to be dedicated and abandoned from several slivers between City and Project.

A phased construction program is proposed, commencing with the East Village and progressing to the West Village. Construction staging areas would be located within the Project site. Construction of the proposed Project is estimated to begin in 2022 and end in 2026.

December 2021 ES-1 Draft MND





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## **ACRONYMS AND ABBREVIATIONS**

ACRONYMS ANI	<u>D ABBREVIATIONS</u>
Term	Description
AB	Assembly Bill
ACM	Asbestos-Containing Material
AF	Acre-Feet
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CALFIRE	California Department of Forestry and Fire Protection
CA MUTCD	California Manual on Uniform Traffic Control Devices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CHRIS	California Historical Resources Information System
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CO Plan	Federal Attainment Plan for Carbon Monoxide
CRHR	California Register of Historic Places
CVFD	Chino Valley Fire District
CWA	California Water Act
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources

Term Description

EIC Eastern Information Center

EIR Environmental Impact Report

EPA Environmental Protection Agency

EVCS Electric Vehicle Charging Station

FEIR Final Environmental Impact Report

FEMA Federal Emergency Management Agency

FIRM Flood Insurance Rate Map

GHGs Greenhouse Gases Gpd Gallons per day

HCP Habitat Conservation Plan
HMP Hazard Mitigation Plan

HREC Historical Recognized Environmental Condition

IEUA Inland Empire Utilities Agency
LSTs Localized Significance Thresholds

LRA Local Responsibility Area
MBTA Migratory Bird Treaty Act
MLD Most Likely Descendent
MMT Million Metric Tons

MND Mitigated Negative Declaration

MVN US Army Corps of Engineers, New Orleans District (MVN)

MVWD Monte Vista Water District

MTCO<sub>2</sub>eq Metric Tons of Carbon Dioxide Equivalent
NAHC Native American Heritage Commission
NCCP Natural Community Conservation Plan

ND Negative Declaration

NPDES National Pollutant Discharge Elimination System

 $N_2O$  Nitrous Oxide  $NO_x$  Nitrogen Oxides

NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places

OPR California Office of Planning and Research

PM<sub>10</sub> and PM<sub>2.5</sub> Particulate Matter
PRC Public Resources Code

Project Rancho Cielito Residential Development Project

RCPG Regional Comprehensive Plan and Guide
REC Recognized Environmental Condition

ROG Reactive Organic Gases
RTP Regional Transportation Plan

RWQCB Regional Water Quality Control Board
USACE United States Army Corps of Engineers

SBCSD Southern California Association of Governments

Term Description

SBTAM San Bernardino County Transportation Analysis Model

SCAG Southern California Association of Governments
SCAQMD South Coast Air Quality Management District
SCCIC South Central Coastal Information Center

SCS Sustainable Communities Strategy

SIP State Implementation Plan

SP Service Population
SoCAB South Coast Air Basin

SR State Route

SRA Sensitive Receptor Area

SWPPP Storm Water Pollution Prevention Plan SWRCB State Water Resources Control Board

TPD Tons Per Day

USFWS United States Fish and Wildlife Service

UWMP Urban Water Management Plan
VHFHSZ Very High Fire Hazard Severity Zone

VMT Vehicle Miles Traveled
WFA Water Facilities Authority

WQMP Water Quality Management Plan

USGS U.S. Geological Survey

#### 1.0 BACKGROUND

## 1.1 Summary

**Project Title:** Rancho Cielito Residential Development Project

**Lead Agency Name and Address:** City of Chino Hills

14000 City Center Drive Chino Hills, California 91709

**Contact Person and Phone Number:** Kim Zuppiger, Contract Planner

City of Chino Hills Community Development Department

(909) 364-2761

**Project Location:** The Rancho Cielito Project Site is located within the City of

Chino Hills. Chino Hills is located in the southwestern portion of San Bernardino County, and borders parts of Los Angeles, Orange, and Riverside counties (Figure 1 Regional Location). The property is regionally accessible from Highway 71 at Chino Hills Parkway/Ramona Avenue. The Project site is generally located north of Los Serranos Boulevard/Valle Vista Drive and south of the Lake Los Serranos Club (Figure 2. Project Location). The site is located on 48.37 acres (28.31 acres of dry and 18.87 acres of water surface area that make

up Lake Los Serranos).

**General Plan Designation:**Medium Density Residential

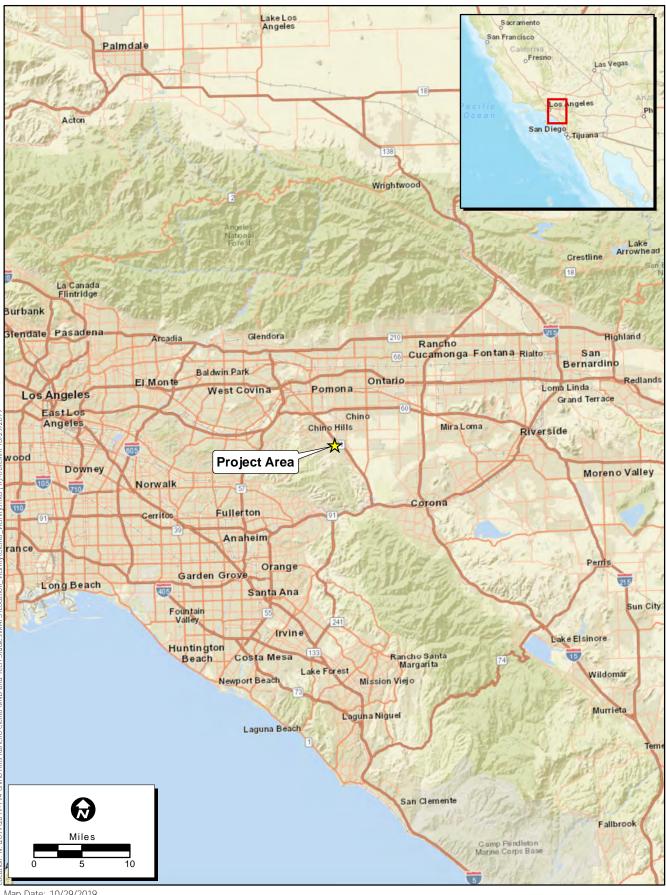
**Zoning:** Medium Density Residential (RM-1)

#### 1.2 Introduction

The City of Chino Hills is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Rancho Cielito Residential Development Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resources Code [PRC], Section 21000 et seq.) and State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate for a Project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

# 1.3 Environmental Setting - Existing Conditions/Surrounding Land Uses/

The existing Project Site consists primarily of undeveloped land and a human-made lake, Lake Los Serranos (*Figure 3. Project Vicinity*). In addition, various older buildings occupy the site, including three single-family houses, three garages, one office, one pump house, and one shed.



Map Date: 10/29/2019

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Figure 1. Regional Location



Map Date: 10/29/2019
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Kona, Esri (Thailand), NGCC, (c) OpenStreading-contributors, and the GIS User Community





Map Date: 5/27/2020 Photo Source: NAIP (2018)

Note: Project boundary excludes water surface area of approximately 18.87 acres.



There is a temporary storm drain outlet and temporary concrete bottom channel located generally in the central portion of the site between Los Serranos Boulevard and Lake Los Serranos that was installed by the City in 2015 to handle offsite flows generated by the surrounding area and avoid flooding of homes. 

The site vegetation is primarily grassland with scattered trees and shrubs along the lake edge and generally surrounding the various buildings (*Figure 4b. Representative Site Photos*). Hickory Creek, a drainage course that drains a natural watershed, enters the property at the southwest corner.

The property is located within Section 22 and 27, Township 2 South and Range 8 West, San Bernardino Meridian, of the United States Geological Survey (USGS) "Prado Dam", California Quadrangle. The property is comprised of three legal parcels: Assessor Parcel Numbers (APN) 1025-561-04, -05, and -06.

Surrounding land uses consist of existing residential uses, including single-family, multi-family, and mobile home park, as shown below.

General Plan Project Designation Zoning		Zoning Designation	Existing Land Use
Site*	Medium Density Residential	Medium Density Residential (RM-1)	Undeveloped
North	Medium Density Residential	Medium Density Residential (RM-1)	Mobile Home Park, Lake Los Serranos
East	Low Density Residential	Low Density Residential (R-S)	Single-Family Residential
South	Low Density Residential Medium Density Residential	Low Density Residential (R-S), Medium Density Residential (RM-1)	Single-Family Residential, Multi- Family Townhouses
West	Low Density Residential Medium Density Residential	Low Density Residential (R-S), Medium Density Residential (RM-1)	Single-Family Residential, Mobile Home Park

Source: City of Chino Hills 2015a, 2015b

Note: Although the current General Plan land use map and Zoning map designate both the land and lake portion of the Project Site as Medium Density Residential, a recent analysis conducted by the City at the request of the applicant indicates that during adoption of the City first General Plan, it was the intent of the City Council to place a Rural Residential designation on the lake. The placement of a Medium Density Residential designation on the lake was a City mapping error. Consequently, the effective General Plan Land Use map and Zoning Map designation for the lake is Rural Residential (R-R). This correction in the lake's land use designation has no bearing on the project as all proposed development will occur on the land portion of the site, which is correctly designated Medium Density Residential. The Rural Residential land use designation on the lake allows a maximum of two dwellings units per acre which would yield 38 dwelling units for future use or transfer of units by Greening Family, LLC/Rolling Ridge Ranch under Measure U.

Background 1-5 December 2021

<sup>&</sup>lt;sup>1</sup>This was constructed by the City in 2015 through grant funding to relieve localized flooding to homes in the neighborhood south of Los Serranos Blvd. At the time, no funds were available to the City to include improvements addressing erosion control measures on the project site or the quality of urban runoff to then flow into the lake.

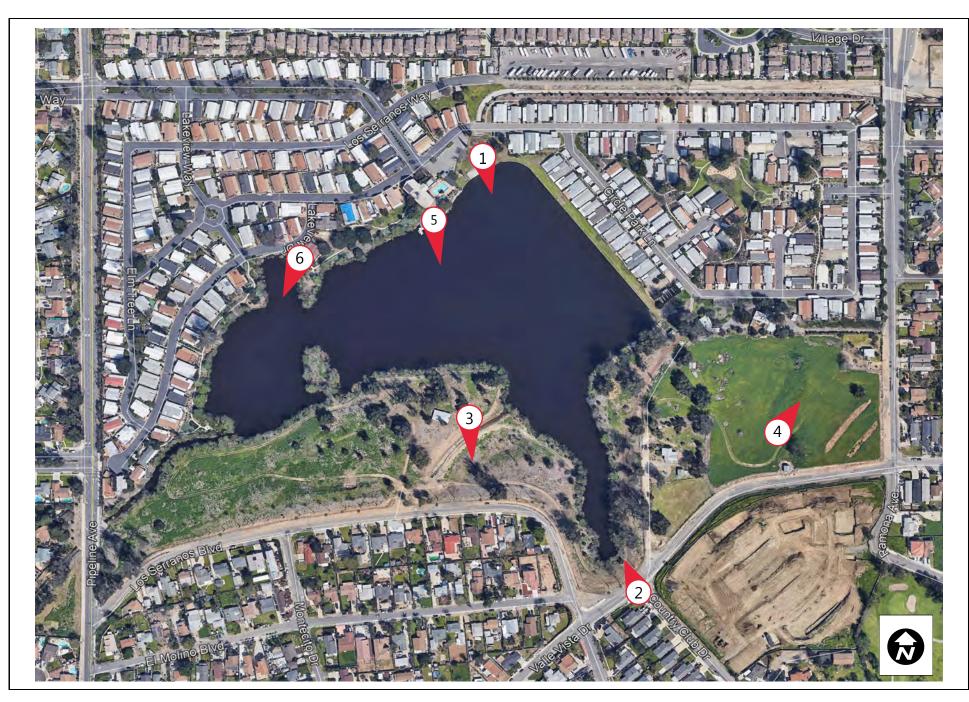






Photo 1. View of Project Site from north-central shore of Lake Los Serranos



Photo 2. Riparian Woodland Vegetation at Shoreline





Photo 3. West Side of Project Site



Photo 4. East Side of Project Site





Source: MHVillage.com

Photo 5. View of Project Site from north-central shore of Lake Los Serranos



Source: MHVillage.com

Photo 6. View of Project Site from northwest shore of Lake Los Serranos



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## 2.0 PROJECT DESCRIPTION

## 2.1 Project Background

Greening Family, LLC/Rolling Ridge Ranch proposes to build a privately gated multi-family apartment project in the City of Chino Hills to be known as Rancho Cielito. The name Rancho Cielito was selected based upon historical records dating back to the late 1880s to the early 1900s as the name registered with the State of California for the earthen dam containing the waters of Lake Los Serranos.

## 2.2 Project Characteristics

The Rancho Cielito Residential Development Project (Project) proposes to build 354 multifamily dwelling units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure. The Project Site is generally located north of Los Serranos Boulevard/Valle Vista Drive and south of the Lake Los Serranos Club in the City of Chino Hills, California. The existing site consists primarily of undeveloped land and Lake Los Serranos. The Project would create four new parcels, as shown in Table 2.2-1 and *Figure 5a*.

Table 2.2-1. Pro	oject Summary			
Existing Parcels	Existing Parcels (APN)	Existing Acres	Proposed Parcels	Proposed Acres
Parcel A [Includes Lake Los Serranos, below]	Parcel 3, Tract 4615 (APN 1025-561-04)	28.31, plus the additional 18.87- acre Lake Los Serranos identified below.	Parcel 1, TPM 20343: East Village – 166 apartments (incudes Lake Los Serranos)	13.30
Parcel B	Portion of Lot 1, Tract 3027 (APN 1025-561-05)	0.60	Parcel 2, TPM 20343: West Village – 188 apartments incudes Lake Los Serranos)	13.37
Parcel C	Portion of Lot 1, Tract 3027 (APN 1025-561-06)	0.60	Parcel 3, TPM 20343: Los Serranos Club office and residence – not part of the Project	1.05
Lake Los Serranos	Parcel 3 of 4615 (APN 1025-561-04))	18.87	Parcel 4, TPM 20343 Lake Los Serranos – would remain as is and would be maintained by as part of the Rancho Cielito development.	20.74
Project Total		48.37		48.4 <b>6</b> ¹

<sup>&</sup>lt;sup>1</sup>The increase in proposed acres (.091 acre) is the result of right-of-way to be dedicated and abandoned from several slivers between City and Project.

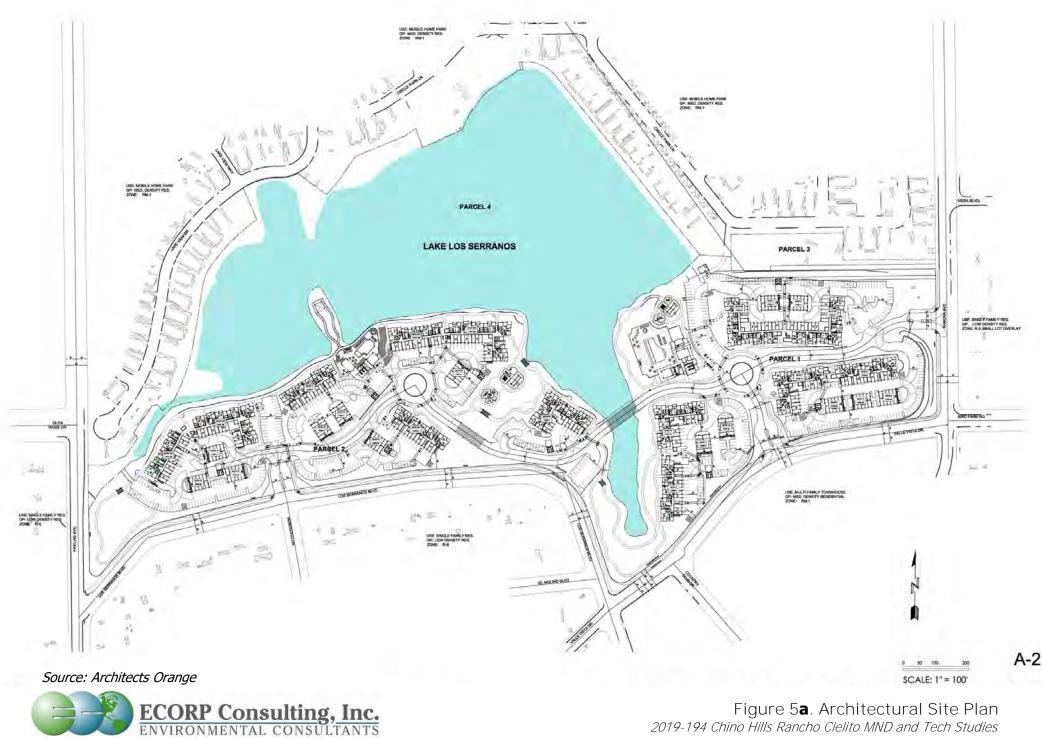
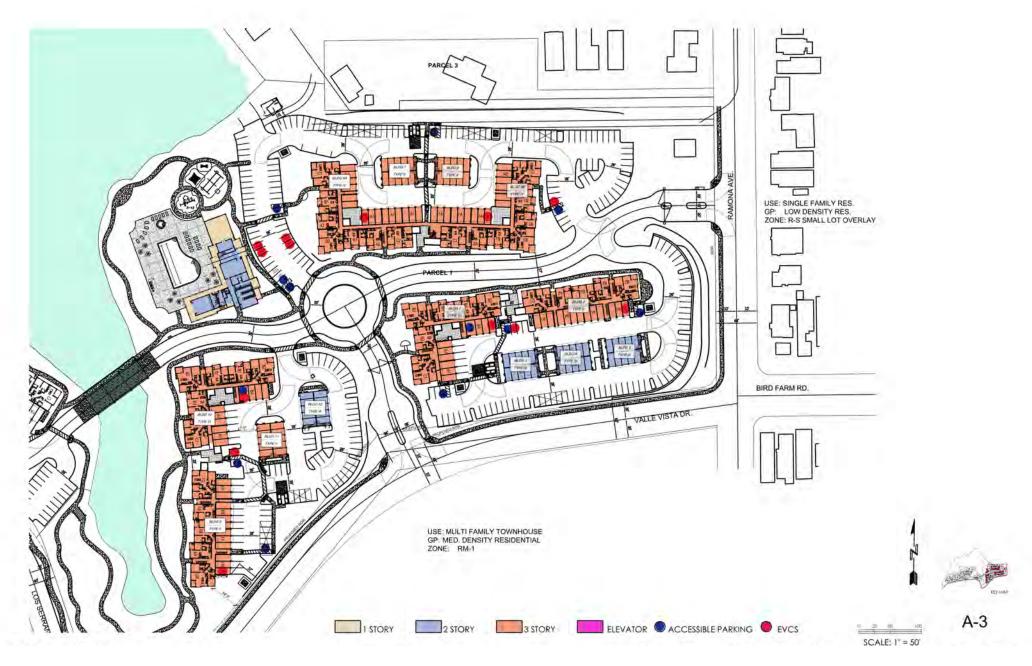
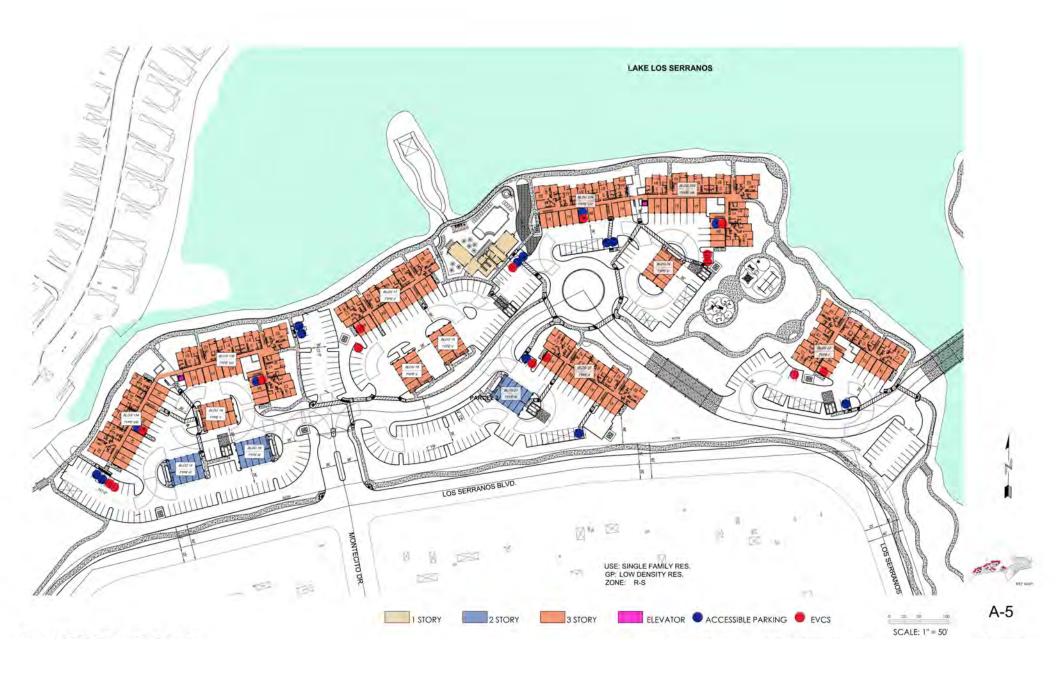


Figure 5a. Architectural Site Plan 2019-194 Chino Hills Rancho Cielito MND and Tech Studies



Source: Architects Orange





Source: Architects Orange



The village/unit mix is summarized in Table 2.2-2.

Table 2.2-2. Village/Unit Mix					
	1-Bedroom Units	2-Bedroom Units	3-Bedroom Units	Sub-Totals	
East Village	56	80	30	166	
West Village	73	89	26	188	
Totals	129	169	56	354	
%	36.4%	47.7%	15.8%	100%	

Figures 5 through 8 show proposed architectural and concept site plans, typical building elevations (three-story units), and amenities.

#### 2.2.1 Residential Amenities

The Project would offer both active and passive recreational opportunities, including playgrounds, neighborhood barbeque areas, a fitness center, picnic areas, lakeside seating/vistas, designated shore fishing areas, and trails. The East and West Villages would each have a clubhouse with a swimming pool, as well as shade trellises and recreation areas.

#### 2.2.2 Architectural Features

Rancho Cielito architecture would incorporate strong roof lines and inviting front porches and decks. Apartment layouts would incorporate one-, two-, and three-bedroom living units with a varying mix of bed/bath configurations to meet the needs of singles, doubles, and families. Each of the 354 units would include its own outdoor space, with covered patios for ground level units and covered decks for secondand third-story units.

The Proposed Project consists of 24 residential apartment buildings located within the East and West Villages, which are bifurcated by Lake Los Serranos. Seven (7) two-story buildings would have a maximum height of 30 feet 6 inches; 17 buildings would be three stories high with a maximum roof height of 41 feet 10 inches, and three elevator shafts would be 44 feet 8 inches in height.

The maximum height permitted in the RM-1 Zone is 35 feet. However, the Chino Hills Municipal Code Section 16.72.020.A.6 allows for a minor variance application to be filed for proposals to increase heights up to 30 percent from that permitted by the Development Code. Pursuant to this Section, the Applicant is requesting a minor variance 17MNV02 to increase the maximum building height from 35 feet to 41 feet 10 inches (a 19 percent increase) to accommodate the elevator shafts and provide architectural enhancement to the residential buildings (Types 1, 2, 5, 6 and 8). The applicant is also proposing 3-foothigh elevator tower elements to screen the mechanical equipment and provide architectural enhancement and to serve as markers for pedestrian entry for three buildings (Buildings 6B, 13B and 23B). The elevator towers would increase the maximum building height from 35 feet to 44 feet 8 inches (a 28 percent increase).

## 2.2.3 Landscaping and Open Space

The East Village would provide 6.60 acres of common open space and the West Village would provide 6.30 acres. The common area would provide recreational playgrounds and picnic areas with bench seating, shade trees, and parkways throughout the development. Lake Los Serranos would provide a scenic backdrop for the new multi-family complex.

Existing shoreline trees including cottonwood, willows, and sycamore will be preserved wherever feasible. New water-wise California-friendly shrubs, grasses, and groundcovers will complement the architectural theme. Two naturalized riparian areas with walking trails connected to the lakefront trail will allow residents to experience the sights and sounds of nature and wildlife. Walking trails and outdoor play area would also be incorporated into the Project.

## 2.2.4 Circulation and Parking

The Project includes a total of 907 parking spaces. East Village would provide 427 resident parking spaces and the West Village would provide 480 parking spaces. The Project would provide a mix of garage, carport, tandem, and open parking.

Access and circulation for the Project would accommodate vehicles, pedestrians and would include roadways, sidewalks, and trails. Private walking trails throughout the Project would encourage residents to relax and recreate, by providing social interaction at outdoor *living room* gathering spaces and at outdoor play areas.

#### 2.2.5 Infrastructure

Rancho Cielito would tie into the existing water lines within the adjacent streets. The existing 10-inch water line, which traverses the eastern portion of the Property, would be abandoned. There are existing 8-, 10-, 12-, and 16-inch water lines in the adjacent streets that have adequate flow and pressure to meet domestic and fire flow requirements. No upgrade of existing water mains is anticipated.

The existing 16-inch sewer line that traverses through the eastern portion of the Property would serve a majority of the site through gravity flow. This line is proposed to be relocated with additional 4-, 6-, 8-, and 12-inch gravity sewer lines provided to accommodate the Project. These sewer lines would be located underneath the proposed roads throughout the Project Site. The West and East Village sewer lines would connect to an existing 12-inch sewer line along Los Serranos Boulevard. No sewer pumping facilities would be required to serve the Project. There are also existing sewer lines in the adjacent streets that may provide connections for the Project.

## 2.2.6 Water Quality Treatment

The majority of runoff from inside and outside the Project boundaries would be conveyed to the lake in much the same manner as the existing condition. The site runoff would be conveyed primarily by surface flow within parking areas and across open spaces toward the lake. However, the northeasterly portion of the Property is an exception to this condition. Approximately 8.5 acres do not flow toward the lake in the

existing condition, but instead flow toward the northeast corner of the site. In the developed condition, approximately 5.3 acres would flow toward the northeast corner and approximately 3.2 acres would flow toward the lake. Runoff flowing to the northeast corner would be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin. The prescribed low flows would be treated in the basin, while runoff exceeding the prescribed treatment rate would be discharged into a proposed storm drain within Ramona Avenue north to the County Flood Control District Channel.

A bio-swale/bio-trench would be located upstream from the proposed trail around the southern perimeter of the lake. This would intercept the surface runoff so that urban runoff pollutants are captured and treated prior to discharge into the lake. Additionally, the offsite runoff from the meadow naturalized creek and cove naturalized creek in the southernmost portion of the site would be diverted into water quality swales to be constructed by the Project (*Figure ES-1*).

## 2.3 Project Timing

## 2.3.1 East Village (Phases 1-3)

Phase 1 of the Project would include construction of buildings 1 through 5. In addition, a 14,179-square foot two-story clubhouse with an outdoor swimming pool would be constructed to the west of building 6a and would be located adjacent to Lake Los Serranos. Phase 2 of the Project would include construction of buildings 6a, 6b, 7 and 8. Phase 3 would include construction of buildings 9, 10, 11 and 12 (*Figure 9. Phasing Plan East Village*), the cove naturalized creek and a small portion of the lake recirculation system in that creek area

Construction activities are expected to commence in 2022. East Village is anticipated to be complete in a 24-month period.

### 2.3.2 West Village (Phases 4-8)

Phase 4 of the project would include construction of buildings 23a, 23b, and 24 and the temporary emergency road connection. A new 4,242 square foot one-story clubhouse with an outdoor swimming pool would be constructed to the west of building 23a and would be located adjacent to Lake Los Serranos. Phase 5 would include construction of buildings 17, 18 and 19. Phase 6 would include construction of building 22, a playground and picnic area, a vehicular bridge that would span over the southern finger of the lake to connect the east and west villages, the meadow naturalized creek/bioswale, and the remaining portion of the recirculation system. Phase 7 would include construction of buildings 20 and 21. Phase 8 would include construction of buildings 13a, 13b, 14, 15 and 16 and a playfield at the southwest corner of the Project site (*Figure 10. Phasing Plan West Village*).

Construction of the West Village is anticipated to commence in mid-2024 upon the completion of Phase 3, to be complete in a 24-month period. Site preparation and grading of the West Village may be performed with the site preparation and grading of the East Village if it is determined to be more efficient and cost-effective. Construction activities are anticipated to occur six (6) days per week (Monday through Saturday).

# 2.4 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits would be required for implementation of the proposed Project:

Approving Agency	Permit/Approval	Timing				
	Local Agencies					
Utility providers (SCE, SoCalGas etc.)	Utility connection permits	Utility providers (SCE, SoCalGas etc.)				
Chino Valley Fire Department	Fire Department permits	Chino Valley Fire Department				
City of Chino Hills Planning Department	Site Plan Review (17SPR02) Minor Variance (17MNV02) Tentative Parcel Map (TPM 20343) Tree Removal Permit	Application and approval of SPR MNV and TTM				
City of Chino Hills Engineering Department	Improvement Plans	Approval of grading, water, sewer, road, and storm drain plans				
City of Chino Hills Engineering Department	Rough Grading Permits	Application for permit upon grading plan approval				
City of Chino Hills Building Department	Precise Grading Permits Building Permits	Application for building permits upon approval of improvement plans				
	State Agencies					
California Department of Fish and Wildlife (CDFW)	Section 1602 streambed Alteration Agreement Section 2081 Incidental Take Permit or 2080.1 Consistency Determination	Application for anticipated after City approval of SPR/TTM/MVN				
Santa Ana Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification	Application for Section 401 certification anticipated after City approval of TTM, SPR, MVN, SWPPP and General Construction Permit				
South Coast Air Quality Management District (SCAQMD)	Building demolition	Survey for asbestos prior to start of construction.				
	Federal Agencies					
United States Army Corp of Engineers (USACE)	Section 404 Nationwide Permit	Application for Section 404 Permit including the bridge that will span the Cove area between the East and West Village and for potential jurisdictional waters before grading permit				

Table 2.4-1. Required Permits and Approvals			
Approving Agency	Permit/Approval	Timing	
United States Fish and Wildlife Service (USFWS)	Section 7 Permit	Prior to the issuance of grading permits, consultation with USFWS under Section 7 of the federal ESA will need to be initiated to determine appropriate avoidance and mitigation measures for potential impacts	

## 2.5 Consultation With California Native American Tribe(s)

The following California Native American tribes traditionally and culturally affiliated with the project area have a standing request to consult with the City regarding any proposed project subject to CEQA in Chino Hills: Soboba Band of Luiseno Indians and the Gabrieleño Band of Mission Indians/Kizh Nation. Letters inviting these tribes to consult were sent on January 23, 2020. On February 4, 2020 the Gabrieleño Band of Mission Indians/Kizh tribe requested consultation pursuant to Public Resources Code section 21080.3.1. Consultation took place on April 16, 2020. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, and incorporation of mitigation measures as a conclusion of the consultation process, is provided in Section 4.18 of this Initial Study.



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# 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

# 3.1 Environmental Factors Potentially Affected

The environmental factors checked be one impact that is a "Potentially Sign	·	, , ,
Aesthetics	Hazards/Hazardous Materials	Recreation
Agriculture and Forestry Resources	Hydrology/Water Quality	Transportation
☐ Air Quality	Land Use and Planning	☐ Tribal Cultural Resources
⊠ Biological Resources	Mineral Resources	Utilities and Service Systems
☐ Cultural Resources	Noise     Noise	Wildfire
☐ Energy	□ Paleontological Resources	Mandatory Findings of Significance
Geology and Soils	Population and Housing	
Greenhouse Gas Emissions	☐ Public Services	
<ul><li>3.2 Determination</li><li>On the basis of this initial evaluation</li></ul>	:	
I find that the Project COULD NOT have DECLARATION will be prepared.	e a significant effect on the environm	ent, and a NEGATIVE
I find that although the Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.		
I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.		
I find that the Project MAY have a "pote impact on the environment but at least pursuant to applicable legal standards, earlier analysis as described on attache must analyze only the effects that rema	one effect 1) has been adequately a and 2) has been addressed by mitiga d sheets. An ENVIRONMENTAL IMPA	nalyzed in an earlier document ation measures based on the
I find that although the Project could he significant effects (a) have been analyze to applicable standards, and (b) have been DECLARATION, including revisions or ne further is required.	ed adequately in an earlier EIR or NEG een avoided or mitigated pursuant to	GATIVE DECLARATION pursuant of that earlier EIR or NEGATIVE
Joann Lombardo Community Development Director	Date	

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#### 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

#### 4.1 Aesthetics

#### 4.1.1 Environmental Setting

#### 4.1.1.1 Regional and Local Setting

Local Scenic Resources

The City of Chino Hills is located in the Chino Valley within the County of San Bernardino. It is uniquely located in the extreme southwest corner of the County where it is bordered by Los Angeles County, Orange County, and Riverside County. Views are generally characterized by the City's open spaces, canyons, hills, and ridgelines. Scenic vistas include the San Gabriel Mountains to the north, the San Bernardino Mountains to the northeast, and Chino Hills State Park to the south.

The existing General Plan addresses preservation of open space, canyons, hillsides, and ridgelines within its Land Use Element, Conservation Element and Parks, Recreation and Open Space Element. Furthermore, Chino Hills Municipal Code ("CHMC") Chapter 16.90 Tree Preservation regulates tree removal and requires tree removal permits for defined "Native" trees and "Heritage" trees. The City establishes the Scenic Resources Overlay District to provide development standards that will protect, preserve, and enhance Chino Hills' Important Visual Resources, including Exceptionally Prominent Ridgelines, Prominent Ridgelines, Prominent Knolls, and Associated Primary View Points. The Scenic Resources Overlay District is currently defined by the Municipal Code as:

- a) Areas within two hundred (200) feet on both sides of the ultimate road right-of-way of state and city-designated scenic highways, including those designated by the state as candidates for a scenic highway designation.
- b) Prominent ridgelines, view windows, and viewsheds as defined and mapped in the Municipal Code.

According to the General Plan Land Use Element, the project site is not located in the Local Scenic Resources District.

#### State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. No scenic highways within Chino Hills have been designated by the state or the City. There are no candidates for the scenic highway land use designation (Chino Hills 2015a; Caltrans 2020).

#### 4.1.1.2 Visual Character of the Existing Project Site

The existing Project site consists primarily of undeveloped land and Lake Los Serranos. In addition, various older buildings occupy the site, including 3 single family houses, 3 garages, one office, one pump house, and one shed. There is a temporary storm drain outlet and temporary concrete bottom channel located generally in the central portion of the site between Los Serranos Blvd and Lake Los Serranos that was installed by the City in 2015 to prevent flooding in the surrounding area. The site vegetation is primarily grassland with scattered trees and shrubs along the lake edge and generally surrounding the various buildings. Hickory Creek, a drainage course which drains a natural watershed, enters the property at the southwest corner at Pipeline Avenue (*Figure 11. Photo Key Map*). The Project site ranges in elevation from approximately 626 to 670 feet above mean sea level (MSL) with an average lake water surface elevation of 642.5 feet above MSL. Views of the Project site from Valle Vista Drive and Los Serranos Boulevard are provided in Figures 11 and 12. The surrounding area includes single family homes, townhomes and a Mobile Home Park; there is a mix of single story and two-story residential units.

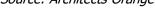
#### 4.1.1.3 Visual Character of the Proposed Project Site

The semi-rural character of the lakeside property would be replaced by a more urban visual character, with two separate club houses (one for the East Village and one for the West Village) and multi-story apartment units stepped down to the lakeshore. Existing trees and vegetation that contribute to the significant aesthetic, visual character, and environmental resource values of the Project site would be integrated into the Site Plan. Drought-tolerant native shrubs, grasses, and groundcovers would complement the architectural theme. Two natural riparian areas with private walking trails for use by residents that would be connected to a lakefront trail (*Figure 6. Conceptual Site Plan*).

Rancho Cielito proposes an agrarian style architecture, described as a simple architecture with strong roof lines, inviting front porches and decks. Agrarian style building is characterized as a clean, and more contemporary interpretation of the farmhouse style, with strong shed and gable roof forms that use a combination of concrete flat tiles and standing seam metal. Rancho Cielito apartment buildings and clubhouses would be wrapped with stucco, enhanced with materials such as horizontal siding, board and batten, varying earth toned color schemes, and accented with stone at the base (*Figure 13. View at Club House 1*).

The Project would be fully contained within a perimeter fence primarily consisting of 6' high tubular steel with stone clad pilasters. The entries would tie into the perimeter fencing with decorative thematic fencing and walls. Identification signage would be incorporated at the complex's main entry at Valle Vista Drive and at the Montecito Drive. Perimeter sidewalks within the street right-of-way are proposed along Ramona Avenue, Valle Vista Drive, and Los Serranos Blvd.













REAR



A-11

**RANCHO CIELITO** 

CHINO HILLS, CA

**ELEVATIONS BUILDING TYPE II** 

SCALE: 1/8" = 1'-0" DATE: 03-04-19 JOB NO.: 2014-360 ARCHITECTS ORANGE 144 NORTH ORANGE ST., ORANGE, CA 92866 (714) 639-9860

GREENING FAMILY LLC. &

JACK & JUNE GREENING LIVING TRUST / ROLLING RIDGE RANCH
15111 PIPELINE AVENUE, CHINO HILLS, CA 91709 PH: (909) 597-1791





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RANCHO CIELITO

CHINO HILLS, CA

ELEVATIONS BUILDIN TY E I

SCALE: 1/8" = 1'-0" DATE: 03-04-19 JOB NO.: 2014-360

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**ARCHITECTS ORANGE** 144 NORTH ORANGE ST., ORANGE, CA 92866 (714) 639-9860



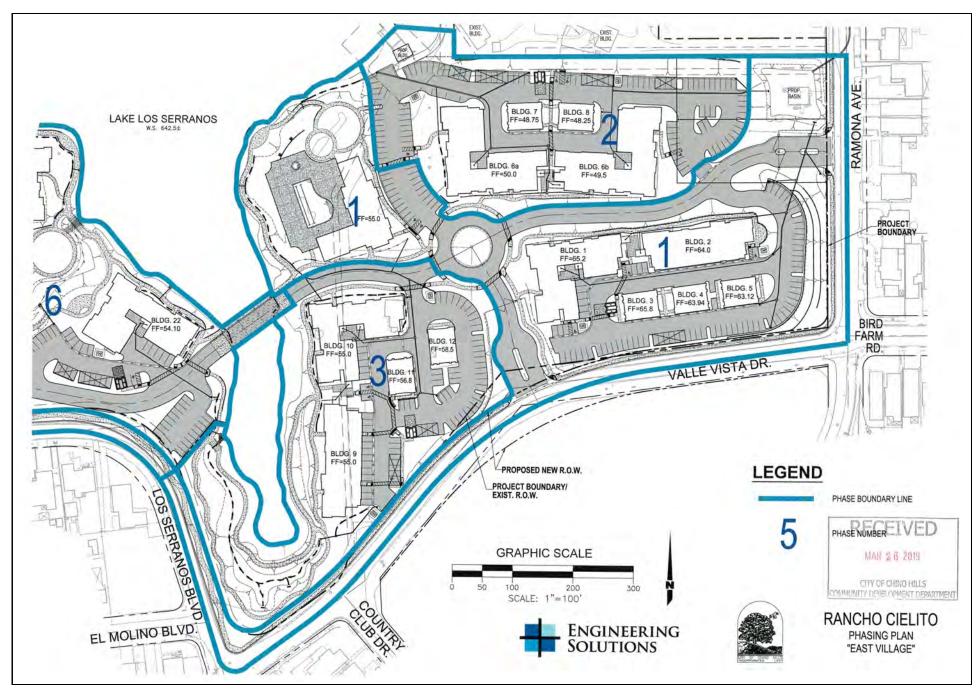
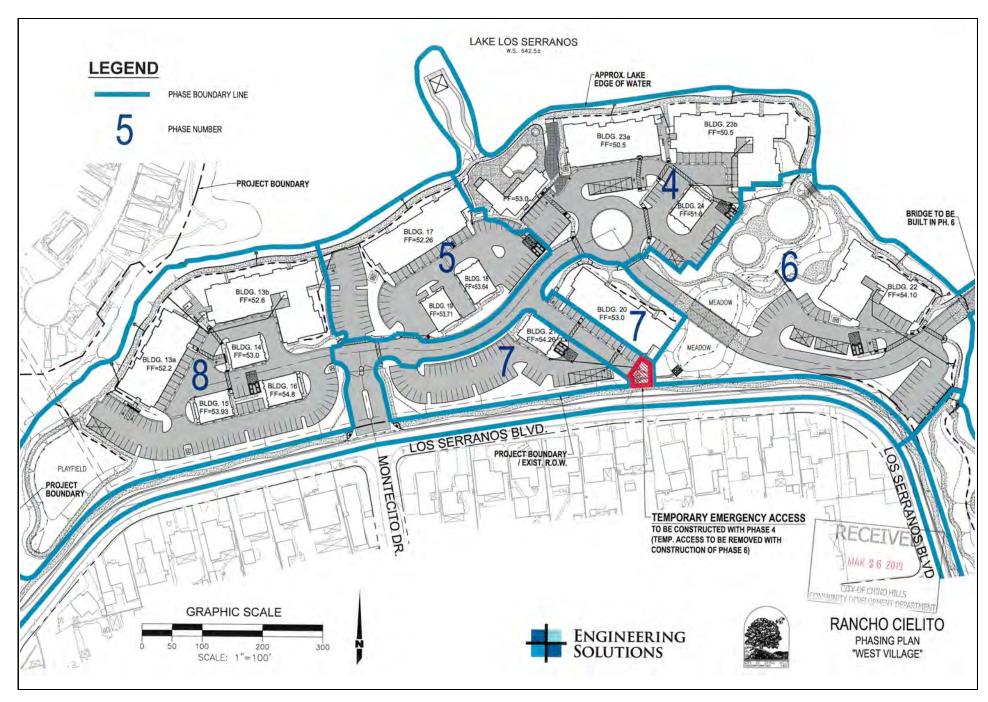




Figure 9. East Village Phasing Plan 2019-194 Chino Hills Rancho Cielito MND and Tech Studies





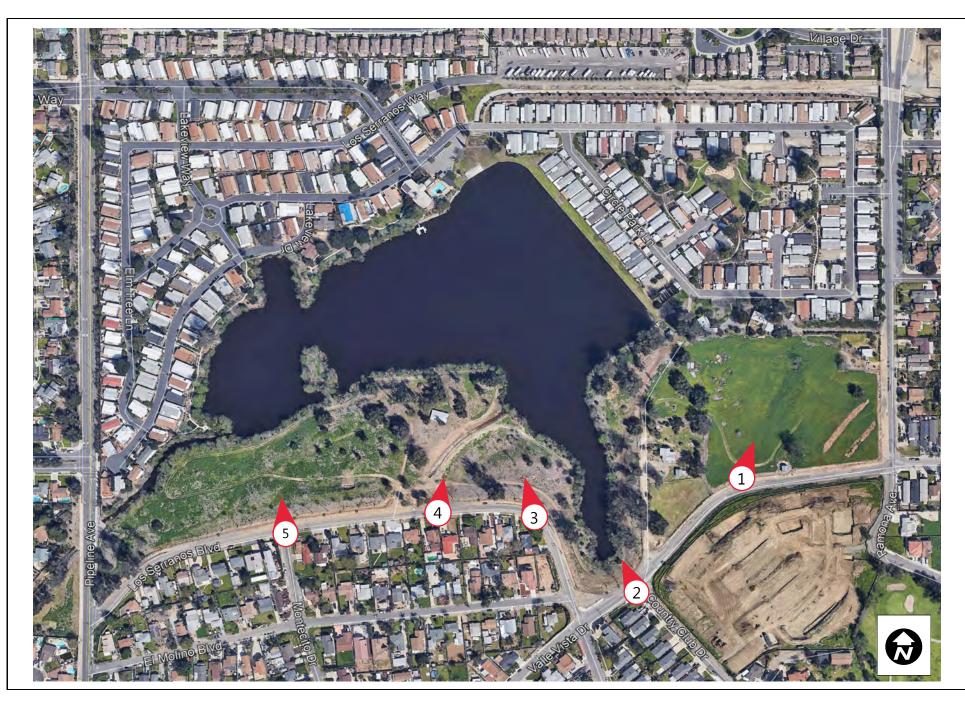






Photo 1. Northeast View from Valle Vista Drive

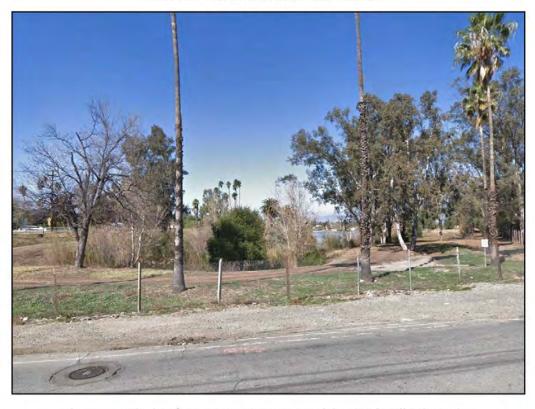


Photo 2. North View from Intersection Country Club Drive & Valle Vista Drive





Photo 3. North View across Lake from Los Serranos Blvd. north of Valle Vista Drive

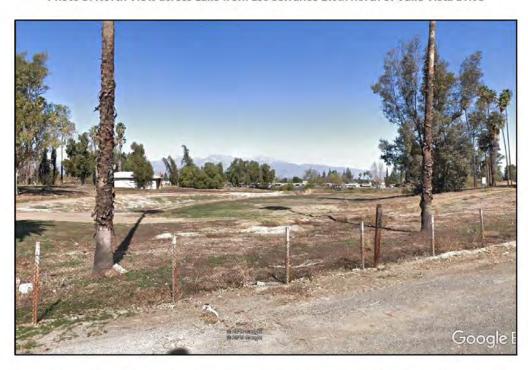


Photo 4. North View from Los Serranos Blvd. along Unnamed Drainage Channel





Photo 5. North View from Los Serranos Blvd. & Montecito Drive Intersection



VIEW AT CLUB HOUSE 1



#### 4.1.2 Aesthetics (I) Environmental Checklist and Discussion

	ept as provided in Public Resources Code Section 199, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$		

Lake Los Serranos represents a scenic amenity for adjacent private residences at Lake Los Serranos Club within the confines of the immediate lake view shed. Although portions of the Project may be visible from the surrounding properties and public right-of way, the site is not located within a protected viewshed nor a local scenic resource overlay district. Property surrounding the site is developed with single-family homes, multi-family uses including townhomes and a Lake Los Serranos Club (mobile home park). The Project would convert a moderate sloping site along Valle Vista Drive and Los Serranos Boulevard to a multi-family apartment complex with two clubhouses, pedestrian trails, and associated landscaping.

Under Section 16.080.030 of the CHMC, scenic resources include Exceptionally Prominent ridgelines, Prominent Ridgelines, and knolls located in the southern, southwestern, and western portions of the City. These scenic resources are not visible from the Project site; major transportation corridors/thoroughfares provide the only access to significant views. Near the Project site, unobstructed views of the San Gabriel Mountains are primarily located along Ramona Boulevard, adjacent to the easterly edge of the site. However, this is not a protected scenic vista under the CHMC. Project impacts would be less than significant.

	ept as provided in Public Resources Code Section 99, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				

The 48.37-acres within the Project site features numerous trees and tree species that contribute to scenic quality. A comprehensive tree survey (Johnny's Tree Service 2019, Appendix B) identified and mapped over 500 trees with a four-inch in diameter or greater DBH on the site. Under the proposed development, 308 (approximately 58%) of the trees on the site are recommended for preservation (Appendix B).

CHMC Chapter 16.90 Tree Preservation regulates tree removal and requires tree removal permits for defined "Native" trees and "Heritage" trees. Native trees include several listed tree species with a four-inch or greater DBH that are located on undeveloped property or developed property within the Fire Hazard Overlay. As the Project is not located within or near the Fire Hazard Overlay (General Plan 2015a, Figures 5-10), native trees on the site do not fall under the tree removal permit requirements.

Heritage trees are any species of single- or multi-trunk tree having a cumulative diameter of forty-four (44) inches or greater at DBH, located on undeveloped property, and of significant age, health and quality to be deemed valuable to the aesthetics of the community by a certified arborist. Excluded from the heritage tree designation are certain types of invasive trees and trees susceptible to breaking or falling (e.g. Eucalyptus Blue Gum).

The 2019 tree survey identified 532 trees and 26 of these trees were considered protected by the City of Chino Hills Tree Preservation Ordinance Chapter 16.90. Development of the Rancho Cielito project would involve removal of four (4) protected trees and a total of thirty-three (33) 48" box trees would be required as mitigation as shown in Table 4.1-1 below. If a total five trees (four trees to be removed and one to be preserved) are removed from the site, a total of forty-two (42) 48" box trees will be required as shown in Table 4.1-1 below.

According to the Arborist Peer Review Report prepared by Greg Zoll on February 26, 2020, an additional tree (#399) was determined to have less than ideal structure and could be considered for removal and nine (9) 48" box trees would be required as mitigation (see Appendix B).

According to the Arborist Peer Review Report, the mitigation trees should be selected from one of the three tree varieties protected by the tree protection ordinance, these trees include California Sycamore, Coast Live Oak, California Black Walnut. Mitigation trees are required to be monitored for a period of five (5) years following installation per City of Chino Hills guidelines. The Tree Protection, Replacement, and Mitigation Plan shall be submitted to the City of Chino Hills showing the location of all trees removed, trees protected in place, including the limits of tree protection zones, and the proposed location of all required mitigation trees. A final tree planting plan can be submitted as part of the Tree Protection, Replacement, and Mitigation Plan if trees for mitigation planting and monitoring are specifically identified.

Mapped Tree Survey No.	Botanical Name	Common Name	Form	DBH	Total No. of Trees to Preserve/ Remove	Required Mitigation
73	Schinus molle	California Pepper	Multi	80	One (1) Remove	Twelve (12) 48" Box Trees
80	Schinus molle	California Pepper		52	One (1) Remove	Eight (8) 48" Box Trees
141	Schinus molle	California Pepper		59	One (1) Remove	Nine (9) 48" Box Trees
198	Platanus racemosa	Western Sycamore		32	One (1) Removed	Four (4) 48" Box Trees
					Subtotal	Thirty-Three (33) 48" Box Trees
399	Salix lasiolepis	Arroyo Willow	Multi	59	One(1) Preserve	Nine (9) 48" Box Trees (if removed)
					Total	Forty-Two (42) 48" Box Trees

The Project Planting Plan identifies preservation of existing trees as described above, and extensive planting of new trees, shrubs, succulents, grasses, vines and other ground covers to provide a high-quality urban landscape with scenic value.

There are no rock outcroppings within the Project site. Further, the Project is not located within or near a state scenic highway. However, the loss of removed trees and potential loss of protected trees represents a significant scenic impact. Implementation of the tree replacement plan (Appendix B), and protective measures in Mitigation Measure **AES-1** (see section 4.1.3) will reduce impacts to less than significant levels.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				

The Project is in an urbanized area and the site is currently zoned for Medium Density Residential use and designated in the General Plan for Medium Density Residential. The Project would alter the open space character of property itself by replacing it with an urban development featuring new agrarian-style apartment buildings ranging from one- to three stories in height. The surrounding area includes single family and multifamily uses including townhomes.

Lake Los Serranos is a man-made private lake that can be viewed from immediately surrounding private vantage points that include lake frontage residences along the west and north shore. Although the Project would alter the existing visual character and quality of the site, it would not substantially degrade the visual character or quality of *public* views of the site or its surroundings. The Project, as proposed, would provide architectural interest and significant landscaping to enhance the appearance of the development.

Under the CHMC, scenic resources include Exceptionally Prominent ridgelines, Prominent Ridgelines, and knolls located in the southern, southwestern, and western portions of the City. These scenic resources are not visible from the Project site; major transportation corridors/thoroughfares provide the only access to significant views. In part because of the relatively flat terrain in the vicinity of the Project site, as well as the screening effect of tree groves and lakeshore vegetation on the Project site itself, offsite public views through the property to the lake are limited. Public views of the site from Valle Vista Drive and Los Serranos Boulevard (Figures 11 and 12) are described below.

**Photo Location 1.** This is a northeast view across the proposed East Village site (Parcel 1) from Valle Vista Drive near its approach to Ramona Avenue. Distant views of the San Gabriel Mountains are available from this vantage point. The Project proposes two- and three-story building units within the proposed East Village at this location (Buildings 1-5).

**Photo Location 2.** A north view of the cove inlet near the Valle Vista Drive and Country Club Drive intersection. Views of the lake are obscured by the cove riparian vegetation. The Project proposes a cove naturalized creek/bioswale at this location.

**Photo Location 3**. View of the lake and mountains from Los Serranos Boulevard north of Valle Vista Drive. A proposed three-story building unit (Building 22) would be visible at this location.

**Photo Location 4.** Open view of the unnamed drainage channel extending north of Los Serranos Boulevard to the lake. The Project proposes a drainage corridor enhancement with meadow/naturalized creek treatment.

**Photo Location 5**. View from Los Serranos Boulevard and Montecito Drive intersection. Views through the site are obstructed by the berm/stockpile along the Los Serrano Boulevard frontage. and proposed West Village frontage.

The Project is proposed within an urbanized setting and would not substantially degrade the existing visual character of the site and surrounding area. Impacts would be less than significant.

	ept as provided in Public Resources Code Section 99, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				

The Project would introduce new sources of light and glare to the site. The Project would include on-site lighting for residential units, parking lots, pedestrian pathways, landscaping, and signage. The amount of lighting proposed would be appropriate for a multi-family residential development, consistent with safety needs, and would be similar to ambient lighting produced by the surrounding residential neighborhoods. As a multifamily residential project, Project lighting is not expected to have a significant impact on the night sky, as it would only incrementally add to the existing background light levels as a result of surrounding residential development. The proposed Project would comply with City regulations and design standards, including the use of shielding around light fixtures at the edge of the project site to minimize spillover effects on surrounding properties. Due to the developed nature of surrounding properties and the shielded design of proposed light fixtures on the site, impacts from lighting would be less than significant.

The reflection of sunlight is the primary potential producer of glare from glass and metallic surfaces. New sources of glare would include headlights from cars entering and leaving the site at night, as well as

windows on cars and buildings, which could reflect sunlight during certain times of the day. Architectural glass with low glare characteristics, as well as shrubs and ornamental trees around the perimeter of the complex, would minimize light and glare impacts on surrounding properties. Adherence to CHMC Chapter 16.09.070 Lighting Guidelines requirements would reduce light and glare impacts to a less than significant level.

### 4.1.3 Mitigation Measures

- **AES-1:** Tree Protection and Replacement: Tree removals and replacement shall conform to City Tree preservation regulations, the project Tree Identification Survey (Johnny's Tree Service 2019, Appendix B), recommendations of the tree report peer review (Zoll 2020), and the following tree protection recommendations:
  - Prior to grading, material deliveries and/or construction, steps shall be taken to protect and minimize any damage to the existing trees.
  - Trees marked for preservation will be temporarily fenced at the drip line to protect root areas and low limbs from heavy equipment and traffic.
  - Any pruning of limbs for safety and/or clearance issues will conform to I.S.A. standards; trees will be kept in their natural state as much as possible.
  - Where there is root pruning or damage to any roots, feeding and additional water shall be added.

According to the Arborist Peer Review Report (Zoll 2020), the mitigation trees should be selected from one of the three tree varieties protected by the tree protection ordinance, these trees include California Sycamore, Coast Live Oak, California Black Walnut. Mitigation trees are required to be monitored for a period of five (5) years following installation per City of Chino Hills guidelines. The Tree Protection, Replacement, and Mitigation Plan shall be submitted to the City of Chino Hills showing the location of all trees removed, trees protected in place, including the limits of tree protection zones, and the proposed location of all required mitigation trees. A final tree planting plan can be submitted as part of the Tree Protection, Replacement, and Mitigation Plan if trees for mitigation planting and monitoring are specifically identified.

# 4.2 Agriculture and Forestry Resources

#### 4.2.1 Environmental Setting

According to the General Plan, agriculture was a significant land use in the City in the past. Uses have ranged from very intensive dairies and cattle feed lots on flatter land, to row crops and horse raising, to less intensive "dry farming" and cattle grazing on the rolling hills. Today, only approximately 1% of the City area is used for agriculture. The remaining sizable agricultural activities within the City are on undeveloped lands and on Boys Republic. This land consists of orchards, cultivated cropland, abandoned or fallow fields, pastureland, and accompanying residences. Most of the large ranches are no longer

owned by farming interests and are expected to be developed over the next several years (Chino Hills 2015a).

According to the California Department of Conservation (CDC) San Bernardino County Important Farmland 2016 Map, the Project site is located on an area designated as Other Land (CDC 2017). The site is not located on or near Prime Farmland, nor is it under a Williamson Act Contract (CDC 2017).

# 4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				$\boxtimes$

According to the CDC 2016 San Bernardino County Important Farmland Map, the Project site is designated as Other Land (CDC 2017). As such, the Project would not convert farmland to non-agricultural use. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for a or a Williamson Act contract?	gricultural use,			

As discussed above, no land on or near the Project Site is currently under agricultural production, nor are any parcels zoned for agricultural uses. The site is not designated for agricultural use nor is it listed under a Williamson Act contract (CDC 2017). No impact would occur.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				

There are no lands within the City that qualify as forestland or timberland. The Project site is not zoned for forest land, timberland, or Timberland Production. No impact would occur related to the loss or conversion of forest land to non-forest use.

Wou	ıld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				

As discussed above, the Project site does not contain forest land or timberland, thus it would not convert forest land to non-forest use. No impact would occur.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				

The Project site and the surrounding properties are not currently used for agriculture. As discussed above, the proposed Project would not result in the conversion of forest land to non-forest use. No impact would occur.

#### 4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

### 4.3 Air Quality

#### 4.3.1 Environmental Setting

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. Chino Hills lies in the South Coast Air Basin (SoCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Both the U.S. Environmental Protection Agency (USEPA) and the CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants

representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O<sub>3</sub>) (O<sub>3</sub> precursor emissions include nitrogen oxide (NOx) and reactive organic gases (ROG)), carbon monoxide (CO), particulate matter (PM), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The Los Angeles County portion of the SoCAB region is designated as a nonattainment area for the federal O<sub>3</sub>, fine particulate matter (PM<sub>2.5</sub>), and lead standards and is also a nonattainment area for the state standards for O<sub>3</sub>, coarse particulate matter (PM<sub>10</sub>), and PM<sub>2.5</sub>. (It is noted that lead is not emitted from standard land use developments such as that proposed by the Project.)

The local air quality agency affecting the SoCAB is the South Coast Air Quality Management District (SCAQMD), which is charged with the responsibility of implementing air quality programs and ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the SoCAB. In an attempt to achieve national and state ambient air quality standards and maintain air quality, the air district has completed several air quality attainment plans and reports, which together constitute the State Implementation Plan (SIP) for the portion of the SoCAB encompassing the Project.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the proposed Project:

- Rule 201 & Rule 203 (Permit to Construct & Permit to Operate) Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- Rule 402 (Nuisance) This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- Rule 403 (Fugitive Dust) This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. This rule is intended to reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM<sub>10</sub> suppression techniques are summarized below.
  - a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.

- b) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
- c) All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
- e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.
- Rule 1113 (Architectural Coatings) This rule requires manufacturers, distributors, and endusers of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.
- Rule 1401 (New Source Review of Toxic Air Contaminants) This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

# 4.3.2 Air Quality (III) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?				

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

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP is the SIP for the SoCAB. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, the Southern California Association of Governments (SCAG), and the USEPA. The plan's

pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2020-2045 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's AQMP, the SIP for the SoCAB.

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

#### 4.3.2.1 Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As shown in Tables 4.3-1, 4.3-3, and 4.3-4 the proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. It is acknowledged however that Project construction could potentially overlap with tenant occupancy and operations of portions of the proposed residential development. In other words, after portions of the Project are fully constructed and occupied, construction emissions could continue to be emitted while the remainder of the site is constructed, and at the same time as partial operation of the Project. For instance, in the event that 50 percent of the Project (East Village) is constructed and operating while the remainder of construction (West Village) is still ongoing, daily emissions could be generated at rates of 15.4 pounds per day ROG, 87.28 pounds per day of NO<sub>x</sub>, 239.67 pounds per day of CO, 0.6 pounds per day of SO<sub>x</sub>, 22.23 pounds per day of PM<sub>10</sub> and 7.82 pounds per day of PM<sub>2.5</sub>. These values are calculated by adding the daily 2023 construction emissions shown in Table 4.3-1 (the approximate mid-point of total construction) and half of the predicted operational emissions shown in Table 4.3-4 below (to account for 50 percent operations of the Project). Nonetheless, as shown in Tables 4.3-1 and 4.3-4 below, the SCAQMD promulgates thresholds for construction and operations separately. Therefore, even with construction overlap, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As shown in Tables 4.3-1 and 4.3-4 the proposed Project would be below the SCAQMD regional thresholds for construction and operations. Since the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

#### 4.3.2.2 Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Chino Hills. Specifically, SCAG's *Growth Management* Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's 2020-2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. This is referenced by SCAG in order to assist forecasting future growth in Chino Hills.

The proposed Project site has a General Plan land use designation of Medium Density Residential (RM-1) and is also zoned RM-1. The RM-1 zoning district permits development of single-family attached townhouses, condominiums, and apartments. Residential developments in this land use designation will be designed to create a high-quality living environment, with pleasing architecture and landscaping. The Project is proposing 354 units that will be a mixture of one, two, and three bedrooms in apartment layout. SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore, would not exceed the population or job growth projections used by the to develop the AQMP. Thus, the Project as proposed is consistent with the Chino Hills General Plan and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the 2020-2045 RTP/SCS and RCPG.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge, from any source whatsoever, in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible PM are prohibited from crossing any property line. SCAQMD Rule 403 is intended to

reduce PM<sub>10</sub> emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD Rule 1113 requires manufacturers, distributors, and endusers of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore, would not exceed the population or job growth projections used by the to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP.

The Project would be consistent with the emission-reduction goals of the 2016 AQMP. No impact would occur.

Woı	uld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				

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

A portion of the proposed Project's air quality impacts are attributable to construction activities. The majority of the long-term air quality impacts will be due to the operation of motor vehicles traveling to and from the site. For purposes of impact assessment, air quality impacts have been separated into construction impacts and operational impacts. Construction-generated emissions associated the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction

requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

#### 4.3.2.3 Project Construction-Generated Criteria Air Quality Emissions

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which, as previously described, requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A of Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the proposed Project are summarized in Table 4.3-1. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

**Table 4.3-1. Construction-Related Emissions (Regional Significance Analysis)** 

Construction Vers	Pollutant (pounds per day)						
Construction Year	ROG	NO <sub>x</sub>	со	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
Construction 2022	2.98	48.60	71.51	0.27	8.58	4.11	
Construction 2023	8.80	83.39	198.05	0.53	13.32	5.41	
Construction 2024	7.99	42.17	153.24	0.29	10.27	4.60	
Construction 2025	7.19	31.73	137.16	0.23	88.97	4.19	
Construction 2026	7.19	23.94	152.58	0.25	2.02	1.03	
SCAQMD Regional Significance Threshold	75	100	550	150	150	55	
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No	

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs. Notes:

- 1. Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.
  Bolded text equals the highest maximum daily emissions. Emissions estimates for Project site construction account for the cut of 230,000 cubic yards of soil, fill of 171,230 cubic yards of soil and demolition of 7 tons of building material. Building construction, paving, and painting are assumed to occur simultaneously. Construction emissions taken from the season (summer or winter) with the highest output.
- 2. The total raw cut is 230,000 C.Y., the raw fill is 171,230 C.Y., and the total of all earth moved is 391,230 C.Y. The total raw cut (230,000 C.Y.) represents the amount of earth removed to reduce the high areas down to design grade. The total raw fill (71,230 C.Y.) represents the amount of earth placed into the low spots to bring them up to design grade. The difference represents 58,770 C.Y. of excess spoil material. The overex, keyway, and trench estimate is 220,000 C.Y and this number represents the amount of additional earth moved below design grade to achieve each purpose and is replaced in balance. The subsidence, shrinkage, and tree root cavity estimate is 58,770 C.Y. These numbers represent reductions to the excess Cut and application of the spoil. All grading will occur on site and there will be no export or import.
- 3. Although SCAQMD promulgates separate thresholds for construction and operational emissions, Project construction could potentially overlap with tenant occupancy and operations of the proposed residential development.

As shown in Table 4.3-1, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

#### Localized Construction Significance Analysis

The nearest sensitive receptors to the Project site are residences directly adjacent to the Project site boundary with the closest one located approximately 40 feet to the northeast on Circle Park Lane. In order

to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the Southwest San Bernardino Valley, SRA 33. LSTs apply to CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The proposed Project would disturb ±29.50 acres during construction. As previously described, the SCAQMD has produced lookup tables for projects that disturb less than or equal to five acres daily. The SCAQMD has also issued guidance on applying the CalEEMod emissions software to LSTs for projects greater than five acres. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, Table 2-7 is used to determine the maximum daily disturbed acreage for comparison to LSTs. All construction years have the same equipment, as such, only phases are show in Table 4.3-2, below.

Construction Phase	Equipment Type	Acres Graded/Disturb ed per 8-Hour Day	Equipment Quantity	Operating Hours per Day	Acres Graded per Day	
	Concrete/ Industrial Saw	0.0	1	8	0.0	
	Crawler Tractors	0.5	1	8	0.5	
	Excavators	0.0	1	8	0.0	
Cita Duananatian	Graders	0.5	1	8	0.5	
Site Preparation	Rubber Tired Dozers	0.5	2	8	1.0	
	Rubber Tired Loaders	0.0	1	8	0.0	
	Tractors/ Loaders/ Backhoes	0.5	1	8	0.5	
	Site Preparation Total: 2.5					
	Crawler Tractors	0.5	2	8	1.0	
	Excavators	0.0	2	8	0.0	
	Graders	0.5	4	8	2.0	
Site Grading	Rollers	0.0	2	8	0.0	
	Rubber Tired Dozers	0.5	2	8	1.0	
	Scrapers	1	3	8	3.0	
	Tractors/ Loaders/ Backhoes	0.5	2	8	1.0	
			-	rading Total:	8	
		Maximum	Total Acres Gra	ded per Day:	8	

As shown in Table 4.3-2, Project implementation could potentially disturb up to 2.5 acres daily during the site preparation phase of construction and eight acres daily during the grading phase of construction. As described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. While the proposed Project site could potentially disturb eight acres on a single day, the LST threshold

value for a five-acre site was employed from the LST lookup tables. This is conservative since the analysis will only account for the dispersion of air pollutants over five acres before reaching sensitive receptors, as opposed to accounting for the dispersion of air pollutants over a greater 29.50-acre area.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The nearest sensitive receptors to the Project site are the residences directly adjacent to the northern boundary. Notwithstanding, the SCAQMD Methodology explicitly states: *It is possible that a project may have receptors closer than 25 meters (82 feet).*). *Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters (82 feet)*. The nearest sensitive receptors to the Project site are directly adjacent (approximately 40 feet [12 meters]); therefore, LSTs for receptors located at 25 meters were utilized in this analysis. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. Table 4.3-3 presents the results of localized emissions from the most polluting activity for each year of construction.

A -st. da.	Maximum Onsite Pollutant (pounds per day)					
Activity	NO <sub>X</sub>	со	PM <sub>10</sub>	PM <sub>2.5</sub>		
Construction 2022 Grading Activity	8.23	62.97	5.92	3.28		
Construction 2023 Combined Site Preparation, Building Construction, Paving, and Painting Activity	25.78	174.35	6.33	3.81		
Construction 2024 Combined Building Construction, Paving, and Painting Activity	23.45	149.45	0.70	0.63		
Construction 2025 Site Preparation Activity	22.64	5.56	3.12	0.88		
Construction 2026 Combined Building Construction, Paving, and Painting Activity	23.07	148.95	0.65	0.64		
SCAQMD Localized Significance Threshold	270	2,193	16	9		
Exceed SCAQMD Localized Threshold?	No	No	No	No		

Source: CalEEMod version 2016.3.2. Refer to Appendix A, Attachment A, pp. 14, 58, 60, 62, 64, 118, 120, 122, 170, 216, 218, 220 for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emissions were taken from the year with the highest output. Construction emissions were modeled to account for construction beginning in the year 2022. Actual construction of the Project site would be dictated by several regulatory and market forces. As such, if construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover.

Table 4.3-3 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to

SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. Therefore, significant impacts would not occur concerning LSTs during construction activities.

#### 4.3.2.4 Project Operations Criteria Air Quality Emissions

Regional Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM<sub>10</sub>, PM<sub>2.5</sub>, CO, and SO<sub>2</sub> as well as ozone precursors such as ROGs and NO<sub>x</sub>. Project-generated increases in emissions would be predominantly associated with motor vehicle use. As previously described, operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates from Linscott Law & Greenspan Engineers (2021). (Reference Appendix I.)

Long-term operational emissions attributable to the Project are identified in Table 4.3-4 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Fraissian Course	Pollutant (pounds per day)					
Emission Source	ROG	NO <sub>X</sub>	СО	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
	Sumi	ner Emissio	ns			
Area	8.90	0.33	29.19	0.00	0.16	0.16
Energy	0.17	1.48	0.69	0.00	0.11	0.11
Mobile	4.13	5.99	53.37	0.16	17.85	4.83
Total:	13.20	7.8	83.25	0.16	18.12	5.10
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No
	Win	ter Emission	าร			
Area	8.90	0.33	29.19	0.00	0.16	0.16
Energy	0.17	1.48	0.69	0.00	0.11	0.11
Mobile	3.63	6.29	45.43	0.14	17.85	4.83
Total:	12.70	8.10	75.31	0.14	18.12	5.10
SCAQMD Regional Significance Threshold	55	55	550	150	150	55
Exceed SCAQMD Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Attachment A for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate identified by Linscott Law & Greenspan Engineers. (2020). Specifically, Linscott Law & Greenspan Engineers estimates the Project generation of 2,591 average vehicle trips daily. The traffic fleet mix defaults contained in the CalEEMod model are based on the average fleet mix of San Bernardino County. In order to more accurately reflect the fleet mix of automobiles visiting the proposed Project during the operation the use of heavy heavy-duty and medium heavy-duty trucks was omitted.

As shown in Table 4.3-4, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

The southwestern San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal PM<sub>10</sub> standards and is also a nonattainment area for the state standards for O<sub>3</sub> and PM<sub>10</sub>. O<sub>3</sub> is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 4.3-4, the proposed Project would result in increased emissions of the O<sub>3</sub> precursor pollutants ROG and NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2016 AQMP, the current approved AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

#### Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources (e.g., smokestacks) or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed Project does not include such uses. Therefore, in the case of the proposed Project, the operational phase LST protocol does not need to be applied. Significant impacts would not occur concerning LSTs during operational activities.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$	

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

receptors to the Project site are residences directly adjacent to the northeastern site boundary, approximately 40 feet away.

#### Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM<sub>10</sub> from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the Project area is designated as a nonattainment area for federal and state O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> standards. Thus, existing O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-1 and Table 4.3-3, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions.

The health effects associated with  $O_3$  are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in  $O_3$  precursor emissions (ROG or NOx) in excess of the SCAQMD thresholds, the Project is not anticipated to substantially contribute to regional  $O_3$  concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust PM<sub>10</sub>, considered a surrogate for DPM and includes emissions of exhaust PM<sub>2.5</sub>, would be a maximum 0.28 pounds per day during Year 1 construction activities, 0.85 pounds per day during Year 2 construction activities, 0.70 pounds per day during Year 3 construction activities, 0.33 pounds per day during Year 4 construction activities, and 0.65 pounds per day during Year 5 construction activities (see Appendix A, Attachment A, pp. 14, 58, 60, 62, 64, 118, 120, 122, 170, 216, 218, 220). PM<sub>10</sub>PM<sub>10</sub> exhaust is considered a surrogate for DPM because all diesel exhaust is considered to be DPM. As with O<sub>3</sub> and NOx, the Project would not generate emissions of PM<sub>10</sub> or PM<sub>2.5</sub> that would exceed the SCAQMD's thresholds. Accordingly, the Project's PM<sub>10</sub> and PM<sub>2.5</sub> emissions are not expected to cause any increase in related regional health effects for these pollutants.

Additionally, SCAQMD's Risk Assessment Procedures for Rules 1401, 1401.1, and 212 (SCAQMD 2017) includes screening level thresholds for assessing TAC emissions, such as DPM and certain ROGs, or source

specific units from a piece of equipment. While these screening level thresholds are primarily intended to evaluate stationary point sources of emissions, they can be useful in evaluating construction pollutants for comparison purposes. The screening levels are TAC emission thresholds which are not expected to produce a maximum increase in cancer risk greater than one in one million nor a hazard index greater than one. According to these screening level thresholds, internal combustion engines operating less than 12 hours daily in the Project region would not produce a maximum increase in cancer risk greater than one in one million nor a hazard index greater than one in the case that less than 21.41 tons of TACs are emitted annually (SCAQMD 2017, Permit Application Package N, Table 10.1A, pp. 70). A review of Appendix A, Attachment BB, shows that Project construction would generate a maximum of 0.85 ton of ROG annually and 0.08 ton of DPM (PM<sub>10</sub>PM<sub>10</sub> exhaust) annually (see Appendix A, Attachment B, pp. 32). Additionally, it is noted that only certain ROGs possess cancer, chronic, and acute health risks. Project construction would not generate 21.41 tons of TACs annually and therefore would not exceed SCAQMD's Risk Assessment Procedures for Rules 1401, 1401.1, and 212 (SCAQMD 2017, Permit Application Package N, Table 10.1A, pp. 70) screening level thresholds for assessing TAC emissions. (The SCAQMD's Risk Assessment Procedures for Rules 1401, 1401.1, and 212 (SCAQMD 2017) also contains a multiple pollutant screening level procedure to assist the evaluation of multiple TAC pollutant; however, the identified screening emission levels do not account for organic compounds (i.e., ROG) and thus were not employed in this analysis.)

Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. According to the SCAQMD (2008), LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of pollutants in each SoCAB source receptor area. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: Further-Reduced Health Risk. As shown in Table 4.3-3, the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NOx, CO, PM10, and PM2.5 demonstrates that the Project would likely not adversely impact nearby sensitive receptors. Impacts would be less than significant.

#### **Operational Air Contaminants**

Operation of the proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations.

#### Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service (LOS') during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Project vicinity have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The analysis prepared for CO attainment in the SCAQMD's 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County can be used to demonstrate the potential for CO exceedances. The SCAQMD CO hot spot analysis was conducted for four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the LOS in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be LOS E at peak morning traffic and LOS F at peak afternoon traffic (LOS E and F are the two least efficient traffic LOS ratings). Even with the inefficient LOS and volume of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

According to the Traffic Study prepared for the Project (Linscott Law & Greenspan Engineers 2020), the Project is anticipated to generate 2,591 daily trips on average. Because the proposed Project would not cause traffic volumes at any intersection to exceed 100,000 vehicles per day, there is no likelihood of the Project traffic exceeding CO values. Furthermore, none of the Project vicinity intersections are currently experiencing traffic levels near 100,000 vehicles per day under existing conditions. According to the Project Traffic Study (Linscott Law & Greenspan Engineers 2020), the Pipeline Avenue / Chino Hills Parkway intersection currently experiences the greatest amount of traffic volumes in the Project vicinity, with 37,296 average daily vehicles. Therefore, the additional traffic instigated by the Project would not result in any vicinity intersection to experience 100,000 vehicles daily. The impact is less than significant. No mitigation is required.

Woul	ld the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			$\boxtimes$	

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

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

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

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The proposed Project does not include any uses identified by the SCAQMD as being associated with odors.

Further, the proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Rule 402 prohibits the discharge from any source that causes nuisance, annoyance, or discomfort to a considerable number of persons. Adherence to these rules would result in a less than significant impact related to operational odor emissions.

#### 4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

# 4.4 Biological Resources

A Biological Technical Report and was prepared by ECORP in December 2019, updated in October 2021, and is provided in Appendix B. ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI) to determine the special-status plant and wildlife species that have been documented on or near the Project site. The CNDDB and CNPSEI database searches were conducted on October 8, 2019. A biological reconnaissance survey was conducted by walking the entire Project site to determine the vegetation communities and wildlife habitats on the Project site. The biologist documented the plant and wildlife species present on the Project site, and the location and condition of the Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Subsequently, focused surveys for sensitive species identified as potentially occurring on the site were conducted in March to July 2020.

#### Least Bell's Vireo Focused Survey

ECORP conducted focused surveys for least Bell's vireo (LBVI; *Vireo bellii pusillus*) between April and July 2020. The LBVI was state-listed as endangered in 1980 and was federally-listed as endangered in 1986. The literature review identified several observations of LBVI within five miles of the Project site, with the closest being documented in 2010 approximately two miles away (Appendix B). Suitable habitat on the Project site consisted of a cottonwood willow riparian woodland riparian along the banks of the Lake. Unbanded male LBVIs were detected in and adjacent to the Project site on May 22, June 2, and July 9, 2020 during focused surveys and incidentally on July 8 during a Crotch bumblebee survey. These individuals were observed and heard constantly advertising from various perches extending from the western edge of the survey buffer in Hickory Creek to the southwestern portions of Lake Los Serranos (Appendix B).

#### Crotch Bumble Bee Focused Survey

ECORP conducted focused surveys for the Crotch bumble bee (*Bombus crotchii*) in April through July 2020. The Crotch bumble bee was a candidate for listing as an endangered species as defined by Section 2068 of the Fish and Game Code. A literature review and habitat assessment were conducted to determine if suitable Crotch bumble bee habitat occurs on site. The literature review did not yield historic detections of Crotch bumble bee within five miles of the Project site. The habitat assessment involved conducting a general field survey of the site and mapping vegetation communities. Four pedestrian surveys were conducted between April and July for the highest detection probability of Crotch bumble bee. The surveys were negative for the presence of Crotch bumble bee. Due to the negative surveys, low-quality nectaring habitat, surrounding development and distance from known populations, Crotch bumble bee was determined absent from the Project site at this time (Appendix B). This species was removed as a candidate for listing in October 2021.

#### Western Spadefoot Focused Survey

ECORP conducted focused surveys for the western spadefoot (*Spea hammondii*). The western spadefoot is a CDFW Species of special concern. Two field surveys were conducted April 2020 during rain events in order to target a time period where spadefoot were most likely to be encountered (Appendix B). Surveys included both a daytime and nighttime component within the same 24-hour period. No western spadefoot were observed or detected within the survey area. While the potential breeding pools on the Project site were holding surface water between storm systems, biologists conducting plant surveys on the following week observed that all the pools were no longer holding water. This would suggest that the potential breeding habitat on the Project site is not suitable for western spadefoot (Appendix B).

#### Rare Plant Survey

Special-status plant species are those listed under the California or federal Endangered Species Acts, considered sensitive by the U.S. Bureau of Land Management, or those considered rare by CNPS. ECORP conducted three focused special-status plant surveys during April, May, and August 2020, based on the expected blooming periods of the target plant species. The purpose of the surveys was to determine the presence or absence and number of individuals of special-status plant species within the Project site, if present. Two special-status plant species (southwestern spiny rush [Juncus acutus ssp. leopoldii] and San Diego marsh elder [Iva hayesiana]) and one sensitive plant community (Fremont Cottonwood Forest and Woodland) were observed during the surveys. All three were most likely planted during a restoration effort for Lake Los Serranos and are not naturally occurring. Neither southwestern spiny rush or San Diego marsh elder has state or federal protections. These plant species were usually present within the Fremont Cottonwood Forest and Woodland habitat.

### 1.1.1 Environmental Setting

The Project site consists primarily of undeveloped land and a portion of the site consists of manmade Lake Los Serranos. There is a temporary storm drain outlet and temporary concrete-bottom channel located in the central portion of the site between Los Serranos Boulevard and Lake Los Serranos that was installed by the City to address flooding south of Los Serranos Boulevard. The site vegetation is primarily composed of disturbed annual grasslands with scattered trees and shrubs interspersed throughout the boundaries of the Project site and cottonwood willow riparian vegetation along the lake edge. The areas vegetated with disturbed annual grasslands show evidence of previous mechanical disturbances, such as mowing or discing. Hickory Creek, a drainage course that drains a natural watershed, enters the property at the southwest corner. An unnamed drainage runs throughout the central portion of the Project site; water was not present in the drainage at the time of the survey. The Project site is surrounded by existing residential developments that have ornamental landscaping. Representative site photographs taken during the survey are included in Figure 4.

#### 4.4.1.1 Vegetation Communities

Vegetation communities and other land cover types observed within and adjacent to the Project were Fremont Cottonwood Forest and Woodland, California Bulrush Marsh, disturbed Annual Brome

Grasslands, Eucalyptus groves, Ornamental, Disturbed, Developed Areas and Open Water (Figure 14aa. Vegetation Communities and Land Cover Types). Two vegetation communities present on the Project site, Fremont Cottonwood Forest and Woodland Forest and California Bulrush Marsh, are considered sensitive vegetation communities by CDFW. Descriptions of each vegetation community and land cover type that were mapped are provided in Appendix B.

#### 4.4.1.2 Plants

Plant species present at the Project site were typical of those found in disturbed annual grassland and riparian habitats in southern California. In the disturbed annual grassland portions of the site, mustard (*Brassica spp.*) and turkey mullein were common. Within the riparian areas of the site, Fremont's cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), and arroyo willow (*S. lasiolepis*) were common throughout. Stands of eucalyptus (*Eucalyptus* spp.) were located near the lake shore on the northeastern portion of the site. A full list of plant species observed on or immediately adjacent to the Project site is included in Appendix B.

#### 4.4.1.3 Wildlife

Nearly 125 different wildlife species were observed or detected during the survey, with the majority of those being bird species. Common wildlife species that were observed during the survey included western fence lizard (*Sceloporus occidentalis*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), mallard (*Anas platyrhynchos*), mourning dove (*Zenaida macroura*), black phoebe (*Sayornis nigricans*), and Botta's pocket gopher (*Thomomys bottae*). A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Appendix B.

### 4.4.1.4 Potential Waters of the U.S.

A formal jurisdictional delineation was conducted for the Project, results of which are included in Appendix B. The Project site includes three primary potential jurisdictional features: Lake Los Serranos, Hickory Creek, and an unnamed temporary concrete-lined ephemeral drainage that originates from a temporary culvert installed by the City in 2015 to handle off-site flows generated by the area and that empties urban runoff from surrounding areas into Lake Los Serranos.

Lake Los Serranos is a manmade lake whose boundaries are set by the elevation of its spillway. The lake is surrounded by a mixture of revegetated and natural wetland vegetation that also would be considered to be potentially jurisdictional to the CDFW as wildlife habitat. Portions of the lake edge consist of wetlands, as defined by the USACE under their criteria for vegetation, soils and hydrology.

Hickory Creek is an intermittent to perennial stream, supported by a combination of stormwater flows and urban runoff. This creek also is surrounded by riparian habitat that would be considered jurisdictional to the CDFW. Although this creek was historically a dry, ephemeral wash it now flows very regularly due to irrigation and other sources of runoff in the area.

The ephemeral drainage is a soft-bottom channel that originates from a box culvert both of which were installed by the City in 2015 as discussed previously and that empty runoff from surrounding urban runoff.

The channel empties into Lake Los Serranos. Even though this feature is artificial, its connection to the lake, and downstream waters by proxy, make this feature potentially jurisdictional to the USACE, CDFW and SWRCB.

### **Special-Status Plants**

The literature review and database searches identified 49 special-status plant species that occur on or near the Project site. However, due to the Project site being disturbed and surrounded by developed areas, 35 of the species were presumed absent from the Project site. Focused special-status plant surveys were conducted during April, May, and August 2020, based on the expected blooming periods of the remaining target plant species with potential to occur. No observations of the 14 target special-status plant species were detected during focused surveys, however, numerous individuals of two non-target special-status plant species were observed during the surveys. Special-status plant species found to occur are detailed below and Appendix B contains detailed mapping and the full results of the focused 2020 special-status rare plant surveys.

## 4.4.1.5 Plant Species Found to Occur

San Diego marsh elder is a perennial herb in the Asteraceae Family and most commonly occurs in riparian/wetlands habitats. It has a CNPS California Rare Plant Rank (CRPR) of 2B.2, 2B meaning the species is rare or endangered in California and threat rank 0.2 meaning it is moderately threatened in California. Ninety-seven individuals of San Diego marsh elder were observed within the Project site, primarily within a few feet of the lake shoreline. These plants were most likely planted during a restoration effort for Lake Los Serranos and are not naturally occurring.

Southwestern spiny rush is a perennial grass-like herb belonging to the Juncaceae Family and most commonly occurs in riparian/wetland habitats. It has a CNPS CRPR of 4.2, 4.0 meaning it is of limited distribution and threat rank 0.2 defining it is moderately threatened in California. Twenty-five individuals of southwestern spiny rush were observed within the Project site, primarily within a few feet of the lake shoreline. These plants were most likely planted during a restoration effort for Lake Los Serranos and are not naturally occurring.

### **Special-Status Wildlife**

The initial literature search documented 51 special-status wildlife species in the vicinity of the Project site, 18 of which are federally and/or state listed or candidates for listing. Of the 51 special-status wildlife species identified in the literature review, two were found to occur, six were found to have a moderate potential to occur, and 17 were found to have a low potential to occur; the remaining 26 species are presumed absent from the Project site. (Appendix B). The presence of anthropogenic disturbances, proximity to urban development, and relative isolation of the Project site from native habitat blocks likely preclude these species from occurring on or adjacent to the site. A brief natural history and discussion of the two special-status wildlife species found to occur on the Project site and six special-status wildlife species with a moderate potential to occur are provided below. Descriptions of all 51 special-status wildlife species identified in the initial literature review are presented in Appendix B.

## 4.4.1.6 Special-Status Wildlife Species Found to Occur

Two special-status wildlife species were found to occur on the Project site during 2020 biological surveys:

- The least Bell's vireo (*Vireo bellii pusillus*) is a federal and state-listed endangered species. This species typically prefers dense willow-dominated riparian habitat with a well-developed understory for nesting. Some areas within the Fremont Cottonwood Forest and Woodland provide relatively dense willow thickets but, in general, these areas are too open and too small in size to support nesting activities. The literature review identified several observations of this species within five miles of the Project site, with the closest being documented in 2010 approximately two miles away. Unbanded male least Bell's vireos (likely two territorial males) were detected in and adjacent to the Project site on May 22, June 2, and July 9, 2020 during focused least Bell's vireo surveys and one incidental detection occurred on July 8 during a Crotch's bumble bee survey. These individuals were observed and heard constantly advertising from various perches extending from the southwestern edge of the survey buffer along Hickory Creek to the southwestern portions of Lake Los Serranos (Appendix B).
- The yellow warbler (*Setophaga petechia*) is a CDFW SSC. It is typically found in riparian habitat with associations in proximity to water. This species is frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants, including cottonwoods and sycamores. The literature review identified one recent record in 2012 located approximately 3.5 miles west of the Project site. This species was detected on several occasions during focused least Bell's vireo and Crotch bumble bee surveys along the south side of Lake Los Serranos (Appendix B).

### 4.4.1.7 Wildlife Species with Moderate Potential to Occur

Six species were found to have moderate potential to occur on the Project site because either habitat for the species occurs on the site and a known occurrence has been reported in the database, but not within five miles of the site; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a known occurrence within five miles of the site and marginal or limited amounts of habitat occurs on the site:

The western pond turtle (*Emys marmorata*) is a CDFW SSC. A petition for federal listing was submitted for this species in 2012, and as of 2015, the petition is still under review by USFWS (<a href="https://ecos.fws.gov/ecp0/profile/speciesProfile?sld=1833">https://ecos.fws.gov/ecp0/profile/speciesProfile?sld=1833</a>). Lake Los Serranos provides suitable open water habitat for this species within the survey buffer however, the Project site generally lacks sandy soils required by this species. In addition, the detection of nonnative predatory American bullfrogs (*Lithobates catesbeianus*) that may consume hatchling turtles and nonnative red-eared sliders (*Trachemys scripta elegans*) which compete with native western pond turtles for food, egg-laying sites, and basking sites, may affect the presence or abundance of this western pond turtle in the lake. There have been five historical sightings between 1987 and 1996 recorded within five miles of the Project site and two recent sightings were documented in October 2019 about two miles south of the Project site (Occurrences 1042 and 1043; CDFW 2019a). The presence of suitable habitat in Lake Los Serranos, lack of incidental detections during

numerous 2020 biological surveys, and the documented records within five miles resulted in this species having a moderate potential to occur.

- The burrowing owl (*Athene cunicularia*) is a CDFW SSC. The project site contains suitable open habitat throughout the disturbed annual grassland and disturbed area. No active owl burrows, sign, or burrowing owls were detected during the reconnaissance survey, nor during the various 2020 focused biological surveys conducted during the owl breeding season. The literature review identified multiple recent records between 2003 and 2016 located within five miles of the Project site (CDFW 2019a). Although potential nesting and foraging habitat is present and a documented record occurs within five miles, no evidence of burrowing owls was detected during numerous 2020 biological surveys (inclusive of transect surveys throughout the grassland), resulting in this species having only a moderate potential to occur.
- The white-tailed kite (*Elanus leucurus*) is a CDFW Fully Protected species. It is typically found in open lowland habitat including savanna, open woodlands, marshes, and agricultural fields that have trees near a marsh for nesting. The mature trees surrounding Lake Los Serranos and in proximity to open lowland habitat provide potential nesting and foraging habitat for this species and the riparian habitat along the lake margins provides suitable foraging habitat. The literature review identified three records from 2009, between one and four miles from the project site: one sighting southwest and two sightings southeast of the Project site (Occurrences 139, 140, and 141; CDFW 2019a). Although potential nesting and foraging habitat is present and a documented record occurs within five miles, this highly detectable species was not observed in the area during numerous 2020 biological surveys, resulting in this species having only a moderate potential to occur.
- The yellow-breasted chat (*Icteria virens*) is a CDFW SSC. It is typically found in riparian and upland thickets, and dry overgrown pastures. This species prefers to nest in dense scrub along streams or at the edges of ponds or swamps. The riparian habitat surrounding Lake Los Serranos provides potential nesting habitat for this species. The literature review identified one recent record in 2010 located approximately 2.7 miles west of the Project site (Occurrence 112; CDFW 2019a). Although suitable riparian habitat is present and a documented record occurs within five miles, this highly detectable species was not observed in the area during numerous 2020 biological surveys, resulting in this species having only a moderate potential to occur.
- The pallid bat (*Antrozous pallidus*) is a CDFW SSC. The mature trees and abandoned buildings present on the Project site contain suitable habitat for this species. The Pipeline Avenue bridge crossing Hickory Creek also has potential to provide suitable roosting habitat for this species. Although no records of this species have been documented within five miles of the Project site, the presence of suitable roosting habitat resulted in this species having a moderate potential to occur.
- The western yellow bat (*Lasiurus xanthinus*) is a CDFW SSC. The palm trees scattered throughout the Project site provide suitable roosting and foraging habitat for this species. Although no records of this species have been documented within five miles of the Project site, the presence of

suitable roosting and foraging habitat resulted in this species having a moderate potential to occur.

## **Raptors and Migratory Birds**

Nesting birds are protected under both the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (Sections 3503, 3503.5, 3513, and 3800) and cannot be subjected to take (as defined in California Fish and Game Code) during the bird breeding season, which typically runs from February 15 through August 31. Vegetation, trees, and structures suitable for nesting birds (e.g., buildings, utility poles) were observed on the Project site. One active red-tailed hawk nest located in a eucalyptus tree off the southeast corner of Lake Los Serranos successfully fledged two young during the 2020 nesting season. Direct observations of nests or recently fledged young for a number of other native and migratory birds protected by the MBTA including Canada goose (*Branta canadensis*), mallard, acorn woodpecker (*Melanerpes formicivorus*), hooded oriole (*Icterus cucullatus*), bushtit (*Psaltriparus minimus*), black phoebe, and barn swallow (*Hirundo rustica*), were observed over the course of the various 2020 focused biological surveys. In addition, a double-crested cormorant and great blue heron breeding rookery was noted in eucalyptus trees along the northwest lake shoreline within approximately 350 feet of the Project area. Construction of the Project could directly or indirectly affect nesting birds within and adjacent to the Project area if activities occur during the nesting bird season. Raptors typically breed between February and August, and songbirds and other passerines generally nest between March and August.

### Wildlife Movement Corridors

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The Project site does contain suitable vegetation and/or cover to support wildlife movement, and the open water source (Lake Los Serranos) and associated riparian vegetation likely serve as an attractant for wildlife. However, the Project site is almost completely surrounded by residential development and wildlife movement opportunities connecting the Project site to large, undeveloped natural areas is extremely limited. There is potential for some species highly adaptable to urban environments, such as coyote, to utilize nearby golf courses to travel between the Project site and the Santa Ana Mountains to the south, but the presence of anthropogenic influences (e.g., human activity, vehicles, domestic animals) and general lack of native vegetation severely limit these types of travel opportunities for other species. The Project site is not considered, nor is a part of, a wildlife movement corridor or linkage.

## 1.1.2 Biological Resources (IV) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		$\boxtimes$		

The Project site contains suitable habitat for special-status species and listed least Bell's vireo, especially in the areas containing cottonwood willow riparian vegetation. Disturbances were present in the non-riparian areas of the Project site, including those associated with the structures and residences. Residential developments are located adjacent to the Project site.

#### **Plants**

Two special-status plant species, San Diego marsh elder and southwestern spiny rush, were found to occur within the Project impact area along the southern shoreline of Lake Los Serranos. Both species were most likely planted during a restoration effort for Lake Los Serranos and are not naturally occurring. Impacts to 97 individuals of San Diego marsh elder and 25 individuals of southwestern spiny rush may occur in the form of loss of individuals and habitat, increased dust, and loss of seedbank from grading or substrate removal. Implementation of Mitigation Measures BIO-1 through BIO-4 would reduce impacts to special-status plant species to less than significant.

### Wildlife

The literature review identified 51 special-status wildlife species that occur near the Project site, but 24 of the 51 special-status wildlife species identified in the literature review were presumed absent from the Project site due to the lack of habitat or the Project occurring outside the known range of these species. Two additional species, western spadefoot and Crotch bumble bee (no longer a state candidate), were presumed absent after these species were not detected during 2020 focused surveys. Construction of the Project will not contribute to the overall decline of any of the special-status wildlife species that have been presumed absent from the site, and no impacts to these species are anticipated to result from this Project.

One state and federal-listed endangered wildlife species, the least Bell's vireo, was found to occur within and adjacent to the Project impact area. Dense willow riparian thickets for nesting is are limited within the Fremont Cottonwood Forest and Woodland and nesting was not observed, but territorial males were detected in two locations during 2020 focused least Bell's vireo surveys in addition to one incidental detection during one of four focused Crotch bumble bee surveys conducted in 2020. Potential Project-related direct impacts to these species could be significant and occur in the form of injury, mortality, and

loss of active nests and/or young. Indirect impacts could occur in the form of habitat loss (without any avoidance) 2.20 acres of Fremont Cottonwood Forest and Woodland), increased human and vehicular activity, ground disturbances, noise, and increased dust. Implementation of Mitigation Measures BIO-2, and BIO-4 through BIO-7 would reduce potential impacts to listed least Bell's vireo and their habitat to less than significant.

One special-status wildlife species, yellow warbler, was found to occur within the Project area. Six additional special-status wildlife species were found to have a moderate potential to occur within the Project boundaries: western pond turtle, burrowing owl, white-tailed kite, yellow-breasted chat, pallid bat, and western yellow bat. Lake Los Serranos provides suitable open water habitat for western pond turtle. A petition for listing under the federal ESA was submitted in 2012 and is currently under review by USFWS. Direct impacts to this species could occur in the form of injury, mortality, and the loss of nests and/or young. Indirect impacts could occur in the form of habitat loss, increased human and vehicular activity, ground vibrations, noise, and increased dust. Implementation of BIO-2, BIO-4, BIO-8, and BIO-9 would reduce potential impacts to western pond turtle to less than significant.

The mature trees surrounding Lake Los Serranos provides potential nesting habitat for white-tailed kite (a CDFW SSC) and open adjacent habitat provides suitable foraging habitat. Riparian habitat along the lake margins provides suitable foraging and nesting habitat for yellow warbler and yellow-breasted chat (also CDFW SSCs). Potential Project-related direct impacts to these species could be significant and occur in the form of injury, mortality, and loss of active nests and/or young. Indirect impacts could occur in the form of habitat loss, increased human and vehicular activity, ground disturbances, noise, and increased dust. Implementation of Mitigation Measures BIO-2, BIO-4, BIO-8, and BIO-9 would reduce potential impacts to special-status bird species to less than significant.

Although no active owl burrows, sign, or burrowing owls were detected during the reconnaissance survey, nor detected during the various 2020 focused biological surveys conducted during the owl breeding season, it is possible that burrowing owl could move into the site prior to the start of Project activities due to the mobile nature of this species. If burrowing owl are found to be using or nesting on the Project site prior to the start of construction, direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from construction noise and vibrations may occur. Implementation of BIO-2, BIO-4, BIO-8, and BIO-11 would reduce potential impacts to burrowing owl to less than significant.

The mature trees, abandoned buildings, and the Pipeline Avenue bridge over Hickory Creek all provide suitable roosting habitat for pallid bat and western yellow bat, both of which have a moderate potential to occur on the Project site. Potential Project-related impacts could occur to these species in the form of injury, mortality, and loss of young if maternity roosts are found in any of the suitable roosting habitats on site. Indirect impacts could occur in the form of roosting habitat loss, increased human activity, noise, and ground vibration. Implementation of BIO-2, BIO-4, BIO-8, and BIO-12 would reduce potential impacts to special-status bats and bat roosts to less than significant.

A total of 17 species were found to have a low potential to occur on the Project site: coast range newt (Taricha torosa torosa), southern California legless lizard (Anniella stebbinsi), coastal whiptail (Aspidoscelis tigris stejnegeri), two-striped garter snake (Thamnophis hammondii), tricolored blackbird (Agelaius tricolor), grasshopper sparrow (Ammodramus savannarum), golden eagle (Aquila chrysaetos), long-eared owl (Asio otus), Swainson's hawk (Buteo swainsoni), southwestern willow flycatcher (Empidonax traillii extimus), bald eagle (Haliaeetus leucocephalus), northwestern San Diego pocket mouse (Chaetodipus fallax fallax), western mastiff bat (Eumops perotis californicus), pocketed free-tailed bat (Nyctinomops femorosaccus), big free-tailed bat (Nyctinomops macrotis), Los Angeles pocket mouse (Perognathus longimembris brevinasus), and American badger (Taxidea taxus). The Project site provides marginal to low quality suitable habitat for these species and, in general, these species are not expected to occur. The presence of anthropogenic disturbances, the presence of urban development immediately adjacent to the Project site, and the lack of connectivity of the Project site to native habitat blocks likely preclude these species from occurring on the Project site. If any of these species were to be present on the site, there is potential for direct impacts such as habitat loss, injury, or mortality, and indirect impacts such as increased human activity, ground vibrations, noise, and nighttime lighting to occur. If these impacts were to occur to any of the CDFW SSC species (all species listed above except tricolored blackbird, Swainson's hawk, southwestern willow flycatcher, and bald eagle), then the impacts would not be considered significant. If these CDFW SSC species were to be present on site, they would likely occur in low numbers due to the limiting factors listed above (anthropogenic disturbances, urban development, and lack of connectivity) and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Implementation of BIO-2, BIO-4, BIO-8, and BIO-12 would reduce potential impacts to these special-status species to less than significant.

If the Project-related impacts occurred to the federally and/or state-listed avian species with low potential to occur (tricolored blackbird, Swainson's hawk, southwestern willow flycatcher, and bald eagle) in the form of injury, mortality, habitat loss, and loss of nests or young, then there is potential for these impacts to be significant. Implementation of Mitigation Measures BIO-2, BIO-4, BIO-8, and BIO-10 would reduce potential impacts to listed bird species to less than significant.

### **Migratory Birds and Raptors**

Suitable habitat for nesting birds and raptors was identified throughout the Project site. The trees, shrubs, utility poles, and structures all provide suitable nesting substrates for raptors and songbirds protected by the MBTA and California Fish and Game Code. An active red-tailed hawk nest that successfully fledged two young in 2020 is located in a eucalyptus tree off the southeast corner of Lake Los Serranos. An active great blue heron and double-crested cormorant rookery was present on the northwest lake shoreline across from the Project impact area. These species are known to utilize the same nests or nest trees year after year. In addition, a variety of passerine species are known to nest in the Project area. If construction of the Project occurs during the bird breeding season (typically January 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), direct impacts in the form of nest destruction, nest abandonment, egg loss, and chick mortality could occur. Ground-disturbing construction activities could indirectly affect birds protected by the MBTA and their nests due to increased

human/vehicular activity, noise, ground vibration, and increased dust. Implementation of Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-8, and BIO-10 would reduce potential impacts to nesting raptors and MBTA-protected species to less than significant.

### Conclusion

Overall, impacts to listed, sensitive and special status species would be less than significant with the incorporation of mitigation measures BIO-1 through BIO-13.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		$\boxtimes$		

Two sensitive vegetation communities were mapped within the Project site: Fremont Cottonwood Forest and Woodland and California Bulrush Marsh. Both communities are mapped along the edges of Lake Los Serranos. and Fremont Cottonwood Forest and Woodland also occurs along Hickory Creek in the southwestern portion of the Project area. The Fremont Cottonwood Forest and Woodland has a State Rarity Rank of S3 and provides suitable habitat for special-status wildlife species (including federal and state-listed least Bell's vireo), two special-status plants, and nesting birds. California Bulrush Marsh has a State Rarity Rank of S4 and provides suitable habitat for the two special-status plant species that were found to occur on site. Preservation of native and heritage trees identified in the Arborist Report Review (Zoll 2020) will result in protection of sensitive natural communities in select locations. The arborist report provided data on 532 trees, 26 of which are considered protected by the City of Chino Hills Tree Preservation Ordinance Chapter 16.90. Numerous native willows that do not qualify for protection by the City tree ordinance will also be protected in place. Four (4) trees on site are proposed to be removed and are considered protected by the tree preservation ordinance including one native western sycamore (Zoll 2020). Implementation of Mitigation Measures BIO-1, BIO-2, BIO-4, BIO-8, and BIO-10 would reduce overall impacts to sensitive natural communities to less than significant. Coordination and/or consultation with CDFW during regulatory permitting (see BIO-13) will be required to determine compensatory mitigation to sensitive natural communities.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		$\boxtimes$		

The Project contains three potentially jurisdictional features; Lake Los Serranos, Hickory Creek, and an unnamed ephemeral drainage. Impacts to the lake or to either of these stream areas would necessitate permitting under the federal Clean Water Act, Sections 401 and 404, and the California Fish and Game Code, Section 1600. An impact is defined as placement of fill material or removal of riparian vegetation, or could include any kind of alteration to these features. Impacts of less than 0.5 acre and 500 linear feet of Waters of the U.S. would likely qualify under the USACE Nationwide Permit program, which are a series of "pre-approved" permits. A notification is still needed. Larger impacts to Waters of the U.S. could necessitate an individual permit, which is a longer process. For impacts to RWQCB jurisdiction, the RWQCB would need to issue a Water Quality Certification for areas under federal jurisdiction and/or a Notice of Applicability/Waste Discharge Requirements for areas not under federal jurisdiction.

Impacts to state- and/or federally protected wetlands and waters (without any avoidance) total 0.698 acre of USACE jurisdiction (including 0.167 acre of wetlands) and 2.584 acres of CDFW jurisdiction and are less than significant with mitigation incorporated. Coordination and/or consultation with the regulatory agencies (USACE, CDFW, Santa Ana RWQCB) regarding regulatory permitting will be required. Implementation of BIO-13 would reduce impacts to less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

The Project site is located adjacent to areas containing existing disturbances (i.e., paved roads and residential developments). Although the Project site does contain suitable vegetation and/or cover to support wildlife movement, the Project site is almost completely surrounded by commercial and residential development, and wildlife movement opportunities connecting the Project site to large, undeveloped natural areas is extremely limited. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. Therefore, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		$\boxtimes$		

Existing trees and vegetation deemed to be significant to the aesthetics, character, and environmental quality of the Project have been integrated into the Site Plan. Existing shoreline trees including cottonwoods, willows, oaks, and sycamores will be preserved wherever feasible, providing habitat while also framing views to the lake. Mature existing eucalyptus, peppertrees, palms, and young oak trees will be incorporated into the landscape wherever feasible.

City Municipal Code Chapter 16.90 Tree Preservation makes it unlawful to destroy or remove any protected tree on undeveloped property or on designated developed properties within the City without a Tree Removal Permit. According to project plans, 26 native or heritage specimens are present onsite. Three (3) of these trees would be removed: three (3) Pepper trees (*Schinus molle*). With adherence to the City's tree ordinances outlined in the Municipal Code and implementation of Mitigation Measure BIO-1 and AES-1 Tree Protection and Replacement, impacts would be less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

The Project site is not located within a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). Therefore, development of the Project site will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. No impact would occur.

### 1.1.3 Mitigation Measures

BIO-1 Tree Protection, Replacement, and Mitigation Plan: Prior to issuance of grading permits, the applicant shall provide a Tree Protection, Replacement, and Mitigation Plan (Tree Plan) to the City of Chino Hills in accordance with the City of Chino Hills Tree Preservation Ordinance Chapter 16.90. The plan shall be peer-reviewed by an arborist under contract with the City. The Tree Plan must incorporate all Protection and Mitigation and Replacement Measures specified in the Arborist Report Review (Zoll 2020), in addition to Tree Protection Specifications Measures specified in the Inventory Report (Johnny's Tree Service 2019). The Tree Plan must identify and delineate tree protection areas and include protection of special-status plant (San Diego marsh elder and southwestern spiny rush) individuals that occur under or immediately adjacent to the preserved tree's canopy/dripline.

The outermost tree protection area limits shall be clearly fenced prior to clearing or grading. The Tree Plan will include preservation of 183 native tree specimens, located throughout the entire property (inclusive of 16 native trees within the Project impact area that qualify as protected by the City of Chino Hills Tree Preservation Ordinance Chapter 16.90) and six non-native heritage trees within the Project impact area. Mitigation ratios shall adhere to the City's tree ordinances outlined in the Municipal Code and implementation of Mitigation Measure AES-1 Tree Protection and Replacement.

- BIO-2 Worker Education and Environmentally Sensitive Areas: Prior to issuance of grading permits, a qualified biologist shall establish limits of Environmentally Sensitive Areas (ESAs) around special-status natural resources that are to remain intact immediately prior to and/or in coordination with the staking of grading limits. The contractor shall install ESA (silt) fencing around ESAs and/or along ESA interface with grading limits under the guidance of a biological monitor to minimize impacts to sensitive natural resources including special-status plant species and native plant communities outside and immediately adjacent to the grading limits. Construction activities and personnel shall be restricted within ESAs and a biological monitor will be present during ESA fence installation and removal. A qualified biologist shall conduct worker environmental awareness training to all construction personnel prior to initial clearing and ground-disturbing activities and as necessary throughout construction. A sign-in sheet signed and dated by each trainee and acknowledging they have been made aware of environmental laws, regulations, noncompliance penalties, and Project specific mitigation measures must be maintained by a qualified biologist.
- BIO-3 Special-Status Plants: Prior to issuance of grading permits, a biological monitor shall be present during staking and fencing of the northern grading limits to prevent impacts to special-status plants that occur immediately adjacent to the Project impact area. San Diego marsh elder and southwestern spiny rush that occur within the Project area and that are not annexed into tree protection areas (see BIO-1) shall have seed harvested and properly stored prior to clearing and grading activities. The seed storage location shall be dry, out of direct sunlight, and with a relatively constant temperature that ranges from 65 to 75 degrees Fahrenheit. Harvested seed shall be used to enhance riparian and marsh habitat that occurs along the Lake Los Serranos southern shoreline during the restoration phase.
- BIO-4 Biological Monitoring: A qualified biologist shall be present to monitor all ground-disturbing and vegetation-clearing activities conducted for the Project. During each monitoring day, the qualified biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to avoid impacts to ESAs and minimize impacts on special-status species with potential to occur (including, but not limited to, western pond turtle, special-status and/or nesting bird species). The monitor shall be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring must take place until the Project site has been completely cleared of any vegetation. The biological monitor shall have the authority (and appropriate handling

permits if required) to temporarily halt activities in order to move wildlife out of harm's way by means of hazing or short-distance capture and release. If an active nest is identified, then the biological monitor shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed no longer active by the biologist.

- BIO-5 Pre-Construction Least Bell's Vireo Surveys: If Project ground-disturbing and vegetation-clearing activities are proposed to occur within 500 feet of least Bell's vireo habitat during the least Bell's vireo breeding season (March 15-August 31), pre-construction focused surveys for least Bell's vireo shall be conducted by a qualified least Bell's vireo designated biologist. These pre-construction least Bell's vireo surveys shall be conducted independently of the pre-construction nesting bird surveys described in BIO-8. Pre-construction focused Least Bell's vireo surveys shall begin 30 days prior to the start of Project ground-disturbing and vegetation clearing activities. The surveys shall continue weekly with three surveys occurring during the week prior to the initiation of Project ground-disturbing and vegetation clearing activities, and the final survey occurring within 24 hours prior to the start of Project ground-disturbing and vegetation clearing activities. Each survey shall be conducted on a separate day and will follow the methods in USFWS' 2001 Least Bell's Vireo Survey Guidelines, which require the surveys be conducted between dawn and 11:00 a.m. when weather conditions are favorable. If a least Bell's vireo individual or an active least Bell's vireo nest is detected, the qualified least Bell's vireo designated biologist shall determine the nesting status with a brief observation period at a distance away from the least Bell's vireo. The qualified least Bell's vireo designated biologist shall establish a 500-foot no-work buffer around active least Bell's vireo nest locations. Buffers shall remain in place until the young have fledged and/or the nest is no longer active.
- BIO-6 Breeding Season Least Bell's Vireo Surveys and Monitoring: If Project ground-disturbing and vegetation-clearing activities are proposed to occur within 500 feet of least Bell's vireo habitat during the least Bell's vireo breeding season, weekly focused surveys for least Bell's vireo shall be conducted by a qualified least Bell's vireo designated biologist simultaneous with the duration of Project activities occurring during the breeding season. Survey methods for the weekly survey and establishment of nest protection buffers shall be the same as the methods described for preconstruction least Bell's vireo surveys in BIO-5. In the event that a no-work buffer has been established around a least Bell's vireo nest, only a qualified least Bell's vireo designated biologist shall be allowed inside the buffer, All Project personnel shall be informed of any no-work buffers affecting the Project. The buffer(s) shall be maintained around each nest until the nest becomes inactive as determined by the qualified least Bell's vireo designated biologist. Buffers around least Bell's vireo(s) shall be maintained until the qualified least Bell's vireo designated biologist determines the nest is inactive (either success or failure) and CDFW agrees that the buffer can be removed and that work may proceed.
- **BIO-7 Least Bell's Vireo Regulatory Permitting:** If impacts to potential least Bell's vireo habitat (in the form of Fremont Cottonwood Forest and Woodland) will occur or if indirect impacts to occupied

vireo habitat cannot be avoided, then the applicant shall submit an application for a Section 2081 Incidental Take Permit. Consultation with USFWS under Section 7 or Section 10 of the federal ESA shall be initiated to determine appropriate avoidance and minimization measures for potential impacts to occupied least Bell's vireo territories, potential direct and indirect impacts to individuals during the breeding season, and loss of up to 2.20 acres of foraging and potential breeding habitat in the form of Fremont Cottonwood Forest and Woodland. The applicant shall implement all conditions required by the 2081, Section 7, or Section 10 consultation prior to implementation of the Project.

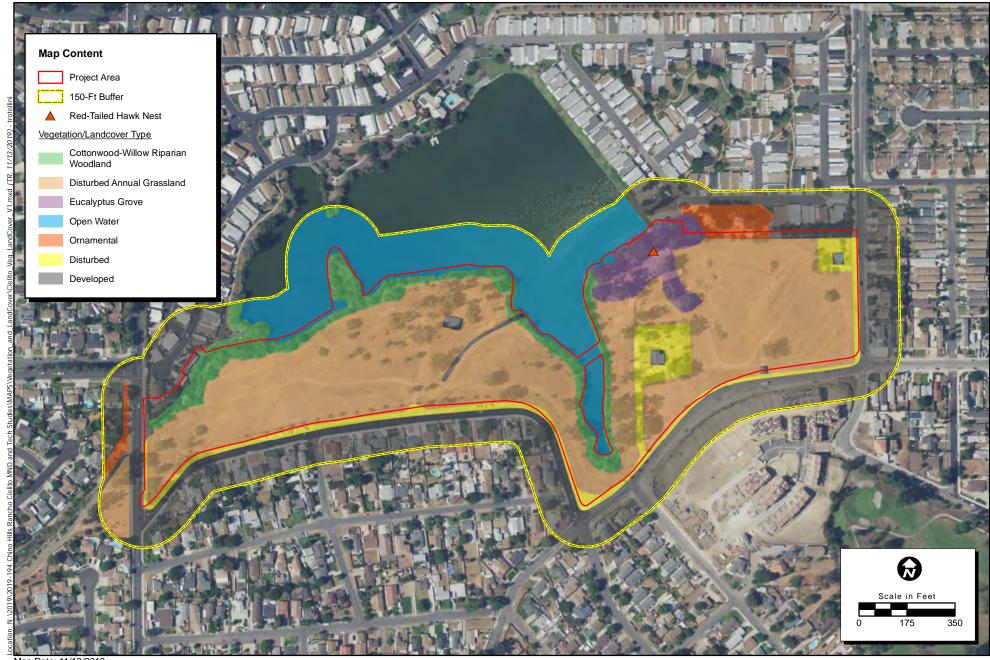
- BIO-8 Pre-Construction Survey for Special-Status Wildlife Species: Based on final grading plans, a pre-construction survey shall be conducted for special-status wildlife species within all areas of potential permanent and temporary disturbance. The pre-construction survey shall take place no more than 14 days prior to the start of ground-disturbing and vegetation clearing activities. The pre-construction surveys shall take place regardless of breeding season timing and shall focus on detection of special-status wildlife species present on the Project site or that were identified as having a moderate potential to occur. Should any special-status species be detected, additional biological monitoring and/or species-specific avoidance and minimization measures developed in coordination with the appropriate agency (USFWS, CDFW), may need to be undertaken.
- BIO-9 Pre-Construction Western Pond Turtle Surveys: Construction surveys for western pond turtle shall be conducted within suitable habitat on the Project site within 30 days of, but prior to, any ground-disturbing activities. The surveys shall be conducted by a qualified turtle biologist who is experienced in surveying for and identifying the western pond turtle. Surveys shall include both visual and live-trapping surveys and specific survey methods shall be submitted to CDFW for review prior to commencement. If western pond turtle is detected on the Project site during the surveys, then coordination with CDFW and USFWS (if federally protected) shall occur in order to develop a western pond turtle management plan. Management plan avoidance and minimization measures for western pond turtle may include seasonal work restrictions, additional biological monitoring requirements, and implementation of no-disturbance buffers.
- BIO-10 Pre-Construction Nesting Bird Survey: If construction or other Project activities are scheduled to occur during the bird breeding season (typically January 1 through August 31 for raptors and March 15 through August 31 for the majority of migratory bird species), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests, including those for yellow warbler, shall not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting-bird survey shall include the Project site and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise. If an active nest is identified, the biologist shall establish an appropriately sized disturbance limit buffer (typically 300 feet for passerines and 500 feet for raptors and listed bird species) around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist. If an active nest has been

identified within 500 feet of the Project site, nest monitoring shall occur as necessary to update the status of nests and confirm active status without affecting nesting birds, as determined by a qualified avian biologist.

- BIO-11 Pre-Construction Surveys for Burrowing Owl: Pre-construction surveys for burrowing owl shall be conducted within the Project site and adjacent areas prior to the start of ground-disturbing activities. The surveys shall follow the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012). Two surveys shall be conducted, with the first survey being conducted between 30 and 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the survey and impacts to those features are unavoidable, consultation with the CDFW shall be conducted and the methods described in the CDFW's Staff Report on Burrowing Owl Mitigation (CDFW 2012) for avoidance and/or passive relocation shall be followed.
- BIO-12 Pre-Construction Bat Survey: Abandoned building demolition and tree removal should take place outside of the bat maternity season (April 1 through August 31) where possible. A preconstruction bat survey must be completed within the Project site no more than 14 days prior to scheduled building demolition or tree removal (at any time of year) to determine if roosting bats are present within the buildings or trees. If roosting bats are determined to be present during the maternity season, building demolition and tree removal shall be postponed until the maternity season is complete and young are volant. If individual roosting bats are determined to be present within trees outside of the maternity season, the trees shall be removed using a two-step method where the outer limbs (or fronds) are first removed under the observation of a qualified bat biologist. After limb removal, 24 hours shall elapse before the remainder of the tree is removed. If roosting bats are determined to be present within buildings outside of the maternity season, coordination with CDFW shall take place to implement appropriate exclusion measures and installation of alternative roosting habitat that is comparable to habitat features lost from Project activities.
- BIO-13 Aquatic Resources Regulatory Permitting. Without any avoidance measures, Project-related impacts to 0.698 acre of USACE jurisdiction and 2.584 acres of CDFW jurisdiction would require coordination and permitting with the USACE, CDFW or RWQCB. Without any avoidance measures, for coordination with the USACE, permitting is anticipated to require an Individual Permit. Note that an Individual Permit may take up to two years or more to complete, depending on the mitigation requirements, and would require a robust suite of avoidance and minimization measures as well as an Alternative Analysis under 404(1)(b) guidelines and the National Environmental Policy Act. Any unavoidable impacts, after the analysis has been completed, would require compensatory mitigation at a minimum replacement ratio of 2:1 replacement or as required by the applicable resource agencies. Mitigation options would be discussed with the City and Project owner at the time of application with the USACE. Mitigation could include

contribution to an existing mitigation bank (such as the Riverpark Mitigation Bank near Mystic Lake), permittee-responsible mitigation such as mitigation within the Lake Los Serranos watershed or property, payment of in-lieu fees or other options involving land acquisition for the purpose of mitigation. The permit process would require preparation and submittal of the ENG 4345 application under Section 404 of the federal Clean Water Act.

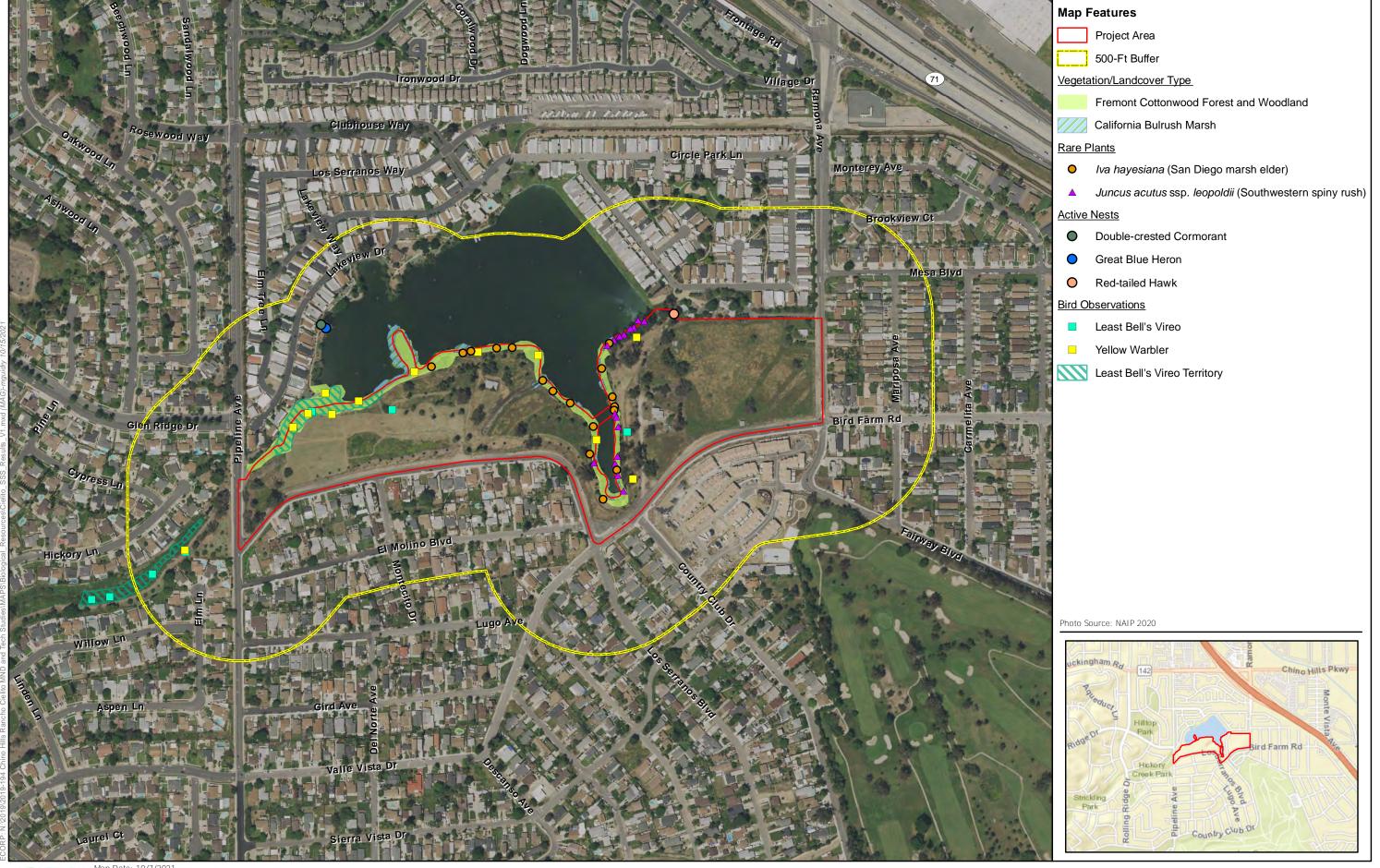
With avoidance measures, if impacts to USACE jurisdiction are reduced to below ½ acre in size, the Project may qualify under the Nationwide Permit program, which is a more streamlined process. For impacts to RWQCB and CDFW jurisdiction, these impacts would require an Application for Water Quality Certification and/or Notice of Applicability/Waste Discharge Requirements under Section 401 of the federal Clean Water Act and a Notification of Lake or Streambed Alteration under Section 1600 of the California Fish and Game Code.



Map Date: 11/13/2019 Photo Source: NAIP (2018)



Figure 14. Vegetation Communities and Land use









## 4.5 Cultural Resources

## 4.5.1 Environmental Setting

A Cultural Resources Inventory Report was prepared by ECORP Consulting, Inc. for the proposed Project to determine if cultural resources were present in or adjacent to the Project area and assess the sensitivity of the Project area for undiscovered or buried cultural resources. A survey of the property was required to identify potentially eligible cultural resources (archaeological sites and historic buildings, structures, and objects) that could be affected by the Project. The cultural context of the Project area including regional and local prehistory, ethnography, and regional and Project area histories can be found in the report in Appendix C.

A records search for the property was completed at the South Central Coastal Information Center (SCCIC) of the California Historic Resources Information System (CHRIS) at California State University, Fullerton on October 16, 2019, a literature review, and an intensive pedestrian survey on October 23, 2019. The purpose of the records search was to determine the extent of previous surveys within a one-mile (1,600-meter) radius of the proposed Project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area. Materials reviewed included reports of previous cultural resources investigations, archaeological site records, historical maps, and listings of resources on the NRHP, CRHR, California Points of Historical Interest, California Landmarks, and National Historic Landmarks.

#### 4.5.1.1 Historical Resources

Under CEQA, cultural resources are evaluated using CRHR eligibility criteria in order to determine whether any of the sites are Historical Resources, as defined by CEQA. CEQA requires that impacts to historical resources be identified and, if the impacts would be significant, that mitigation measures to reduce the impacts be applied. A Historical Resource is a resource that:

- 1. is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission;
- 2. is included in a local register of historical resources, as defined in PRC 5020.1(k);
- 3. has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g); or
- 4. is determined to be historically significant by the CEQA Lead Agency [CCR Title 14, § 15064.5(a)].

For this Project, only the fourth definition of a historical resource is applicable because there are no resources previously determined eligible or listed on the CRHR, there are no resources included in a local register of historical resources, and no resources identified as significant in a qualified historical resources survey.

Three resources were documented as a result of the field survey: an agricultural complex with a historicage house and outbuildings, and associated agricultural features (RC-001); one historicage single-family

residence (RC-002); and one pumphouse with associated features (RC-003). These resources were documented and evaluated using CRHR eligibility criteria. The resources were evaluated and found not eligible for listing in the CRHR under any criteria; they are also not currently listed in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), and have not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g). Therefore, RC-001, RC-002, and RC-003 are not considered Historical Resources as defined by CEQA [CCR Title 14, § 15064.5(a)]. A further discussion of these resources is included in Appendix C.

## 4.5.1.2 Archaeological Resources

The records search revealed that 11 pre-contact resources, 17 historic-period resources, and one multicomponent resource are located within one mile of the Project Area. Pre-contact resources consist of three lithic deposits, one burial, one burial with fire-affected rock, one campsite, one lithic flake isolated find, one modified faunal bone isolated fine, and three ground stone isolated finds. Historic-period resources consist of a segment of Pomona-Rincon Road, one refuse deposit, one bungalow, one property with a residence and two barns, seven residences, the Los Serranos neighborhood, the Lugo Adobe, a property containing two vacated municipal buildings, a transmission tower, a segment of the Chino-Mesa Transmission Line, and a segment of the Chino-Soquel Transmission Line. The multicomponent resource consists of a site comprised of a historic-period refuse deposit and one mano. No previously recorded resources are located within the Project Area.

Surface sediments within the Project Area consist of late Pleistocene older surficial sediments, and a lesser amount of mid-Holocene surficial sediments. Of these, Holocene sediments are considered most likely to contain subsurface cultural deposits. Due to the presence of sediments contemporaneous with human occupation of the region, the presence of an intermittent stream passing through the Project Area in the past, and the presence of previously recorded pre-contact resources in the surrounding area, the potential for subsurface resources is considered moderate.

## 4.5.1.3 Sacred Lands File Search

In addition to the record search, ECORP contacted the California Native American Heritage Commission (NAHC) on October 8, 2019 to request a search of the Sacred Lands File for the Project Area. Results of the search of the Sacred Lands File were received on October 21, 2019. The search failed to indicate the presence of Native American Sacred Lands in the Project Area. The NAHC also provided a list of six Native American groups that have historic or traditional ties to the Project Area who may have knowledge about the Project Area. It should be noted that this does not constitute consultation in compliance with Senate Bill 18 or AB 52.

## 4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				

No previously recorded resources were identified on the property as a result of the records search. Three resources were documented as a result of the field survey: an agricultural complex with a historic-age house and outbuildings, and associated agricultural features (RC-001); one historic-age single-family residence (RC-002); and one pumphouse with associated features (RC-003). These resources were documented and evaluated using CRHR eligibility criteria. RC-001, RC-002, and RC-003 were evaluated and found not eligible for listing in the CRHR under any criteria. The resources are also not currently listed in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), and have not been identified as significant in a historical resources survey, as defined in PRC 5024.1(g). Therefore, RC-001, RC-002, and RC-003 are not considered Historical Resources as defined by CEQA [CCR Title 14, § 15064.5(a)]. No impact to historical resources would occur.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				

Archaeological resources are defined as the physical remains of past human activities and can be either prehistorical or historical in origin. Archaeological sites are locations that contain evidence of human activity. In general, an archaeological site is defined by a significant accumulation, or presence, of one or more of the following: food remains, waste from the manufacturing of tools, concentrations or alignments of stones, modification of rock surfaces, unusual discoloration or accumulation of soil, or human skeletal remains.

The records search revealed that 11 pre-contact resources, 17 historic-period resources, and one multicomponent resource are located within one mile of the Project Area. Surface sediments within the Project Area consist of late Pleistocene older surficial sediments, and a lesser amount of mid-Holocene surficial sediments. Of these, Holocene sediments are considered most likely to contain subsurface cultural deposits. Due to the presence of sediments contemporaneous with human occupation of the region, the presence of an intermittent stream passing through the Project Area in the past, and the presence of previously recorded pre-contact resources in the surrounding area, the potential for subsurface resources is considered moderate. However, there always remains a potential for ground-

disturbing activities to expose previously unrecorded cultural resources. Implementation of mitigation measure **CUL-1** would ensure that impacts to unanticipated archaeological discoveries are less than significant.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

No human remains or dedicated cemeteries were identified during the background research, field survey, and property significance evaluation. However, compliance with California Health and Safety Code Section 7050.5 governing the discovery, notification, disposition and treatment of discovered human remains and related grave goods would be adhered to during Project construction. The discovery of human remains would require handling in accordance with PRC 5097.98, which states that in the event that human remains are discovered during construction, construction activity shall be halted and the area shall be protected until consultation and treatment can occur as prescribed by law. In the unexpected event that human remains are unearthed during construction or demolition activities, implementation of mitigation measure **CUL-1** would ensure that impacts to unanticipated human remains are less than significant.

# 4.5.3 Mitigation Measures

- CUL-1: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for pre-contact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
  - If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
  - If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the County of San Bernardino and the applicable landowner. The agency shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a)

of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

# 4.6 Energy

### 4.6.1 Environmental Setting

## 4.6.1.1 Electricity/Natural Gas Services

Southern California Edison provides electrical services to Chino Hills through State-regulated public utility contracts. Southern California Edison, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,000 square miles.

The Southern California Gas Company provides natural gas services to the Project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

### 4.6.1.2 Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption associated with all residential uses in San Bernardino County from 2014 to 2018 is shown in Table 4.6-1. As indicated, the demand has increased since 2014.

Table 4.6-1. Residential Electricity Consum	dential Electricity Consumption in San Bernardino County 2014-2018	
Year	Residential Electricity Consumption (kWh)	
2018	5,443,731,723	
2017	5,409,197,320	
2016	4,997,544,199	
2015	4,953,489,541	
2014	4,766,204,869	

Source: ECDMS 2019 [http://www.ecdms.energy.ca.gov/]

The natural gas consumption associated with all non-residential uses in San Bernardino County from 2014 to 2018 is shown in Table 4.6-2. As indicated, the demand has increased since 2014.

Table 4.6-2. Residential Natural Gas Consu	Imption in San Bernardino County 2014-2018
Year	Residential Natural Gas Consumption (therms)
2018	231,468,146
2017	235,261,401
2016	234,628,679
2015	223,939,116
2014	213,697,168

Source: ECDMS 2019 [http://www.ecdms.energy.ca.gov/]

Automotive fuel consumption in San Bernardino County from 2015 to 2019 is shown in Table 4.6-3. As shown, automotive fuel consumption has remained constant in the county since 2015.

le 4.6-3. Automotive Fuel Consumption in San Bernardino County 2015–2019	
Year	Automotive Fuel Consumption (gallons)
2019	3,334,922,526
2018	3,385,160,075
2017	3,427,137,695
2016	3,469,323,122
2015	3,336,730,022

Table 4.6-3. Automotive Fuel Consumption in San Bernardino County 2015–2019			
Year	Automotive Fuel Consumption (gallons)		

Source: California Air Resources Board (CARB) 2019

# 4.6.2 Energy (VI) Environmental Checklist and Discussion

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			$\boxtimes$	

The impact analysis focuses on the four sources of energy that are relevant to the proposed Project: electricity, natural gas, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity and natural gas estimated to be consumed by the Project is quantified and compared to that consumed by residential land uses in San Bernardino County. Similarly, the amount of fuel necessary for Project construction and operations is calculated and compared to that consumed in San Bernardino County.

The analysis of electricity gas usage is based on California Emissions Estimator Model (CalEEMod) modeling conducted by ECORP Consulting (see Appendix D), which quantifies energy use for Project operations. The amount of operational automotive fuel use was estimated using the CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in San Bernardino County. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the proposed Project is summarized in Table 4.6-4.

Table 4.6-4. Proposed Project Energy and Fuel Consumption					
Energy Type	Annual Energy Consumption	Percentage Increase Countywide			
Electricity Consumption <sup>1</sup>	1,803,943 kWh	0.03 percent			
Natural Gas Consumption <sup>1</sup>	58,370 therms	0.02 percent			
Automotive Fuel Consumption					

Table 4.6-4. Proposed Project Energy and Fuel Consumption					
Energy Type	Percentage Increase Countywide				
Project Construction <sup>2</sup>	1,115,271 gallons	0.03 percent			
• Project Operations <sup>3</sup>	258,675 gallons	0.01 percent			

Source: <sup>1</sup>ECORP Consulting 2020; 2Climate Registry 2016; 3EMFAC2017 (CARB 2017)

Notes: The Project increases in electricity and natural gas consumption are compared with all of the residential buildings in the respective service provider's service area in 2018, the latest data available. The Project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2019, the most recent full year of data.

As shown in Table 4.6-4, the increase in electricity usage as a result of the Project would constitute an approximate 0.03 percent increase in the typical annual electricity consumption attributable to residential uses in San Bernardino County. However, this is a conservative estimate. In May of 2018 the California Energy Commission (CEC) adopted the 2019 California Energy Code that applies to all project construction after January 1, 2020. The 2019 Code is designed to move the state closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install solar photovoltaic panels sized to offset all the electricity needs of each residential unit (CCR, Title 24, Part 6, Section 150.1(c)4). The Code is enforced through the local plan check and building permit processes. Additionally, Project increases in natural gas usage, 0.02 percent, across the County would also be negligible. For these reasons, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

As further indicated in Table 4.6-4, the Project's gasoline fuel consumption during the four-year construction period is estimated to be 1,122,759 gallons of fuel, which would increase the annual gasoline fuel use in the county by 0.03 percent. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would conserve the use of their supplies to minimize costs to their profits. Additionally, construction equipment fleet turnover and increasingly stringent State and federal regulations on engine efficiency combined with State regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

Lastly, as indicated in Table 4.6-4, Project operation is estimated to consume approximately 258,675 gallons of automotive fuel per year, which would increase the annual countywide automotive fuel consumption by 0.01 percent. The amount of operational fuel use was estimated using CARB's EMFAC2017 computer program, which provides projections for typical daily fuel usage in San Bernardino County. This analysis conservatively assumes that all of the automobile trips projected to arrive at the Project during operations would be new to San Bernardino County. The Project would not result in any unusual characteristics that would result in excessive long-term operational automotive fuel consumption.

Fuel consumption associated with vehicle trips generated by the Project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

For these reasons, this impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

The Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. Relevant energy conservation plans specific to Chino Hills include the City's General Plan Housing Element, specifically Goal H-3 of this Element. The overarching goal of this element is to ensure that new housing in the City is sensitive to the natural environment by encouraging the use of energy conservation design and concepts. The Project would not conflict or obstruct any local or state plans for renewable energy or energy efficiency.

For these reasons, this impact would be less than significant.

# 4.6.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

## 4.7 Geology and Soils

### 4.7.1 Environmental Setting

A site-specific Geotechnical/Geologic Study was performed by Hilltop Geotechnical, Inc. (HGI) in September 2017 and is included in Appendix E. The results of the report are incorporated into the threshold analysis below.

## 4.7.1.1 Geomorphic Setting

The City is located in the eastern Puente Hills, which are at the northern end of the Peninsular Ranges geomorphic province and are bounded on the northwest by the San Gabriel Valley, on the northeast by the San Bernardino Valley, and on the south by the Santa Ana River Canyon and the Los Angeles Basin (Chino Hills 2020). The Peninsular Ranges province is characterized by a series of northwest to southeast-oriented valleys, hills, and mountains separated by faults associated with, and parallel to, the San Andreas Fault system. Elevations vary from approximately 500 feet to 1,600 feet above sea level.

Fine-grained older alluvial deposits (early to middle Pleistocene) generally blanket a good portion of the site and likely formed as flood plain deposits from several local hills extending from the eroding Chino

Hills. The site has likely received more recent alluvial material from neighboring stream channels that continue to erode Chino Hills today (HGI 2017; Appendix E).

# 4.7.1.2 Regional Seismicity and Fault Zones

An "active fault," according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive."

Surface rupture represents the primary potential hazard to structures built in an active fault zone. The Chino Fault and Whittier Fault are located in and near the City and are classified as "active." According to the Geotechnical Geologic Study conducted by HGI, the site is not located within a zone of mandatory study for active faulting. Although the Project site is located at the southern portion of the Chino Fault, evidence strongly suggests that the fault dies out on site (HGI 2017; Appendix E).

The City of Chino Hills' General Plan Safety Element identifies effective ways to assess the significant natural and manmade hazards that may affect the City and its inhabitants and reduce the City's vulnerability to these hazards. According to Figure 5-3 Liquefaction Susceptibility Seismically-Induced Landslide Hazard Zones in the General Plan, the Project site is not located in a Fault Zone (Chino Hills 2015a).

### 4.7.1.3 Soils

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the site consists of Chualar clay loam, 2 to 9 percent slopes; Chualar clay loam, 9 to 15 percent slopes; and Sorrento clay loam, 0 to 2 percent slopes, warm MAAT, MLRA 19 (NRCS 2019). Generally, the site is underlain by fill material (af), colluvium (Col), young alluvial fan deposits (Qyf3), very old alluvial fan deposits (Qvof), and Puente Formation, Yorba Member bedrock (Tpy) (HGI 2017; Appendix E).

## 4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Woı	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii) Strong seismic ground shaking?			$\boxtimes$	
iii) Seismic-related ground failure, including liquefaction?			$\boxtimes$	
iv) Landslides?				

i) HGI conducted a site-specific fault study that is included in Appendix E. Two fault systems local to the Chino Hills area that generally parallel the San Andreas Fault system include the Chino Fault and the Elsinore Fault, Whittier segment. According to HGI, a review of official maps delineating State of California earthquake fault zones indicated that the site is not located within a zone of mandatory study for fault zoning. However, a designated fault study zones ends immediately southeast of the project site. In addition, a residential property immediately south of the site reportedly indicated recent faulting activity. As a result, HGI conducted a site-specific faulting study to see if the fault extends onto the site and also determined its recent activity.

The faulting study found that the lack of evidence of recent faulting activity coupled with the regional interpretations of the Chino Fault ending south of the project site all support the idea that Chino Fault dies out onsite. Based on this, HGI concluded that the faulting observed onsite is greater than 11,000 years old. No mitigation is required.

- Please see Question a) Section i). The potential for ground shaking is discussed in terms of the percent probability of exceeding peak ground acceleration (% g) in the next 50 years. Probabilistic seismic hazard maps and data files prepared by the US Geological Survey (USGS) assign a 2% likelihood that a PGA of approximately 0.7528g will occur at this site within the next 50 years. Compliance with the structural standards contained in the California Building Code for residential projects would minimize risks to the public from strong seismic ground shaking and would ensure that impacts are less than significant. No mitigation is required.
- strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements. Liquefaction generally occurs in areas where the ground water table is less than 50 feet below the surface. The site is not located within a designated area as having a liquefaction potential per the San Bernardino County Land Use Plan, Geologic Hazards Overlay (San Bernardino County 2009). Liquefaction potential at the site is very low due to the dense and hard consistency of the underlying older alluvium and shallow bedrock material. As such, impacts from liquefaction would be less than significant.

Landslides refer to a wide variety of processes that result in the perceptible downward and outward movement of soil, rock, and vegetation under gravitational influence. Common names for landslide types include slump, rockslide, debris slide, lateral spreading, debris avalanche, earth flow, and soil creep. Landslides may be triggered by both natural- and human-induced changes in the environment resulting in slope instability. According to the Chino Hills General Plan Safety Element Figure 5-5 Landslide Susceptibility, the site is located in a Marginally Susceptible Area (Chino Hills 2015a). Due to the relatively flat-lying to moderately sloping nature of the site, landslides or debris flows should not be considered to be a geologic constraint at this site. Field reconnaissance did not disclose the presence of older existing landslides, and seismic induced landslides is considered to be low (HGI 2017; Appendix E). A less than significant impact would occur.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in substantial soil erosion or the loss of topsoil?				

Artificial fill is present at various locations on the site, as well as two drainage locations. The majority of the fill is located along the southern border of the site in a large stockpile that is described to be import materials (HGI 2017; Appendix E). The peninsula extending into the lake is also believed to be artificial fill. Undocumented fill is present on the northern portion of the site generally along the lake outline around the entire site. In the center south portion of the site, fill was placed in an inlet where Lake Los Serranos used to flow. The Project site ranges in elevation from approximately 626 to 670 feet above mean sea level (MSL) with an average lake water surface elevation of 642.5 feet above MSL. Project grading is designed to adapt to the existing topography and to maintain the existing drainage patterns. Project earthwork would include approximately 230,000 cubic yards (cy) of cut and 171,230 cy of fill.

All excavation, grading, and construction activities would be conducted according to the California Building Code 2019 Edition Volumes 1 and 2 and Chino Hills Municipal Code Chapter 15.04 – California Construction Codes Adopted (Chino Hills 2020). The Project will be required to comply with the National Pollutant Discharge Elimination System (NPDES) standards to ensure that pollutants are not discharged in the storm drain system. The applicant has submitted a preliminary Water Quality Management Plan (WQMP) that incorporates the foregoing water quality treatment features and low impact development (LID) site design, source control and treatment Best Management Practices to address the NPDES requirements as part of the review process. This plan is intended to bring the Project into compliance with San Bernardino County's Municipal Separate Storm Sewer System Ordinance and the Statewide NPDES. Examples of construction phase Best Management Practices (BMPs) implemented with the SWPPP include sandbags, silt fences, and detention basins. Prior to the issuance of building permits, a final WQMP will have to be submitted by the applicant and approved by the City's Engineering Division, and strict adherence to the program will be required.

Implementation of the SWPPP, including the use of stormwater quality BMPs, would prevent erosion of soil from stormwater runoff during Project construction (see Hydrology and Water Quality: Section IX of this Environmental Checklist). Once construction is completed, soils would be stabilized and monitored according to the SWPPP until a Notice of Termination for the NPDES construction permit is filed with the RWQCB. Consequently, the proposed Project would not result in substantial erosion and/or unstable earth conditions from Project construction or operation. For these reasons, erosion-related impacts are considered to be less than significant. No mitigation is required.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onor off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				

Lateral spreading is the horizontal movement or spreading of soil toward an open face, such as a streambank, the open side of fill embankments, or the sides of levees. The potential for failure from lateral spreading is highest in areas where there is a high groundwater table, where there are relatively soft and recent alluvial deposits, and where creek banks are relatively high. The lateral spread potential of the subject site is not considered to be a geologic hazard for the proposed structures due to the shallow depth of bedrock (HGI 2017; Appendix E). No impact would occur.

Land surface subsidence can be induced by both natural and human phenomena. Natural phenomena include subsidence resulting from tectonic deformations and seismically induced settlements, soil subsidence from consolidation, hydro compaction, rapid sedimentation subsidence from oxidation or dewatering of organic-rich soils, and subsidence related to subsurface cavities. Subsidence related to human activity includes subsurface fluid or sediment withdrawal. Pumping of water for residential, commercial, and agricultural uses from subsurface water tables causes the majority of the identified subsidence in the U.S. Based upon the results of the site-specific geotechnical investigation, the site is underlain at depth by dense and hard consolidated deposits that should not be prone to a significant degree of seismic settlement. Therefore, the Project would have no impact in this area.

As previously mentioned, the San Bernardino County General Plan identifies areas that are considered susceptible to liquefaction and landslides (San Bernardino County 2009). According to the Geologic Hazards Overlay map, the Project site is not located in an area considered to be susceptible to liquefaction or landslides. No impact would occur.

Wou	ld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			$\boxtimes$	

Expansive soils can shrink and swell with drying and wetting. The shrink-swell potential of expansive soils can result in differential movement beneath foundations. According to the site-specific Geotechnical/Geologic Study performed by HGI, the near-surface earth materials on the site exhibit expansion potential (HGI 2017; Appendix E).

The proposed Project would be required to comply with California Building Code (CBC) requirements related to expansive soils. The Project's foundation and structural design would be required to incorporate measures prescribed in the CBC to address these design considerations and minimize related project impacts. Appropriate construction plans would be reviewed by the City's Building Official for consistency with current building codes and implementation of the recommendations contained in the project's geotechnical study. The geotechnical study includes recommendations for a deepened foundation system with presaturation under the slab (see Appendix E). Thus, with implementation of standard design measures required in the CBC to address expansive soils and inclusion of the recommendations contained in the Geotechnical/Geologic Study, impacts would be less than significant.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?				

The Project does not propose the use of septic tanks. Structures would be connected to the existing sewer system for disposal and treatment of wastewater. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

In the northern-most portion of the proposed project area there are surficial deposits of younger Quaternary Alluvium, derived as alluvial fan deposits from the Puente Hills immediately to the west. These younger Quaternary deposits usually do not contain significant vertebrate fossils in the uppermost layers (LACNHM 10/25/19; Appendix E). Therefore, shallow excavations in the surficial younger Quaternary Alluvium exposed in the northern-most portion of the site probably would not encounter any significant vertebrate fossils. Although no paleontological resources are known to exist on site, there is a possibility that paleontological resources exist at sub-surface levels on the project site and may be uncovered during grading and excavation activities. Deeper excavations that extend down into older Quaternary deposits, as well as any excavations in the older Quaternary deposits exposed in almost all of the Project area, may uncover significant vertebrate fossil remains. Implementation of mitigation measure **GEO-1** will ensure that if any such resources are found during construction of the Project, they would be handled according to the proper regulations and any potential impacts would be reduced to less than significant levels.

## 4.7.3 Mitigation Measures

GEO-1: Unanticipated Discovery – Paleontological Resource. If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the City and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g. fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

### 4.8 Greenhouse Gas Emissions

### 4.8.1 Environmental Setting

Greenhouse Gas (GHG) emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH<sub>4</sub> traps over 25 times more heat per molecule than CO<sub>2</sub>, and N<sub>2</sub>O absorbs 298 times more heat per molecule than CO<sub>2</sub>. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO<sub>2</sub>e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO<sub>2</sub> were being emitted.

The local air quality agency regulating the SoCAB is the SCAQMD, the regional air pollution control officer for the basin. To provide guidance to local lead agencies on determining significance for GHG emissions

in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold Working Group. Members of the working group included government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. The SCAQMD *Draft AQMD Staff CEQA GHG Significance Thresholds* guidance document, which builds on the previous guidance prepared by the CAPCOA, explored various approaches for establishing a significance threshold for GHG emissions and was described as a "work in progress" of efforts to date. However, the draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. In December 2008, the SCAQMD adopted an interim 10,000 metric tons of CO<sub>2</sub>e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons of CO<sub>2</sub>e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 metric tons of CO<sub>2</sub>e per year), commercial projects (1,400 metric tons of CO<sub>2</sub>e per year), and mixed-use projects (3,000 metric tons of CO<sub>2</sub>e per year). Under option 2, a single numerical screening threshold of 3,000 metric tons of CO<sub>2</sub>e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 metric tons of CO<sub>2</sub>e per service population for project level analyses and 6.6 metric tons of CO<sub>2</sub>e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.
- Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels. As demonstrated below, Tier 5 is not necessary for the Proposed Project.

The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board.

These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the SoCAB, industry groups, and environmental and professional organizations. These thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed land use project are significant.

# 4.8.1.1 Determining Significance

The Appendix G thresholds of the CEQA Guidelines for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's greenhouse gas emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

- 1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
- 2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- 3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA

Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

First, the calculated emissions attributable to the proposed Project are quantified using the latest version of the CalEEMod emissions modeling software and compared to the SCAQMD screening level numeric bright-line threshold of 3,000 metric tons of CO<sub>2</sub>e annually consistent with Tier 3 of the SCAMQD *Draft AQMD Staff CEQA GHG Significance Thresholds*. If it is determined that the proposed Project is estimated to exceed this screening threshold, it will then be compared to the SCAQMD-recommended efficiency-based threshold of 4.8 metric tons of CO<sub>2</sub>e per service population per year in 2020, and 3.0 metric tons of CO<sub>2</sub>e per service population per year in 2020, and 3.0 metric tons of CO<sub>2</sub>e per service population per year in 2035 consistent with Tier 4 of the SCAQMD *Draft AQMD Staff CEQA GHG Significance Thresholds*. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions.

The significance of the Project's GHG emissions is also evaluated by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions, consistent with SCAQMD *Draft AQMD Staff CEQA GHG Significance Thresholds* Tier 2 and CEQA Guidelines Section 15064.4(b)(2). Specifically, as demonstrated below the Project was assessed by ECORP Consulting for consistency with regulations or requirements adopted by the 2008 Climate Change Scoping Plan and subsequent updates. Additionally, as shown in Table 4.8-5 below the Project was assessed for consistency with the GHG-reducing provisions contained in the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy),which establishes an overall GHG target for the Project region consistent with both

the target date of Assembly Bill (AB) 32 (2020) and the post-2020 GHG reduction goals of Senate Bill (SB) 32.

## 4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				

#### 4.8.2.1 Construction-Generated Greenhouse Gas Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project.

As shown in Table 4.8-1, Project construction would result in the generation of approximately 11,315 metric tons of  $CO_2$ e over the course of construction (not per year). Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions		
Emissions Source	CO₂e (Metric Tons/ Year)	
2022 Construction	835	
2023 Construction	3,068	
2024 Construction	2,713	
2025 Construction	2,535	
2026 Construction	2,164	
Total Emissions	11,315	

Source: Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

Notes: Note: Emissions estimates for Project site construction account for the cut of 230,000 cubic yards of soil, fill of 171,230 cubic yards of soil and demolition of 7 tons of building material. Construction emissions were modeled to account for construction beginning in the year 2022. Actual construction of the Project site would be dictated by several regulatory and market forces. As such, if construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover.

### 4.8.2.2 Operational-Related Greenhouse Gas Emissions

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Other long-term operational GHG emissions attributable to the Project are identified in Table 4.8-2.

Table 4.8-2. Operational-Related GHG Emissions			
Emissions Source	CO <sup>2</sup> e (Metric Tons/Year)		
Construction Emissions (amortized over the 30-year life of the Project)	377		
Area Source Emissions	6		
Energy Source Emissions	313		
Mobile Source Emissions	2,495		
Solid Waste Emissions	135		
Water Emissions	120		
Total Emissions	3,446		

Source: CalEEMod version 2016.3.2. Refer to Attachment B for Model Data Outputs.

As shown in Table 4.8-2, Project operations would result in the generation of approximately 3,466 metric tons of  $CO_2e$  annually.

As shown in Table 4.8-2, operational-generated emissions would exceed the SCAQMD's screening level numeric bright-line threshold of 3,000 metric tons of CO<sub>2</sub>e annually under option 2, but not the separate screening thresholds proposed for residential projects of 3,500 metric tons of CO2e per year under option 1. Under option 2, therefore, as previously stated, since it is determined that the proposed Project is estimated to exceed this screening threshold, it is then be compared to the SCAQMD-recommended efficiency-based threshold of 4.8 metric tons of CO<sub>2</sub>e per Project service population (Project Population) per year by 2020, and 3.0 metric tons of CO₂e per Project service population per year in 2035. This SCAQMD Tier 4 threshold was developed to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions. The SCAQMD efficiency-based threshold describes an efficiency limit using "per service population." An advantage of the service population approach is its application to both residential land uses and employment-oriented land uses. The per capita or per service population metrics represent the rates of emissions needed to achieve a fair share of the state's emission reduction mandate. The use of "fair share" in this instance indicates the GHG efficiency level that, if applied statewide or to a defined geographic area, would meet the 2020 and post-2020 emissions targets. The intent of AB 32 and SB 32 is to accommodate population and economic growth in California, but do so in a way that achieves a lower rate of GHG emissions, as evidenced in the statement from CARB's Scoping Plan. If projects can achieve targeted rates of emissions per the sum of residents plus jobs (i.e., service population), California can accommodate expected population growth and achieve economic development objectives, while also abiding by AB 32's emissions target and future post-2020 targets.

The majority of population that would be visiting the Project would be residents that live on the Project site (Project Population), followed by a smaller number of employees (e.g., apartment managers, maintenance staff, and landscapers). The number of employees that would visit the site per day are unknown at this time, thus they are not included in this analysis. Per the State of California Department of

Finance (2019), the City of Chino Hills averages 3.37 person per household; thus, the service population attributable to the Project is 1,193 residents ( $3.37 \times 354 = 1,193$ ).

As shown in Table 4.8-3, dividing the GHG emissions for each time period yields a metric ton per service population ratio of 2.9.

Table 4.8-3. Greenhouse Gas Emissions per Service Population						
Per Capita Emissions	Project Emissions	Service Population Increase (Project Population)	Metric Tons of CO₂e/SP/ Year	SCAQMD Threshold	Exceed Threshold?	
Year 2020 Project Buildout	3,446	1,193	2.9	4.8	No	
Year 2035 Project Buildout	3,446	1,193	2.9	3.0	No	

Source: CalEEMod version 2016.3.2. Refer to Attachment C for Model Data Outputs.

As shown in Table 4.8-3, the proposed Project would not surpass the SCAQMD efficiency-based significance thresholds. SCAQMD thresholds were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. Compliance with such thresholds will be part of the solution to the cumulative GHG emissions problem, rather than hinder the state's ability to meet its goals of reduced statewide GHG emissions. This impact is less than significant.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

As previously described, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Specifically, the Project will first be assessed for consistency with regulations or requirements adopted by the 2008 Climate Change Scoping Plan and subsequent updates.

#### Consistency with CARB's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations. It does not provide recommendations for lead agencies to develop evidence-based numeric thresholds consistent with the Scoping Plan, the State's long-term GHG goals, and climate change science. Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-global warming potential (GWP) GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32 and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 4.8-4 highlights measures that have been, or will be, developed under the Scoping Plan and presents the Project's consistency with Scoping Plan measures. The Project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the Project.

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Tra	ansportatio	n Sector
Advanced Clean Cars	T-1	Consistent. The Project's residents would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	Consistent. Motor vehicles driven by the Project's residents would use compliant fuels.
Regional Transportation-Related GHG Targets	T-3	Consistent. The Project would result in a GHG per capita (emissions per resident) that is less than that projected for the region within the SCAG 2020-2045 RTP/SCS planning area.
Advanced Clean Transit	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
Last-Mile Delivery	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
Reduction in Vehicle Miles Traveled	N/A	Consistent. The Project would result in a GHG per capita that is less than that projected for the region within the SCAG 2020-2045 RTP/SCS planning area.

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Vehicle Efficiency Measure 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Not applicable. The Project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable. The Project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures  1. Port Drayage Trucks  2. Transport Refrigeration Units Cold Storage Prohibition  3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification  4. Goods Movement Systemwide Efficiency Improvements  5. Commercial Harbor Craft Maintenance and Design Efficiency  6. Clean Ships  7. Vessel Speed Reduction	T-6	Not applicable. The Project would not prevent CARB from implementing this measure.
<ul> <li>Heavy-Duty Vehicle GHG Emission Reduction</li> <li>Tractor-Trailer GHG Regulation</li> <li>Heavy-Duty GHG Standards for New Vehicle and Engines (Phase I)</li> </ul>	T-7	Not applicable. The Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed Project	T-8	Not applicable. The Project would not prevent CARB from implementing this measure.
Medium- and Heavy-Duty GHG Phase 2	N/A	Not applicable. The Project would not prevent CARB from implementing this measure.
High-Speed Rail	T-9	Not applicable. The Project would not prevent CARB from implementing this measure.
Electricit	y and Natu	ral Gas Sector
Energy Efficiency Measures (Electricity)	E-1	Consistent. The Project would be constructed in accordance with CalGreen and Title 24 building standards.
Energy Efficiency Measures (Natural Gas)	CR-1	Consistent. The Project would be constructed in accordance with CalGreen and Title 24 building standards.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Not applicable. The Project would not prevent CARB from implementing this measure
Combined Heat and Power	E-2	Not applicable. The Project would not prevent CARB from implementing this measure
Renewables Portfolio Standard (33% by 2020)	E-3	Not applicable. The Project would not prevent CARB from implementing this measure

Table 4.8-4. Project Consistency with Scoping Plan GHG Emission Reduction Strategies				
Scoping Plan Measure	Measure Number	Proposed Project Consistency		
Renewables Portfolio Standard (60% by 2030)	N/A	Not applicable. The Project would not prevent CARB from implementing this measure		
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Not applicable. The Project would not prevent CARB from implementing this measure		
	Water Se	ctor		
Water Use Efficiency	W-1	Consistent. The Project would be constructed in accordance with Cal Green and Title 24 building standards.		
Water Recycling	W-2	Not applicable. The Project would not prevent CARB from implementing this measure		
Water System Energy Efficiency	W-3	Not applicable. The Project would not prevent CARB from implementing this measure		
Reuse Urban Runoff	W-4	Not applicable. The Project would not prevent CARB from implementing this measure		
Renewable Energy Production	W-5	Not applicable. The Project would not prevent CARB from implementing this measure		
	Green Build	dings		
State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure		
Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Consistent. The Project would be constructed in accordance with Cal Green and Title 24 building standards.		
Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential, and Commercial Buildings	GB-1	Consistent. The Project would be constructed in accordance with Cal Green and Title 24 building standards. Additionally, the state is to increase the use of green building practices. The proposed Project would implement required green building strategies through existing regulation that requires the proposed Project to comply with various Cal Green requirements. The proposed Project includes sustainability design features that support the Green Building Strategy.		
Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. The Project would not prevent CARB from implementing this measure		
	Industry Se	ector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable. The Project would not prevent CARB from implementing this measure		
Oil and Gas Extraction GHG Emissions Reduction	I-2	Not applicable. The Project would not prevent CARB from implementing this measure		

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Reduce GHG Emissions by 20% in Oil Refinery Sector	N/A	Not applicable. The Project would not prevent CARB from implementing this measure
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable. The Project would not prevent CARB from implementing this measure
Refinery Flare Recovery Process Improvements	I-4	Not applicable. The Project would not prevent CARB from implementing this measure
Work with the Local Air Districts to Evaluate Amendments to Their Existing Leak Detection and Repair Rules for Industrial Facilities to Include Methane Leaks	I-5	Not applicable. The Project would not prevent CARB from implementing this measure
Recycling an	d Waste Ma	anagement Sector
Landfill Methane Control Measure	RW-1	Not applicable. The Project would not prevent CARB from implementing this measure
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable. The Project would not prevent CARB from implementing this measure
Mandatory Commercial Recycling	RW-3	Consistent. The Project would include recycling during both construction and operation consistent with the requirements of the Title 24 Building Standards
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure
Anaerobic/Aerobic Digestion	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure
Extended Producer Responsibility	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure
Environmentally Preferable Purchasing	RW-3	Not applicable. The Project would not prevent CARB from implementing this measure
	Forests Se	ctor
Sustainable Forest Target	F-1	Not applicable. The Project would not prevent CARB from implementing this measure
Motor Vehicle Air Condition Systems: Reduction of Refrigerant Emissions from Non- Professional Servicing	H-1	Not applicable. The Project would not prevent CARB from implementing this measure
SF <sub>6</sub> Limits in Non-Utility and Non- Semiconductor Applications	H-2	Not applicable. The Project would not prevent CARB from implementing this measure
Reduction of Perfluorocarbons (PFCs) in Semiconductor Manufacturing	H-3	Not applicable. The Project would not prevent CARB from implementing this measure
Limit High GWP Use in Consumer Products	H-4	Not applicable. The Project would not prevent CARB from implementing this measure
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Not applicable. The Project would not prevent CARB from implementing this measure

Table 4.8-4. Project Consistency with Scoping Plan GHG Emission Reduction Strategies				
Scoping Plan Measure	Measure Number	Proposed Project Consistency		
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable. The Project would not prevent CARB from implementing this measure		
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable. The Project would not prevent CARB from implementing this measure		
SF <sub>6</sub> Leak Reduction Gas Insulated Switchgear	H-6	Not applicable. The Project would not prevent CARB from implementing this measure		
40% Reduction in Methane and Hydrofluorocarbon (HFC) Emissions	N/A	Not applicable. The Project would not prevent CARB from implementing this measure		
50% Reduction in Black Carbon Emissions	N/A	Not applicable. The Project would not prevent CARB from implementing this measure		
A	griculture	Sector		
Methane Capture at Large Dairies	A-1	Not applicable. The Project would not prevent CARB from implementing this measure		

Based on the analysis in Table 4.8-4, the Project would be consistent with the applicable strategies and measures in the Scoping Plan.

Since the Project is consistent with the Scoping Plan, it would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in EO S-03-05 and SB 32. EO S-03-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. SB 32 establishes for a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40 percent below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory toward meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). With regard to the 2050 target for reducing GHG emissions to 80 percent below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and

to stay on track to reduce emissions to 80 percent below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB as indicated that the State is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and EO S-03-05. This is confirmed in the Second Update, which states (CARB 2017):

The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

As discussed previously, the Project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the State's trajectory toward future GHG reductions. In addition, since the specific path to compliance for the State in regard to the long-term goals will likely require development of technology or other changes that are not currently known or available, specific additional mitigation measures for the Project would be speculative and cannot be identified at this time. The Project's consistency would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and EO S-03-05, CARB has also made clear its legal interpretation is that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020 to meet SB 32's 40 percent reduction target by 2030 and EO S-03-05's 80 percent reduction target by 2050. This legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the State on its trajectory toward meeting these future GHG targets. The Project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 or impede the State's trajectory toward the previously described Statewide GHG reduction goals for 2030 or 2050.

#### Consistency with SCAG's 2020-2045 RTP/SCS

The Project is also assessed for consistency with the GHG-reducing provisions contained in the 2020-2045 RTP/SCS, which establishes an overall GHG target for the Project region consistent with post-2020 GHG reduction goals of SB 32. Chino Hills is a member city of the SCAG. SCAG's 2020-2045 RTP/SCS, adopted September 3, 2020, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. The RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for the year 2035 and establishes an overall GHG target for the region consistent with post-2020 statewide GHG reduction goals. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding. In addition, the RTP/SCS

is supported by a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal CAA requirements, preserve open space areas, improve public health and roadway safety, support the vital goods movement industry, and use resources more efficiently. The proposed Project's consistency with the RTP/SCS goals is analyzed in detail in Table 4.8-5.

SCAG Goals	Compliance with Goal
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	Not Applicable: This is not a project-specific policy and is therefore not applicable.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	Consistent: Improvements to the transportation network in Chino Hills are developed and maintained to meet the needs of local and regional transportation and to ensure efficient mobility. A number of regional and local plans and programs are used to guide development and maintenance of transportation networks, including but no limited to:  California Department of Transportation (Caltrans) Traff Impact Studies Guidelines Caltrans Highway Capacity Manual SCAG RTP/SCS
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	Consistent: All modes of transit in Chino Hills are required to follow safety standards set by corresponding regulator documents. Pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Chino Hills, County of San Bernardino) and regional agencies (e.g., SCAG, Caltrans). Roadways for motorists must follow safety standards established for the local and regional plans.
Goal 4: Preserve and ensure a sustainable regional transportation system.	Consistent: All new roadway developments and improvements to the existing transportation network mube assessed with some level of traffic analysis (e.g., traffic assessments, traffic impact studies) to determine how the developments would impact existing traffic capacities and to determine the needs for improving future traffic capacities.
Goal 5: Maximize the productivity of our transportation system.	Consistent: The local and regional transportation system would be improved and maintained to encourage efficiency and productivity. The City of Chino Hill's Public Works Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. The City also coordinates with regional transit providers, including Omnitrans, to bring transit services to the community.

SCAG Goals	Compliance with Goal
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (nonmotorized transportation, such as bicycling and walking).	Consistent: The reduction of energy use, improvement of air quality, and promotion of more environmentally sustainable development are encouraged through the development of alternative transportation methods, greer design techniques for buildings, and other energy-reducing techniques. For example, development projects are required to comply with the provisions of the California Building and Energy Efficiency Standards and the Green Building Standards Code.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	Not Applicable: This is not a project-specific policy and is therefore not applicable
Goal 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent: See response to RTP/SCS Goal 6.
Goal 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Consistent: The City of Chino Hills monitors existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. Other local and regional agencies (e.g., Caltrans, SCAG) work with the City to manage these systems. Security situations involving roadways and evacuations would be addressed in the County of San Bernardino emergency management protocols developed in accordance with the state and federal mandated emergency management regulations.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. As shown, the proposed Project would in no way conflict with the stated goals of the RTP/SCS; therefore, the proposed Project would not interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets outlined in the 2020-2045 RTP/SCS, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. Furthermore, the proposed Project is not regionally significant per CEQA Guidelines Section 15206 and as such, it would not conflict with the SCAG RTP/SCS targets since those targets were established and are applicable on a regional level.

Consistency with the San Bernardino Associated Governments' San Bernardino County Regional GHG Reduction Plan

The main goal in the San Bernardino County Regional GHG Reduction Plan, specific to Chino Hills, is to reduce GHG emissions to a level that is 20 percent below its projected 2020 emissions. The Chino Hills portion of the Reduction Plan identifies sources of GHG emissions within the City's boundaries, presents current and future emission estimates, identifies a GHG reduction target for future years, and presents strategies and actions to reduce emissions. The GHG reduction strategies in this Reduction Plan builds on

inventory results and key opportunities prioritized by the City staff and members of the public. The three local strategies to Chino Hills include the goal to install solar energy generation units on existing residences, the acquisition of *smart bus* technologies, and the implementation of SB X7-7, which requires that all water suppliers increase their water use efficiency. The Reduction Plan consists of strategies that identify steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the Chino Hills portion of the GHG Reduction Plan respond to the needs of development through achieving more efficient and sustainable use of resources.

All development in the City, including the Project, is required to adhere to all City-adopted policy provisions, including those contained in the Regional GHG Reduction Plan specific to Chino Hills. The City ensures all mandatory provisions of the plan are applicable to new development are incorporated into projects and their permits through development review and applications of conditions of approval as applicable.

The proposed Project would not conflict with an adopted plan, policy, or regulation pertaining to GHGs.

### 4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.9 Hazards and Hazardous Materials

# 4.9.1 Environmental Setting

A Phase 1 Environmental Site Assessment (ESA) was performed by Altec Testing & Engineering (Altec) on May 8, 2017, to observe current conditions throughout the project site (Appendix F). This Phase 1 ESA included a site visit and area reconnaissance, historical site use research, a review of previously prepared reports, a review of contaminated or potentially contaminated properties in the vicinity, and interviews. This assessment also included a review of available federal and state data reported by Environmental Data Resources (EDR), available regulatory agency environmental records, and available site history and records. No significant impacts to the site or properties in the vicinity of the site were observed (Altec 2017).

**Recognized Environmental Condition (REC)**. REC refers to the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: due to release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment.

**Controlled Recognized Environmental Condition (CREC)**. CREC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

**Historical Recognized Environmental Conditions (HREC).** HREC refers to a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.

According to the Phase 1 ESA, there is low likelihood of RECs or CRECs associated with the property, but one HREC was identified. This condition in the presence of hydrocarbon and volatile organic compounds in soil at two former drum storage areas on APN 1025-561-04. Forty 55-gallon drums of asphalt/bituminous materials and associated impacted soil were removed by Altec in 2014. Post excavation soil sampling was performed and showed that the detected contaminant concentrations in the remaining soil were below regulatory screening levels.

Although not a REC, HREC, or CREC, the presence of suspect asbestos-containing materials (ACMs), lead paint, and universal wastes was noted at the property; these materials require identification/testing and removal prior to demolition/grading. Suspect asbestos-containing materials (ACM) may be included in exterior stucco, drywall, plaster, roofing, flooring, and insulation. Sampling would be required to obtain demolition permits from the City of Chino Hills and the South Coast Air Quality Management District (SCAQMD). If such hazardous wastes are present and would be impacted by demolition work, removal or stabilization would occur. There is also an exposed asbestos-containing Transite pipe along Los Serranos Boulevard at the southern perimeter of the property. Any asbestos-containing Transite pipe materials encountered during grading would be removed by certified and licensed asbestos removal contractors as it is encountered.

#### 4.9.2 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			$\boxtimes$	

#### 4.9.2.1 Project Construction

Construction of the Project would involve the use of various products that contain materials classified as hazardous (e.g., solvents, adhesives and cements, certain paints, cleaning agents, and degreasers). Project construction would be required to comply with applicable building, health, fire, and safety codes. Hazardous materials would be used in varying amounts during construction of the project. Construction and maintenance activities would use hazardous materials such as fuels (gasoline and diesel), oils and lubricants, paints and paint thinners, glues, cleaners (which could include solvents and corrosives in addition to soaps and detergents), and possibly pesticides and herbicides.

The California Code of Regulations (CCR) Title 8 addresses workplace regulations involving the use, storage, and disposal of hazardous materials, and specific applications for construction workers. CCR Titles 22 and 26 set forth environmental health standards for hazardous materials management. California Health and Safety Code Chapter 6.95 sets forth enabling legislation for the application of CCR Titles 8, 22, and 26. Safety precautions for the prevention of fire hazards associated with the use and storage of hazardous materials are addressed in the Uniform Fire Code. Compliance with applicable federal, state, and local regulations including, but not limited to, CCR Titles 8 and 22, the Uniform Fire Code, and California Health and Safety Code Chapter 6.95 would ensure that the Project would not create a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous materials.

#### 4.9.2.2 Project Operation

Development of the proposed Project would result in uses associated with a multifamily apartment complex. It is likely that the Project would use small amounts of commercial cleaning materials, paints and solvents for building maintenance, and pesticides/herbicides for Project landscaping could be considered hazardous materials. However, an apartment complex, such as the proposed Project, would not use a hazardous material in a quantity great enough to cause significant hazard to the public or the environment. Nor would a project of this type, once operational, transport, or dispose of hazardous materials in an amount to cause significant hazard to the public or the environment.

#### 4.9.2.3 Conclusion

The use, storage, and transportation of hazardous materials are subject to local, state, and federal regulations, the intent of which is to minimize the public's risk of exposure. Based on the uses that would be part of the Project and the existing regulatory structure related to these materials, the proposed Project would not cause a threat to public safety during project construction or operation. Therefore, because the transport, use, storage, and disposal of hazardous materials pertaining to the Project would be relatively minor and subject to extensive regulatory oversight, this impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				

As discussed above, a Phase I ESA was performed for the proposed Project site by Altec in May 2017 (Appendix F). One HREC was identified. This condition in the presence of hydrocarbon and volatile organic compounds in soil at two former drum storage areas on APN 1025-561-04. Forty 55-gallon drums of

asphalt/bituminous materials and associated impacted soil were removed by Altec in 2014. Post excavation soil sampling was performed and showed that the detected contaminant concentrations in the remaining soil were below regulatory screening levels.

Construction and demolition activities associated with the proposed Project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions. For example, there is a possibility of accidental release of hazardous substances such as petroleum-based fuels or hydraulic fluid used for equipment. Additionally, the onsite buildings may contain ACMs, lead paint, and universal wastes. Compliance with mitigation measures **HAZ-1** and **HAZ-2** (See Section 4.9.3), along with standard construction and demolition practices, would ensure that any materials released are appropriately contained and remediated as required by local, state, and federal regulations. Impacts would be less than significant with mitigation incorporated.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			$\boxtimes$	

The closest schools to the Project site are Glenmeade Elementary School to the northwest and Chaparral Elementary School to the east. Both schools are located more than one-quarter mile away from the property. As stated above, there would be no hazardous materials, substances, or waste associated with project development other than those typically used for routine maintenance. Therefore, schools would not be exposed to hazardous materials, substances, or waste. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				

A review of the Department of Toxic Substances Control's Hazardous Waste and Substances List (Cortese List) indicated that the project site is not located on any identified hazardous materials sites (DTSC 2019). Additionally, a review of the State Water Resources Control Board's Leaking Underground Storage Tank (LUST) Geotracker database and the Environmental Protection Agency's (EPA) EnviroMapper indicated that there are no listed hazardous material sites within the project vicinity (SWRCB 2019; EPA 2019). No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				

The nearest airport to the Project site is Chino Airport, located approximately 3.5 miles to the east. The site is not addressed in the Chino Airport Land Use Plan. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				

The City of Chino Hills updated the Hazard Mitigation Plan in 2011. This plan seeks to reduce the loss of life, personal injury, and property damage that can result from a disaster through long- and short-term strategies. The Project would comply with the goals, objectives, and mitigation measures outlined in the HMP to reduce risks associated with natural and human-caused hazards.

All construction vehicles and equipment would be stationed in a designated area on-site within the Project site boundaries. The Project would require limited offsite improvements, and thus construction of new infrastructure (e.g. water lines or sewers) may require trenching or other limited localized activities which may cause traffic lane closures and traffic congestion delays. However, access along surrounding roadways would be maintained throughout Project construction activities.

A temporary road connection is proposed for the West Village (Phase 4) at the approximate location of the property's existing entry gate on Los Serranos Boulevard. The connection is proposed as an interim, emergency only, secondary ingress/egress and would be removed upon completion of Phase 6.

Upon completion, emergency access to the East Village would be available at one entryway on Ramona Avenue and a second entryway on Valle Vista Drive. One entryway would be provided for the West Village along Los Serranos Boulevard. There would be an interior 30' wide primary drive aisle which would run through the center and length of the Project connecting the neighborhoods and parking areas, allowing for fire access throughout the site. As such, impacts to emergency response and evacuation plans would be less than significant.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

The Project would construct 354 multifamily apartment units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure. The Project is not located in or near land designated with high fire hazard severity; the property is surrounded by urban development and is not in the vicinity of any large wildlife areas. Therefore, the Project would not expose people or structures to significant loss, injury, or death involving wildland fire. No impact would occur.

# 4.9.3 Mitigation Measures

- Prior to the demolition of any existing structures, the Project Applicant shall perform sampling for asbestos-containing materials (ACMs), lead paint, and universal wastes to obtain demolition permits from the City of Chino Hills and the South Coast Air Quality Management District (SCAQMD). Contractors would be required to use standard controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. If ACMs or lead paint are identified, they shall be removed in compliance with federal, state, and local regulations.
- **HAZ-2:** During Project grading, the applicant shall take measures to ensure that that the exposed asbestos-containing Transite pipe along Los Serranos Boulevard remains as undamaged as possible and is removed by certified and licensed asbestos removal contractors as it is encountered. Transite pipe is an asbestos-cement product which was used for both HVAC ducts and for chimney or flue material to vent gas-fired appliances.

# 4.10 Hydrology and Water Quality

#### 4.10.1 Environmental Setting

A Hydrology and Hydraulics Report was completed for the Project by Engineering Solutions in November 2017 (Appendix G). The hydrologic methodology used is per the San Bernardino County Hydrology Manual. The results of the report are summarized below and incorporated in the threshold analysis.

#### 4.10.1.1 Regional Hydrology

The City's watershed includes a system of streams, water courses, and ponds that run through the hills and usually lie at the bottom of canyons and drainage ravines. Runoff from the City generally drains east and south, toward Chino Creek and the Prado Flood Control Basin, and on to the Santa Ana River Basin. Canyons on the west side of the City, including Tonner Canyon, Carbon Canyon, Soquel Canyon, and Aliso

Canyon drain westward toward Los Angeles and Orange Counties. With the exception of Tonner Canyon, which drains into the San Gabriel River watershed, the remaining canyons drain into the lower reaches of the Santa Ana River Basin (Chino Hills 2020).

#### 4.10.1.2 Site Hydrology and On-Site Drainage

The subject property consists of all of APN 1025-561-04, 05 & 06, containing a total of 48.37 acres, located at Los Serranos Boulevard, Pipeline Avenue, and Ramona Avenue in the City of Chino Hills. The subject property is rural in nature with un-paved roads and sparse impervious coverage (existing impervious cover is less than 1% of on-site dry land watershed). The existing land use is primarily open space with miscellaneous existing structures including three residential structures; two are vacant and one residence is occupied. The property owner proposes to develop the property as a multi-family complex, which would increase the impervious cover to 55% of the on-site dry land watershed area (Appendix G).

Most of the watershed upstream from the Project is urban development, in a fully developed condition. The few remaining areas of significant contiguous open space do not comprise a large enough percentage of the watershed to significantly lower the area runoff factor from the single-family development category. Runoff from outside the Project boundaries enters from three locations:

**Watershed A** – the westernmost location, which enters the Project approximately 330 feet north of the intersection of Pipeline Avenue and Los Serranos Boulevard, is the uppermost reaches of Hickory Creek.

- Major entry point with a flow of approximately 1,125 cubic feet per second (cfs) in a hundred-year event, with a watershed of 493 acres. (Note: The City of Chino Hills Storm Drain Master Plan shows a 425-acre watershed and 739 cfs peak runoff)
- Enters the Property via a 12′x6′ box culvert under Pipeline Avenue flowing directly into Lake Los Serranos.
- The Project adds no runoff to this flow.

**Watershed B** - Enters the Project from the north side of Los Serranos Boulevard, roughly halfway between Montecito Drive and El Molino Boulevard.

- Approximately 35 cfs is discharged from a 36" storm drain constructed by the City of Chino Hills in 2015 (Note: City Storm Drain plans indicate a flow rate of 56 cfs)
- The storm drain collects runoff from the single-family neighborhood to the south and enters the property and extends north of the property line to a velocity reducing facility.
- From there, discharge flows approximately 400 feet to the lake via a natural channel with a concrete bottom constructed by the City of Chino Hills in 2015.
- The project adds approximately 24 cfs to the flow prior to joining the lake.

Watershed C - North of the intersection of El Molino, Valle Vista, and Country Club Drive.

- Runoff is discharged from two existing storm drain pipes almost directly into the lake.
- The total runoff from offsite at this location is approximately 111 cfs.
- The project does not add directly to this flow because the pipes discharge into the lake. However, watershed C adds approximately 40 cfs to the watershed runoff along the lake shore.

**Watershed D** – South and mostly west of the intersection of Ramona Avenue and Valle Vista.

- The off-site watershed does not contribute to the onsite runoff but joins the site runoff at the northeast corner of the Project.
- Unlike the remainder of the Project, in the existing condition approximately 8.5 acres does not flow to the lake, but instead flows towards the northeast corner of the site.
- In the developed condition, only approximately 5.3 acres of runoff will flow toward the northeast corner, with the remaining 3.2 acres diverted toward the lake.
- This runoff will be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed detention/retention-filtration basin. The prescribed low flows will be treated in the basin, while runoff exceeding the prescribed treatment rate will be discharged into a proposed 30" storm drain in Ramona Avenue. This basin will perform the function of removing pollutants. The storm drain will be designed to convey the 100-year developed condition runoff plus the existing off-site runoff to the existing master drainage culvert, where the channel crosses Ramona Avenue to the north.
- The estimated basin volume required to mitigate water quality is 0.25 AF, provided as shown on the conceptual grading plan.

To help prevent erosion and to maintain the integrity of the lake shoreline, between 2007 and 2009, native plants such as willow, cottonwood, sycamore, and alder root systems were planted to stabilize the banks. In addition, 12 – 24-inch rock was hand placed around the entire lake edge to create a "stone toe" which contains the 100-year storm flows and provides protection from wave action.

#### Existing Lake

The Chino Hills General Plan Safety Element (Figure 5-7) identifies Lake Los Serranos as a Zone A, 100-Year Flood Hazard Area (General Plan Safety Element). However, the lake was not intended as a flood control reservoir—it was originally constructed as a water supply primarily for agricultural purposes. The Greening Family has maintained the reservoir since the 1940's and, as a matter of practice, maintain the lake level at approximately 642.5. This allows approximately 2 feet of freeboard, which would act as a flood control measure to some extent. The lake level is maintained by the operation of a valve in a 36" drain pipe, which draws the water surface down following periods of excess runoff.

The existing spillway at elevation 644.3 at the north-easterly end of the lake is approximately 160 feet wide. It is a broad crested weir capable of discharging the peak runoff contributing to the lake at a depth of about 2 feet over the spillway. Therefore, the project developed condition runoff, plus the existing runoff would result in a peak water surface of 646.3, even if the lake were assumed to be at full capacity at the time of the storm. Discharge from the spillway is directed to the flood control channel at Circle Park Lane immediately north of the spillway. The channel was constructed to convey a peak flow based on a fully developed upstream condition which included the subject property, zoned for multi-family residential at the time. Engineering Solutions has confirmed that the Storm Drain Master Plan based the hydrology on this assumption (Appendix G).

#### 4.10.2 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				

## 4.10.2.1 Proposed Drainage and Water Quality

The majority of runoff from inside and outside the Project boundaries would be conveyed to the lake in much the same manner as the existing condition. The site runoff would be conveyed primarily by surface flow within parking areas and across open spaces toward the lake. However, the northeasterly portion of the Property is an exception to this condition. Approximately 7.85 acres do not flow toward the lake in the existing condition, but instead flow toward the northeast corner of the site. In the developed condition approximately 5.3 acres would flow toward the northeast corner and approximately 3.2 acres would flow toward the lake. Runoff flowing to the northeast corner would be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin. The prescribed low flows would be treated in the basin, while runoff exceeding the prescribed treatment rate would be discharged into a proposed storm drain within Ramona Avenue north to the County Flood Control District Channel. Additionally, runoff from the watersheds B and C would be diverted into water quality swales to be constructed by the Project, a condition which would reduce off-site urban contaminants prior to flowing into the lake.

The site runoff would be conveyed primarily by surface flow within parking areas and across open spaces toward the lake. A bio-swale/bio-trench would be located upstream from the proposed trail around the southerly perimeter of the lake. This would intercept the surface runoff so that urban runoff pollutants are captured and treated prior to discharge into the lake (*Figure 15. Water Quality Features*).

The following Project Design Features (PDF) will be implemented to meet water quality standards and minimize degradation of surface and groundwater quality:

- **PDF-1:** Offsite runoff into the Meadow and Cove Naturalized Creek areas will be diverted into water quality swales to be constructed by the Project, a condition which will help reduce offsite urban contaminants prior to flowing into the lake.
- **PDF-2:** A lake water aeration system is currently in place and shall be maintained to assist in improving the water quality of Lake Los Serranos.
- **PDF-3:** A pedestrian trail will be developed along the southern perimeter of the lake. Immediately upstream from the trail there will be a bio-swale/bio-trench to intercept the surface runoff so that urban runoff pollutants are captured prior to discharge into the lake.
- **PDF-4:** Runoff flowing to the northeast corner will be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin. The prescribed low flows will be treated in the basin, while runoff exceeding the prescribed treatment rate will be discharged into a proposed storm drain within Ramona Avenue north to the County Flood Control District Channel.
- PDF-5: Lake Management Program. Prior to issuance of any grading permits, the applicant shall prepare a Lake Management Program for Lake Los Serranos for City Engineer and Community Development Director approval. The Program will document current and historic lake management measures and provide a comprehensive program for management of the lake. Components of the Program shall include, but not be limited to the following:
  - Aeration System Design and Maintenance
  - Water Quality Monitoring
  - Erosion Control
  - Control of Algae and Aquatic Weeds
  - Aquatic Vegetation Restoration and Management
  - Public Education and Outreach to Rancho Cielito and Los Serranos Mobile Home Park residents.
  - Recommendations for additional enhancement efforts (Figure 16. Proposed Lake Re-Circulation System).
  - The owner of the lake (Proposed Parcel "4", Tentative Parcel Map 20343) shall be responsible for management of the Program and the lake's maintenance. The financial mechanism responsible for ensuring the lake's management shall be identified through the Program.

The Project will be required to comply with the National Pollutant Discharge Elimination System (NPDES) standards to ensure that pollutants are not discharged in the storm drain system. The applicant has submitted a preliminary Water Quality Management Plan (WQMP) that incorporates the foregoing water quality treatment features and low impact development (LID) site design, source control and treatment Best Management Practices to address the NPDES requirements as part of the review process. This plan is intended to satisfy the San Bernardino County's Municipal Separate Storm Sewer System Ordinance and the Statewide National Pollution Discharge Elimination System and the Statewide NPDES. Examples of construction phase Best Management Practices implemented with the SWPPP include sandbags, silt fences, and detention basins. Prior to the issuance of building permits, a final WQMP will have to be submitted by the applicant and approved by the City's Engineering Division, and strict adherence to the program will be required.

With implementation of the aforementioned PDFs and proposed lake water re-circulation system (Figure 16. Proposed Lake Re-Circulation System), the impact of discharges to the lake from existing offsite sources and onsite development would be reduced and lake water quality enhanced. To assure the long-term maintenance of lake water quality, PDF-5 will be implemented as a condition of approval.

With adherence to provisions of the NPDES, SWPPP, WQMP, implementation of Project Design Features PDF 1 through PDF 5 as listed above, no additional requirements are necessary. No violations of water quality standards or waste discharge requirements would occur and impacts to surface and ground water quality would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			$\boxtimes$	

The Sustainable Groundwater Management Act (SGMA) applies to all California Groundwater Basins and requires that high-and medium-priority groundwater basins form Groundwater Sustainability Agencies and be managed in accordance with locally developed Groundwater Sustainability Plans or Alternative Plans (DWR 2019). The proposed Project falls within the Chino Groundwater Basin, Basin 8-002.01. The basin covers 153,762. acres (DWR 2019). The basin is prioritized in the Very Low priority category based on the consideration of the eight components required in Water Code Section 10933(b) (DWR 2019). Per Water Code section 10720.8(a)(4), the Sustainable Groundwater Management Act does not apply to the Chino Groundwater Basin. As a result, the groundwater basin is not required to develop a sustainable groundwater management plan at this time. Portions of the Chino Basin have been adjudicated since 1978 (Chino Basin Watermaster 2020).

In the developed condition, the majority of runoff from inside and outside the Project boundaries would be conveyed to the lake in much the same manner as the existing condition. There will be an increase in impervious surfaces as a result of the Project, thereby decreasing the absorption rates for ground water. The RM-1 Zoning District allows a maximum lot coverage of 55% of the project site. The project proposes approximately 52% site coverage with impervious surfaces (buildings, parking and other paved areas), which is within the 55% threshold and is not considered significant. Much of the site area would consist of landscaping that can absorb precipitation and contribute to groundwater recharge. As described in the City's General Plan, since only a small portion of the Chino Basin extends into lowlands along the eastern periphery of the City, future development in the City would have little or no direct effect on the groundwater aquifer that comprises the Chino Basin. Impacts to groundwater supplies will be consistent with General Plan build-out projections and would not impede the sustainable groundwater management of the basin. Impacts would be less than significant.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
	<ul> <li>result in substantial erosion or siltation on- or off-site;</li> </ul>			$\boxtimes$	
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</li> </ul>			$\boxtimes$	
	iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			$\boxtimes$	
	iv) impede or redirect flood flows?				

i), ii) See Response a) above. The subject property is rural in nature with unpaved roads and sparse impervious coverage comprising less than 1% of onsite dry land watershed (HGI 2017). The Project would generally maintain the existing drainage patterns through the site. With the introduction of impervious surfaces site runoff would be conveyed primarily by surface flow within parking areas and across open spaces toward the lake. A bio-swale/bio-trench would be located upstream from the proposed trail around the southerly perimeter of the lake. This would intercept the surface runoff so that urban runoff pollutants are captured and treated prior to discharge into the lake. To help prevent erosion and to maintain the integrity of the lake shoreline, native plants such as willow, cottonwood, sycamore, and alder root systems were planted over ten years ago to stabilize the banks. In addition, 12 – 24-inch rock was hand placed around the entire lake edge to create a "stone toe" which contains the 100-year storm flows and provides protection from wave action. Runoff flowing to the northeast corner will be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin.

Construction phase Best Management Practices will be implemented with the SWPPP to include sandbags, silt fences, and detention for erosion and sedimentation control. The Project would not result in substantial erosion or siltation on- or off-site. The rate or amount of surface runoff would not increase in a manner which would result in flooding on- or offsite. Impacts would be less than significant.

- iii) In its developed condition, the Project would contribute additional peak flow runoff to Lake Los Serranos. The existing dam spillway at elevation 644.3 at the north-easterly end of the lake is capable of discharging the peak runoff contributing to the lake at a depth of about 2 feet over the spillway. The project developed condition runoff, plus the existing runoff would result in a peak water surface of 646.3, even if the lake were assumed to be at full capacity at the time of the storm. Discharge from the spillway is directed to the flood control channel at Circle Park Lane immediately north of the spillway. The channel was constructed to convey a peak flow based on a fully developed upstream condition which included the subject property, zoned for multi-family residential at the time (HGI 2017). Project water quality treatment features, including the East Cove Naturalized Creek, Meadow Naturalized Creek, lake perimeter trail bio-swale/bio-trench, and lake water re-circulation system will intercept and treat runoff to the lake from offsite and onsite sources to remove sources of polluted runoff and maintain lake water quality (Figure 16. Proposed Lake Re-Circulation System). Runoff flowing to the northeast corner will be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin. The Project would not contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts would be less than significant.
- iv) See prior Response 4.10.2 a). The general drainage pattern for offsite and onsite flows to and through the Project site to the lake would be maintained. The dry land watershed portion of the Project site is not included within a 100-Year Flood Hazard Area. Project development would not substantially impede or redirect flood flows. Impacts would be less than significant.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				

The dry land portion of the Project site is not within a flooding and inundation hazard area according to the General Plan Safety Element Figure 5-7 – Flooding and Inundation Zones (Chino Hills 2015a). The Department of Dams Division of Water Resources has jurisdiction of the dam at Lake Los Serranos, an earth filled concrete faced dam for water storage and irrigation built in the early 1900's and perhaps as early as 1880 according to old maps. The dam is inspected annually by the Department of Dams Division of Water Resources and the floodgate opened to confirm operation. The proposed Project would not alter the dam structure or contribute to any risk of release of pollutants due to inundation.

A hazardous seiche is an occasional and sudden oscillation of the water of a lake, bay or estuary producing fluctuations in the water level and caused by wind, earthquakes, or other phenomena. Lake Los Serranos is identified as a large water body where inundation of flood waters could potentially occur if subject to seiche conditions (General Plan EIR 2015). As described previously, the Lake Los Serranos shoreline has been reinforced with hand placed rock around the entire lake edge to create a "stone toe"

which contains the 100-year storm flows and provides protection from wave action potentially caused by a seiche. The dry land portion of the Project site is not within a seiche zone and no risk of release of pollutants due to a seiche would occur.

The Pacific Ocean is located approximately 30 miles west of the project site; consequently, there is no potential for the project site to be inundated by a tsunami. Thus, implementation of the Project would not risk release of pollutants due to project inundation from flooding, tsunami or seiche. No impact would occur.

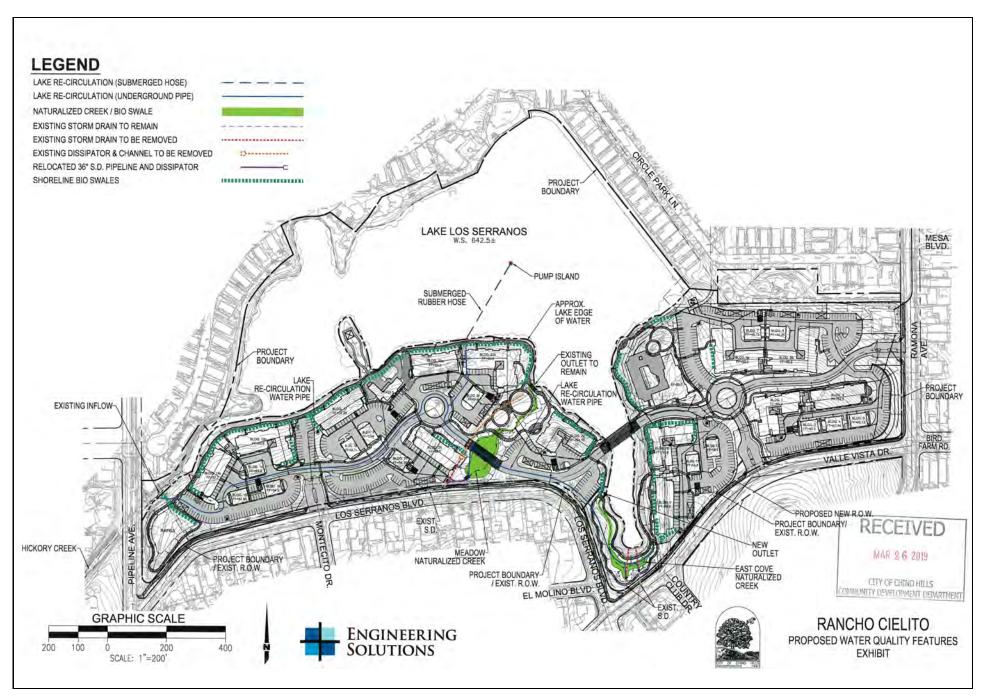
Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			$\boxtimes$	

See previous Response 4.10.2 a). The Project will be required to comply with the National Pollutant Discharge Elimination System (NPDES) standards to ensure that pollutants are not discharged in the storm drain system. The applicant has submitted a preliminary Water Quality Management Plan (WQMP) that incorporates water quality treatment features and low impact development (LID) site design, source control and treatment Best Management Practices to address the NPDES requirements as part of the review process. This plan is intended to satisfy the San Bernardino County's Municipal Separate Storm Sewer System Ordinance and the Statewide National Pollution Discharge Elimination System and the Statewide NPDES. Thus, the Project would not conflict with implementation of an applicable water quality control plan.

The Project is located within the larger Chino Basin, a groundwater basin that underlies the upper portion of the Santa Ana River watershed area. The City extracts groundwater from the Chino Groundwater Basin using its own wells that are located within the City of Chino, the adjudicated basin limits groundwater pumping to safe yield amounts (safe yield based upon calculation of rate of groundwater replenishment). As the Project is consistent with the City of Chino Hills General Plan, and the City's water supply projections that indicate there are sufficient water supplies to serve the project within established safe yield amounts, the Project would not conflict with sustainability objectives of a groundwater management plan (Chino Hills 2020). Impacts would be less than significant.

#### 4.10.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.





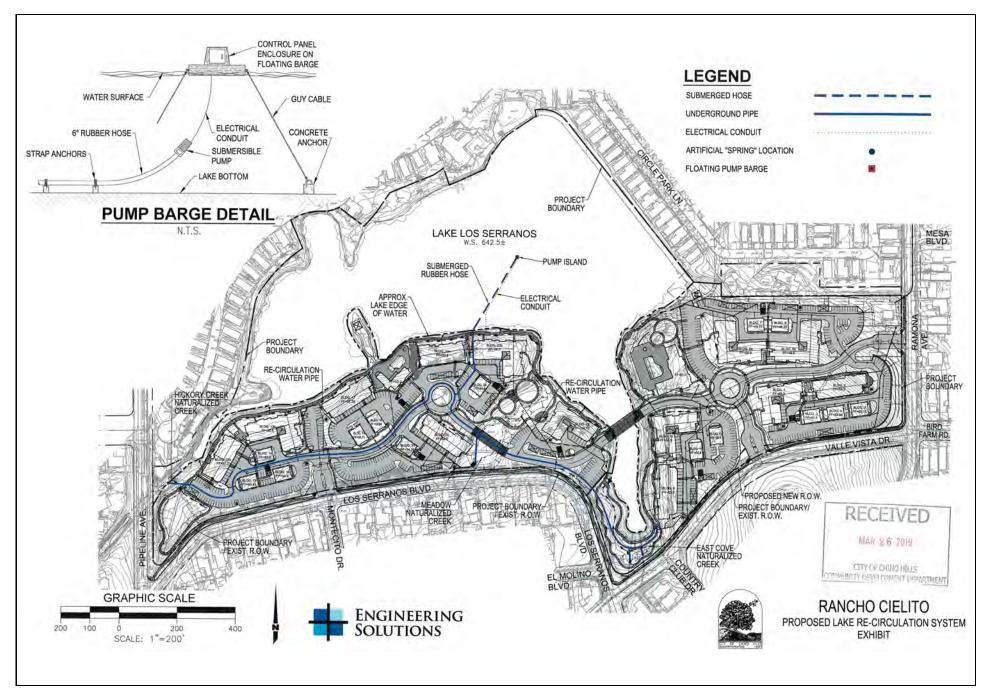




Figure 16. Proposed Lake Re-Circulation 2019-194 Chino Hills Rancho Cielito MND and Tech Studies

# 4.11 Land Use and Planning

### 4.11.1 Environmental Setting

The City of Chino Hills is located in the southwest corner of San Bernardino County and immediately adjacent to Orange, Riverside, and Los Angeles Counties (Figure 1. Project Vicinity). The City encompasses 46 square miles in the rolling hills and is located at the juncture of Los Angeles, Orange, and Riverside Counties. Chino Hills shares boundaries with the cities of Chino, Pomona, Brea, Diamond Bar, and Corona. The Project site is generally located north of Los Serranos Boulevard/Valle Vista Drive and south of the Lake Los Serranos Club (*Figure 2*). The project site is located on 29.50 acres of dry land and 18.87 acres of water surface area, totaling approximately 48.37 acres. The Project is regionally accessible from SR-71 at Chino Hills Parkway/Ramona Avenue. The existing Project site consists primarily of undeveloped land and Lake Los Serranos. Various older buildings occupy the site including 3 single family houses, 3 garages, one office, one pump house, and one shed. The site vegetation is primarily grassland with scattered trees and shrubs along the lake edge and generally surrounding the buildings.

According to the Chino Hills General Plan, the site is designated Medium Density Residential and is zoned Medium Density Residential (RM-1). This type of land use is "appropriate for single-family attached townhouses, condominiums, and apartments. This land use designation is generally applied in areas of relatively flat land with good access to arterial streets and public services. Residential developments in this land use designation will be designed to create a high-quality living environment, with pleasing architecture and landscaping" (Chino Hills 2015a). The land uses surrounding the Project area are characterized by low- and medium-density residential development and public parks (Chino Hills 2015b). Surrounding land uses are described in Table 4.11-1 below.

Table 4.11-1. Surrounding Land Uses							
	General Plan Designation	Zoning Designation	Existing Land Use				
Project Site	Medium Density Residential	Medium Density Residential (RM-1)	Undeveloped				
North	Medium Density Residential	Medium Density Residential (RM-1)	Mobile Home Park, Lake Los Serranos				
East	Low Density Residential	Low Density Residential (R-S)	Single-Family Residential				
South	Low Density Residential Medium Density Residential	Low Density Residential (R-S), Medium Density Residential (RM-1)	Single-Family Residential, Multi- Family Townhouses				
West	Low Density Residential Medium Density Residential	Low Density Residential (R-S), Medium Density Residential (RM-1)	Single-Family Residential, Mobile Home Park				

Source: City of Chino Hills 2015a; City of Chino Hills 2015b

Although the current GP land use map and Zoning map designate both the land and lake portion of the Project site as Medium Density Residential, a recent analysis conducted by the City at the request of the applicant indicates that during adoption of the City first General Plan, it was the intent of the City Council to place a Rural Residential designation on the lake. The placement of a Medium Density Residential designation on the lake was a City mapping error. Consequently, the effective General Plan Land Use map and Zoning Map designation for the lake is Rural Residential. This correction in the lake's land use designation has no bearing on the project as all proposed development will occur on the land portion of the site, which is correctly designated Medium Density Residential. (The Rural Residential designation on the lake yields 38 dwelling units for future use or transfer by Greening Family, LLC/Rolling Ridge Ranch under Measure U.)

### 4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

		Less than			
Wo	ould the Project:	Potentially Significant Impact	Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Physically divide an established community?				$\boxtimes$

Lands that surround the Project site are developed with single- and multi-family residences to the north, south, east, and west. The Project would construct 354 multifamily apartment units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure. Although the site is surrounded by residential communities, no part of the project would extend beyond the existing site boundaries, and no part of the project would create a barrier within the established communities. No impact would occur.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			$\boxtimes$	

The proposed Project site is designated as Medium Density Residential in the City of Chino Hills General Plan. As described above, appropriate uses in this designation include single-family attached townhouses, condominiums, and apartments.

The Project consists one-story clubhouse in the West Village and a two-story clubhouse in the East Village and a total of 24 multifamily residential buildings. Seven (7) of the residential buildings would be two stories with a maximum height or 30'-6" and 17 buildings would be three-stories with a maximum roof height of 41'-10" and three elevator towers located at Buildings 6B, 13B and 23B would be a maximum height of 44'-8".

Per Section 16.10.030 of the CHMC, the maximum building height within the RM-1 zone is 35 feet. The CHMC allows for a variance procedure to grant relief from zoning provisions when, because of special circumstances applicable to a property, including size, shape, topography, location, or surroundings, the strict application of the Development Code deprives such property of privileges enjoyed by other property in the vicinity and under the identical zoning classification.

Section 16.72.020.A.6 of the CHMC allows for a minor variance application to be filed for proposals to increase heights up to 30% from that permitted by the Development Code. The Applicant is requesting a minor variance 17MNV02 to increase the maximum building height from 35′ to 41′-10″ (19% increase) to blend with the increase elevator height, the three-story buildings rooftop parapet walls and shed roofs

elements of multifamily residential buildings Types I, 2, 4, 5, 6 and 8. The applicant is also proposing 3 foot high elevator tower elements to screen the mechanical equipment and also provide architectural enhancement and to serve as markers for pedestrian entry to the buildings. The elevator towers would increase the maximum building height from 35' to 44'-8"(28% increased) for three buildings (buildings 6B, 13B and 23B). The heights for the elevators and shed roofs of the residential buildings are shown in Table 4.11-2 below.

Building No.	Building Type	No. of Stories	Proposed Roof/Elevator Tower Height
	East	: Village	
1	VI	3	41'-10"
2	II	3	41'-0"
3	Ш	2	30'-6"
4	III	2	30'-6"
5	III	2	30'-6"
6A & 6B	IV	3	41'-0"
6B Elevator Tower	IV	3	44'-7"
7	V	3	37'-6"
8	V	3	37'-6"
9		3	41'-0"
10	VI	3	41'-10"
11	V	3	37'-6"
12	III	2	30'-6"
East Village Clubhouse No. 1	-	2	34'-0"
	Wes	t Village	
13A & 13B	VIII	3	41'-0"
13B Elevator Tower	VIII	3	44'-8"
14	V	3	37'-6"
15	III	2	30'-6"
16	III	2	30'-6"
17	II	3	41'-0"
18	V	3	37'-6"
19	V	3	37'-6"
20	I	3	41'-0"
21	III	2	30'-6"
22		3	41'-0"
23A & 23 B	VIII	3	41'-0"
23B Elevator Tower	VIII	3	44'-8"
24	V	3	37'-6"
West Village Clubhouse No. 2	-	1	24'-0"

Note: \* With approval of Minor Variance 17MNV02.

The proposed Project site is zoned RM-1 (Medium Density Residential) and it has a land use designation of designated as Medium Density Residential in the City of Chino Hills General Plan. As described above, appropriate uses in this designation include single-family attached townhouses, condominiums, and apartments. Thus, the proposed Project would be consistent with the City's General Plan. Upon approval of the requested site plan review and variance, the proposed Project would not conflict with any applicable land use plans or policies. The minor variance for the proposed height increase for both the shed roofs and elevator towers would be less than significant, upon approval of minor variance findings by the Planning Commission.

## 4.11.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.12 Mineral Resources

#### 4.12.1 Environmental Setting

According to the City's General Plan, oil is currently produced in the Chino-Soquel Oil Field and Mahala Oil. In the southeastern portion of the City, the California Geological Survey (CGS) has classified the sand and gravel resources along the Santa Ana River Wash as Mineral Resource Zone 2 (MRZ-2), which is defined as an area where adequate information indicates that significant mineral deposits exist or are highly likely. The majority of this area lies within the Chino Hills State Park. The existing oilfields within the City are within undeveloped lands designated Agriculture/ Ranches. Due to the limited supply of mineral resources within the City, no other mineral resource policies are identified in the General Plan's Conservation Element.

#### 4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				

The Project site is currently designated MRZ-3, which are areas containing known mineral resource of undetermined resource significance (CGS 1995). According to the General Plan, no significant mineral deposits are known to exist in the Project vicinity. No mining operations exist on or in the vicinity of the project site, and no mining activities are proposed by the Project. As such, impacts to mineral resources would be less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				$\boxtimes$

The proposed Project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, because no mining operations exist on or in the vicinity of the project site (Chino Hills 2015a). Besides the policy related to oilfield land use designation, no mineral resource related policies are identified in the General Plan's Conservation Element. Furthermore, no mining activities are proposed as part of the Project. Therefore, no impact would occur.

#### 4.12.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.13 **Noise**

#### 4.13.1 Environmental Setting

#### 4.13.1.1 Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in  $L_{eq}$ ) and the average daily noise levels/community noise equivalent level (in  $L_{dn}$ /CNEL). The  $L_{eq}$  is a measure of ambient noise, while the  $L_{dn}$  and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

**Equivalent Noise Level (L\_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

**Day-Night Average (L<sub>dn</sub>)** is a 24-hour average  $L_{eq}$  with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour  $L_{eq}$  would result in a measurement of 66.4 dBA  $L_{dn}$ .

**Community Noise Equivalent Level (CNEL)** is a 24-hour average  $L_{eq}$  with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed (FHWA 2011).

#### 4.13.1.2 Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The Project is proposing the construction of 354 multifamily dwelling units and associated features. The nearest sensitive receptors to the Project site are residences directly adjacent to the Project site boundary in multiple directions. The closest residence, located on Circle Park Lane, is located approximately 40 feet to the northeast.

#### 4.13.1.3 Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

#### 4.13.1.4 Existing Ambient Noise Environment

The noise environment in the proposed Project area is impacted by various noise sources. Mobile sources of noise, especially cars and trucks traveling on area roadways, are the most common and significant

sources of noise in the Project area. Other sources of noise are the various land uses (i.e., residential, commercial and institutional) throughout the area that generate stationary-source noise. The Project site is located outside of any airport land use plan. Furthermore, the Project site is located beyond two miles from any airport. The Chino Airport is the nearest airport to the Project site, located approximately 3.44 miles to the east. Per the Chino Hills General Plan, the City of Chino Hills is located outside the 65 dB CNEL for the Chino Airport.

The Project site can be characterized by relatively flat land with a few moderate slopes, an existing manmade lake (Lake Los Serranos) and three residences. In order to quantify existing ambient noise levels in the Project area, ECORP Consulting, Inc. conducted four short-term noise measurements on February 12, 2020. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site. The 10-minute measurements were taken between 1:16 p.m. and 2:17 p.m. Short-term (Leq) measurements are considered representative of the noise levels throughout the daytime (Appendix H).

### 4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				

#### 4.13.2.1 Project Construction Noise

Construction noise associated with the proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., building construction, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive receptors in the vicinity of the construction site.

Noise levels associated with individual construction equipment are summarized in Table 4.13-1.

Table 4.13-1. Typical Construction Equipment Noise Levels					
Type of Equipment	Maximum Noise (L <sub>max</sub> ) at 50 Feet (dBA)	Maximum 8-Hour Noise (L <sub>eq</sub> ) at 50 Feet (dBA)			
Crane	80.6	72.6			
Dozer	81.7	77.7			
Excavator	80.7	76.7			
Generator	80.6	77.6			
Grader	85.0	81.0			
Other Equipment (greater than 5 horsepower)	85.0	82.0			
Paver	77.2	74.2			
Roller	80.0	73.0			
Tractor	84.0	80.0			
Dump Truck	76.5	72.5			
Concrete Pump Truck	81.4	74.4			
Welder	74.0	70.0			

Source: FHWA, Roadway Construction Noise Model (FHWA-HEP-05-054), dated January 2008.

Note: Leq is the average acoustic energy content of noise for a stated period of time. Thus, the Leg of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or night, L<sub>max</sub> is the maximum and minimum A-weighted noise level during the measurement period.

As shown, the noise levels from construction equipment at 50 feet range from 70.0 dBA to 82.0 dBA. The nearest existing noise-sensitive land uses to proposed onsite construction consist of single-family residences adjacent to the Project site boundary at approximately 40 feet. Thus, the noise levels from construction equipment could be experienced at these residences at levels exceeding these values.

The City of Chino Hills does not promulgate numeric thresholds pertaining to the noise associated with construction. Instead, the City limits the time that construction can take place between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 6:00 p.m. on Saturdays, excluding federal holidays (Municipal Code Section 8.08). It is typical to regulate construction noise in this manner because construction noise is temporary, short term, intermittent in nature, and would cease on completion of a project. Furthermore, the City is a developing urban community and construction noise is generally accepted as a reality within the urban environment. Additionally, construction would occur throughout the Project site and would not be concentrated at one point. Therefore, noise generated during construction activities, as long as conducted within the permitted hours, would not exceed City noise standards. However, construction noise would represent a substantial, though temporary, noise level increase

compared with existing conditions and could negatively affect the sensitive residential receptors in the vicinity.

Noise source control is the most effective method of controlling construction noise. Source controls, which limit noise, are the easiest to oversee on a construction project. Mitigation at the source reduces the problem everywhere, not just along one single path or for one receiver. Noise path controls are the second method in controlling noise. Barriers or enclosures can provide a substantial reduction in the nuisance effect in some cases. Path control measures include moving equipment farther away from the receiver; enclosing especially noisy activities or stationary equipment; erecting noise enclosures, barriers, or curtains; and using landscaping as a shield and dissipater.

Noise barriers or enclosures can provide a sound reduction 35 dBA or greater (WEAL 2000). To be effective, a noise enclosure/barrier must physically fit in the available space, must completely break the line of sight between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In these cases, the enclosure/barrier system must either be very tall or have some form of roofed enclosure to protect upper-story receptors.

Implementation of mitigation measures **NOI-1** (see section 4.13.3) would substantially reduce construction-generated noise levels.

#### 4.13.2.2 Project Operational Noise

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The nearest noise-sensitive land uses consist of residences adjacent to the Project site boundary, with the closest one being approximately 40 feet from the Project site on Circle Park Lane. Operational noise sources associated with the proposed Project include mobile and stationary (i.e., mechanical equipment, internal circulation, traffic) sources.

#### 4.13.2.3 Operational Traffic Noise

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise sensitive residential land uses) were modeled based on the traffic volumes identified by Linscott Law & Greenspan Engineers (2021) to determine the noise levels along Project vicinity roadways. Table 4.13-2 shows the calculated offsite roadway noise levels under existing traffic levels compared to future buildout of the Project. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the noise standards promulgated in the City of Chino Hills General Plan (Table 4-1) for all roadway segments except those located north of SR 71. Those segments are located within the City of Chino and are therefore compared to the City of Chino noise standards presented in that city's General Plan (Table 4-2). In the case that the existing ambient noise levels already exceed the applicable numeric

noise threshold within the City of Chino Hills, an increase of more than 3 dBA over the existing ambient noise level is considered significant.

As shown in Table 4.13-2, no roadway segments currently experience noise that exceeds respective noise standards under existing conditions. Thus, Project-generated roadway noise are compared to the applicable standard. As shown, Project roadway segments do not exceed respective noise standards. No applicable noise standards would be exceeded by Project traffic.

Table 4.13-2. Existing Plu	s Project Conditions	- Predicted Tr	affic Noise Lev	rels		
			0 feet from of Roadway	Noise	Exceed	
Roadway Segment	Surrounding Uses	Existing Conditions	Existing + Project Conditions	Standard (dBA)	Standard/ Significan t Impact?	
	Chino	Hills Parkway				
West of Peyton Drive	Residential	59.5	59.6	65	No	
Between Peyton Drive and Pipeline Avenue	Residential	61.8	61.9	65	No	
Between Pipeline Avenue	Residential	62.0	62.1	65	No	
Between Ramona Avenue and Central Avenue	Commercial and Residential (In the City of Chino)	60.7	60.8	65	No	
East of Central Avenue	Commercial and Residential	40.9	40.9	65	No	
	Rosewood W	/ay/Clubhouse	Way			
West of Pipeline Avenue	Residential	45.2	45.2	65	No	
East of Pipeline Avenue	Residential	42.1	42.6	65	No	
	Glen	Ridge Drive				
West of Pipeline Avenue	Residential	47.0	47.1	65	No	
	Los Serra	anos Boulevar	d			
Between Pipeline Avenue and Valle Vista Drive	Residential	42.4	46.1	65	No	
	Valle	Vista Drive				
West of Pipeline Avenue	Residential	45.7	45.7	65	No	
Between Pipeline Avenue and Country Club Drive	Residential	45.6	45.6	65	No	
Between Los Serranos Boulevard and Ramona Avenue	Residential	49.2	49.5	65	No	
East of Ramona Avenue	Residential	48.6	48.7	65	No	
	Pey	ton Drive				
North of Chino Hills Parkway	Residential	59.8	59.8	65	No	
South of Chino Hills Parkway	Residential	60.4	60.4	65	No	

			0 feet from of Roadway	Noise	Exceed
Roadway Segment	Surrounding Uses	Existing Conditions	Existing + Project Conditions	Standard (dBA)	Standard/ Significan t Impact?
	Pipel	ine Avenue		1	
North of Eucalyptus Avenue	Commercial and Residential (In the City of Chino)	56.1	57.2	65	No
Between Eucalyptus Avenue and Chino Hills Parkway	Commercial and Residential	53.6	54.9	65	No
Between Chino Hills Parkway and Rosewood Way/Clubhouse Way	Residential	55.1	55.3	65	No
Between Rosewood Way/Clubhouse Way and Glen Ridge Drive	Residential	53.8	54.0	65	No
Between Glen Ridge Drive and Los Serranos Boulevard	Residential	53.2	53.4	65	No
Between Los Serranos Boulevard and Vale Vista Drive	Residential	52.2	52.4	65	No
Between Vale Vista Drive and Bayberry Drive/ Country Club Drive	Residential	49.8	51.6	65	No
South of Bayberry Drive/ Country Club Drive	Residential	50.8	50.8	65	No
	Ramo	ona Avenue			
Between Village Drive and Vale Vista Drive	Residential	56.2	57.0	65	No
South of Vale Vista Drive	Residential	50.5	50.6	65	No
		ral Avenue	T	T	
South of Chino Hills Parkway	Residential (In the City of Chino)	62.2	62.2	65	No
		ptus Avenue	T	T	
West of Pipeline Avenue	Residential	57.8	59.8	65	No
Between Pipeline Avenue and Ramona Avenue	Residential (In the City of Chino)	59.2	59.9	65	No
East of Ramona Avenue	Residential (In the City of Chino)	58.4	59.1	65	No
	Yorl	oa Avenue	T	T	
South of Los Serranos Road	Residential	49.7	49.8	65	No
North of Fairway Boulevard	Residential	44.6	44.8	65	No
South of Fairway Boulevard	Residential	49.2	49.3	65	No
Between Fairway Boulevard and Los Serranos Road	Residential	48.3	48.4	65	No

Table 4.13-2. Existing Plus Project Conditions - Predicted Traffic Noise Levels									
			0 feet from of Roadway	Noise	Exceed				
Roadway Segment	Surrounding Uses	Existing Conditions	Existing + Project Conditions	Standard (dBA)	Standard/ Significan t Impact?				
	Fairwa	y Boulevard							
East of Yorba Avenue	Residential	41.0	41.2	65	No				
	State Route 71 (Chi	no Hills Parkw	ay Onramp)						
SB on SR 71	Commercial and Residential	59.1	62.2	65	No				
NB on SR 71	Commercial and Residential	59.3	62.3	65	No				

Notes: A total of 21 intersections were analyzed in the Traffic Impact Study; however, only roadway segments that impact sensitive receptors were included for the purposes of this analysis.

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by Linscott Law & Greenspan Engineers 2021. Refer to Attachment B for traffic noise modeling assumptions and results.

## 4.13.2.4 Operational Stationary Noise

The main stationary operational noise associated with the Project would be activities occurring on the Project site. Potential stationary noise sources related to long-term operation of residences on the Project site would include mechanical equipment and other typical sources specific to residential neighborhoods such as barking dogs, internal traffic circulation, radios, and people talking. According to field noise measurements conducted by ECORP, mechanical heating, ventilation, and air conditioning equipment generates noise levels less than 45 dBA at 20 feet, which is less than City's noise threshold for protecting residential uses. Urban residential noise, consisting of barking dogs, internal traffic circulation, radios, and people talking, generally registers at 55 to 60 dBA. The proposed Project places residential uses adjacent to other residential uses. The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the community that would negative affect noise sensitive land uses. The Project is consistent with the types, intensity, and patterns of land use envisioned for the Project area, and as previously described, the Project is considered compatible with the existing noise environment. Operation of the Project would not result in a significant noise-related impact associated with onsite sources. Impacts would be less than significant.

#### 4.13.2.5 Land Use Compatibility

The City of Chino Hills uses the land use compatibility table presented in the General Plan that provides the City with a tool to gauge the compatibility of new land users relative to existing noise levels. This table identifies acceptable interior and exterior noise levels for various land uses, including residential land uses such as those proposed by the Project. In the case that the noise levels identified at the proposed Project site fall within levels presented in the General Plan, the Project is considered compatible with the existing noise environment. As previously stated, the Project site is zoned *RM-1*. The primary purpose of areas designated *RM-1* is for single-family attached townhouses, condominiums, and apartments. As shown in

the General Plan, the exterior noise standard for residential land uses is 65 dBA CNEL. In order to quantify existing ambient noise levels in the Project area, ECORP conducted four short-term noise measurements on February 12, 2020. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site and are considered representative of the noise levels throughout the day. As shown in Table 4.13-3, the ambient noise level recorded on the Project site is 56.3 dBA. This noise level falls below the noise standard. It is noted that the baseline measurements taken were short-term (15 minutes) and therefore measured in Leq, defined as the average acoustic energy content of noise for a stated period of time, while the City of Chino Hills compatibility standards are in CNEL. As previously described, CNEL is a community exposure noise metric that is defined as 24-hour average Leq noise measurement with weighting added during the certain nighttime hours to account for the increase noise sensitivity during nighttime. For a comparable representation of the ambient noise levels in the Project vicinity using a community exposure noise metric, existing traffic noise in the Project vicinity was calculated. This is appropriate since the predominate source of noise in the Project Site vicinity is traffic.

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity (Appendix H). The modeled noise levels depicted in Appendix H are reported in the noise metric, CNEL, which is the same noise metric promulgated by City noise compatibility guidelines. The noise emanating from the segment of Los Serranos Boulevard traversing a substantial amount of the southern boundary of the Project site (between Pipeline Avenue and Valle Vista Drive) was calculated at 42.4 dBA CNEL under existing conditions. The segment of Valle Vista Drive traversing the other half of the southern boundary of the Project site (between Los Serranos Boulevard and Ramona Avenue) was calculated as generating noise levels of 49.2 dBA CNEL. The segment of Pipeline Avenue traversing the western boundary of the Project site (between Los Serranos Boulevard and Glen Ridge Drive) was calculated as generating noise levels of 53.2 dBA CNEL, and the segment of Ramona Avenue traversing the eastern boundary of the site (between Valle Vista Drive and Village Drive) was calculated at 56.2 dBA CNEL under existing conditions. These noise level falls below the 65 dBA CNEL standard considered acceptable for the location of residential land uses.

Therefore, baseline measurements conducted nearest to the Project site and calculated traffic noise levels generated by the nearest roadways fall within the range of sound considered clearly compatible for residences. Impacts would be less than significant.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$	

#### 4.13.2.6 Construction-Generated Vibration

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the proposed Project would be primarily associated with short-term construction-related activities. Construction on the Project site would have the potential to

result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 4.13-3.

Table 4.13-3. Representative Vibration Source Levels for Construction Equipment					
Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)				
Large Bulldozer	0.089				
Pile Driver	0.170				
Caisson Drilling	0.089				
Loaded Trucks	0.076				
Rock Breaker	0.089				
Jackhammer	0.035				
Small Bulldozer/Tractor	0.003				

Source: Caltrans 2013; FTA 2018

The City of Chino Hills does not regulate vibrations associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2013) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

It is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. The nearest structures of concern to the construction site is located approximately 40 feet to the northeast. Based on the vibration levels presented in Table 4.13-3, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.170 inch per second PPV at 25 feet. Thus, the structure located at 40 feet would not be negatively affected. Predicted vibration levels at the nearest structures would not exceed recommended criteria.

#### 4.13.2.7 Operational Groundborne Vibration

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. Impacts would be less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

The Project site is located approximately 3.44 miles east of the Chino Airport. The Project site is located outside the 65 dBA CNEL noise impact zone for the Chino Airport per the City of Chino Hills General Plan. Implementation of the proposed Project would not affect airport operations nor result in increased exposure of noise-sensitive receptors to aircraft noise. No impact would occur.

#### 4.13.3 Mitigation Measures

#### NOI-1:

In order to reduce construction noise, temporary noise barriers or enclosures shall be used along the southern property line and portion of the western property line between the Project site and residences fronting Lakeview Drive, to break the line of sight between the construction equipment and these nearby residences (*Figure 17 Noise Barrier Location*). The temporary noise barrier shall be positioned in a manner that avoids existing riparian zones and associated vegetation. The temporary noise barrier shall have a sound transmission class (STC) of 35 or greater in accordance with American Society for Testing and Materials Test Method E90, or at least two pounds per square foot to ensure adequate transmission loss characteristics. The temporary noise barrier should consist of a solid plywood fence at least 7/16-inch and/or flexible sound curtains, such as an 18-ounce tarp or a two-inch-thick fiberglass blanket, attached to chain link fencing. The length, height, and location of noise control barrier walls shall be adequate to assure proper acoustical performance. All noise control barrier walls shall be designed to preclude structural failure due to such factors as winds, shear, shallow soil failure, earthquakes, and erosion.



Map Date: 5/27/2020 Photo Source: NAIP (2018)

Note: Project boundary excludes water surface area of approximately 18.87 acres.



## 4.14 Population and Housing

## 4.14.1 Environmental Setting

According to the General Plan, the City of Chino Hills has experienced rapid residential growth since its incorporation in 1993. The City's 1993 housing stock of 16,286 units had risen to 23,617 units in 2010, an increase by 45%. In 1993, the city's population was 48,041 persons and increased to 74,799 by 2010 (Chino Hills 2015a). According to the State Department of Finance, the City's population was 84,364 in January 2019 (Chino Hills 2015).

## 4.14.2 Population and Housing (XIV) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			$\boxtimes$	

Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place without implementation of the project. For example, development of a project may require additional housing, goods, and services associated with the population increase caused by, or attracted to, the new project. Growth induced from a project may result in significant adverse impacts if the growth is not consistent with the land use plans and growth management plans and policies for the area affected. Thus, it is important to assess the degree to which the growth accommodated by a project would conflict with any applicable land use plan, policy, or regulation.

According to the State Department of Finance, the City's population was 84,364 in January 2019 and the average household size is 3.37 persons (Chino Hills 2019). The Project proposes 354 dwelling units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure. Thus the Project would increase population growth by approximately 1,193 persons. However, the population increase would be consistent with projections made by SCAG and the General Plan, as discussed above. The proposed Project is consistent with land use designation in the City's General Plan and is essentially an infill project surrounded by existing residential development. Thus, the Project would not induce substantial unplanned population growth. Impacts would be less than significant.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?				

The Rancho Cielito Project site consist of three dwelling units. Two (2) single family residences are located on Parcel 1. One residence was built in 1940 and is currently occupied and it consists of two bedroom one bath and is approximately 800 square feet of livable area with a detached garage The date and square footage of the second residence is unknown and it is unoccupied. The third residence is located on Parcel 3 and was built in 1960; and it consists of two-bedroom, one-bathroom with approximately 1,330 square feet of livable area and an attached garage and is currently unoccupied. The Maintenance Supervisor, who is retained by the Los Serranos Club/Mobilehome Park to take care of the mobile home park, currently lives in the residence located on Parcel 1, however, he currently pays no rent based upon his employment agreement with the mobile home park. This agreement will remain in place and there will be no requirement to pay rent upon his relocation. The proposed Project would remove both of the residences located on Parcel 1 and the Project applicant proposes to relocate the Maintenance Supervisor to the existing house on Parcel 3. As discussed in Section 2.4 of this document, Parcel 3 would not be developed or modified as a result of this Project. The relocation of the Maintenance Supervisor to the existing residence on Parcel 3 prior to any demolition or grading on the project site is added to the Project as a condition of approval. Therefore, the proposed Project would not displace a substantial number of people and not necessitate the construction of housing elsewhere. The Project would, in fact, increase the availability of housing in the area and impacts would be less than significant.

#### 4.14.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

## 4.15 Public Services

#### 4.15.1 Environmental Setting

#### 4.15.1.1 Police Services

The City of Chino Hills has contracted with the San Bernardino County Sheriff's Department for law enforcement services since incorporation in 1991. The Chino Hills Police Station is a 30,000 square foot building located just off Peyton Drive in the Chino Hills Government Center at 14077 Peyton Drive. The Station has 52 sworn personnel and 15 civilian personnel assigned.

#### 4.15.1.2 Fire Services

The City of Chino Hills is serviced by the Chino Valley Fire District (CVFD). CVFD serves an approximately 80-square-mile area that includes the cities of Chino Hills and Chino, and surrounding unincorporated areas. CVFD began in 1895 as Chino Fire Company No. 1 and has since grown to include seven fire stations, housing over 100 professional firefighters. Firefighters/paramedics and specialized teams

respond to structure fires, vegetation fires, medical aids, traffic collisions, confined space rescues, water rescues and hazardous materials incidents. The Project site would be served by Chino Valley Fire Station 66, located at 13707 Peyton Drive approximately 2.31 miles northwest of the site.

#### 4.15.1.3 Schools

Chino Valley Unified School District (CVUSD) is home to 21 California Distinguished Schools. The closest schools to the Project site are Glenmeade Elementary School to the northwest and Chaparral Elementary School to the east. Both schools are located more than one-quarter mile away from the property, but within one mile.

#### 4.15.1.4 Parks

Chino Hills enjoys more than 3,000 acres of publicly owned open space, 40 parks, 38 miles of trails, and 5 community buildings. The City boundaries encompass approximately 28,736 acres, 7,366 acres of which are part of the Chino Hills State Park of land area. There are multiple parks to the northwest and southwest of the Project site, including Los Serranos Park, Hilltop Park, Strickling Park, Cinnamon Park, and Glenmeade Park. The Los Serranos Country Club is located approximately 1000 feet southeast of the site.

#### 4.15.2 Public Services (XV) Environmental Checklist and Discussion

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	Fire Protection?				
	Police Protection?				
	Schools?				
	Parks?				
	Other Public Facilities?			$\boxtimes$	

The Project proposes to build 354 dwelling units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a

maintenance garage, and associated infrastructure. According to the City of Chino Hills, the average household size is 3.37 persons (Chino Hills 2019). As the majority of the households in the City are single family homes, the proposed 354-unit multifamily Project would likely contribute to direct population growth by less than 1,193 persons. As such, some additional demand for fire, police, school, and park services would occur due to the Project.

The proposed Project would result in an increased demand for police and fire protection service resulting from the new residential community and increase of vehicular traffic to the area. However, although the demands for public services would increase with the proposed Project beyond existing conditions, the increase in population and housing would be consistent with assumptions in the General Plan which provides the basis for future planning purposes. Development with modern materials and in accordance with current standards, inclusive of fire-resistant materials, fire alarms and detection systems, automatic fire sprinklers, would enhance fire safety and would support fire protection services. The CVFD and the SBCSD has sufficient resources to accommodate the proposed Project and would not result in the need to construct new or physically alter existing police protection facilities. Therefore, no significant impacts would occur related to fire or police services. Any related increase in student generation, demand for City parks, or demand for other facilities resulting from Project implementation would also be consistent with the increased demand assumed in the General Plan.

In accordance with City guidelines, development fees would be collected for the provision of public services. These fees would offset any project-related demands on such public services, therefore impacts would be less than significant.

#### 4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.16 Recreation

#### 4.16.1 Environmental Setting

The City currently has 284 acres of public parkland, which is made up of 40 parks. Seven public parks are located within one mile of the Project site: Los Serranos Park, Stickling Park, Hilltop Park, Cinnamon Park, Hickory Creek Park, Eucalyptus Park, Hollow Run Park, and Glenmeade Park.

#### 4.16.1.1 Proposed Recreation and Amenities

Rancho Cielito would be a privately gated multi-family apartment complex. Each of the 354 units would include its own private outdoor space, with ground level units incorporating a covered patio and second and third story units incorporating a covered deck. The Project would offer both active and passive recreational opportunities. The East Village would include a playground for children 2-12 years of age, neighborhood barbeque areas, clubhouse pool/spa, fitness center, picnic areas, lakeside seating/vistas, designated shore fishing areas, and trails. The West Village would include a playground for children ages 2-12, turf play field, neighborhood barbeque areas, clubhouse pool/spa, peninsula boardwalk with

covered viewing platform, lakeside seating/vistas, designated shore fishing areas, and trails (Figure 6. Conceptual Site Plan). Two clubhouse recreation areas with swimming pools, shade trellises, and full amenities will provide residents with the luxury of a resort-like, waterfront lifestyle.

Chapter 16.10 Residential Districts of the City's Municipal Code requires projects within the Medium Density Residential (RM-1) zone to provide a minimum of 70 SF of usable private open space and a minimum of 300 SF of a combination of private and common usable open space per unit. The Project would provide 300 SF of private usable open space per unit—East Village would provide 6.60 acres of common open space and West Village would provide 6.30 acres. The common area would provide recreational playgrounds and picnic areas with bench seating, shade trees, and parkways. Los Serranos Lake also provide a scenic backdrop for the new multi-family complex.

#### 4.16.2 Recreation (XVI) Materials Checklist

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighboregional parks or other recreational that substantial physical deteriorations facility would occur or be accelerated.	acilities such			

The proposed Project is not expected to significantly impact the City's existing parks or recreational facilities. The Project would offer both active and passive recreational opportunities within the private Rancho Cielito complex. Recreational amenities would include playgrounds, barbeque areas, clubhouse pools/spas, a fitness center, picnic areas, lakeside seating/vistas, and trails. These amenities would not be available to the general public. As such, the Applicant would be required to pay a Quimby fee prior to occupancy, pursuant to City requirements. This development fee would help reduce potential impacts of future development on parks and recreational facilities; thus, deterioration to existing parks and recreation facilities would be less than significant as a result of the Project. Public parks and recreation facilities would be incrementally expanded, or new facilities built to meet future demand.

As discussed in Section XIV, Population and Housing, the Project would not increase population beyond what was anticipated in the City General Plan; therefore, the Project would not cause substantial physical deterioration of recreational facilities. As such, impacts related to recreation would be less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				

The proposed Project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. The Project would offer both active and passive recreational opportunities within the private gated community. Recreational amenities would include playgrounds, barbeque areas, clubhouse pools/spas, a fitness center, picnic areas, lakeside seating/vistas, designated shore fishing areas, and trails. These amenities would not be available to the general public. However, the City's Quimby Fee collected prior to occupancy is intended to offset any potential demand for parks and recreational facilities. Impacts would be less than significant.

#### 4.16.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

## 4.17 Transportation

A focused traffic impact analysis was completed for the proposed Project by Linscott, Law & Greenspan Engineers in June 2021 (LLG 2021; Appendix I). The traffic report was prepared consistent with City of Chino Hills General Plan Circulation Element policies that require a Level of Service Analysis (LOS) for development projects. Consistent with the General Plan policy, the traffic report analyzes existing and future weekday AM peak hour and PM peak hour traffic conditions for a near-term (Year 2026) and long-term (Year 2040) traffic setting upon completion of the proposed Project. In conformance with each City's study guidelines and San Bernardino County Congestion Management Plan (CMP) requirements, existing AM peak hour and PM peak hour operating conditions were evaluated using the methodology outlined in the Highway Capacity Manual 6th Edition (HCM 6) for signalized and unsignalized intersections in the City of Chino Hills and City of Chino. It is noted that the HCM operations method of analysis is also utilized by Caltrans.

LOS measures the volume of traffic against the capacity of the roadway. The General Plan Circulation Element measures LOS to determine quality of vehicular traffic flow. Although automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion is no longer considered a significant impact on the environment under CEQA (under Public Resources Code section 21099 and case law (Citizens for Positive Growth & Preservation v. City of Sacramento), this metric is still analyzed to determine the Project's consistency with the City's General Plan. A facility with LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. The upper limit of LOS E is typically defined as the operating capacity of a roadway.

Eighteen (18) study intersections were selected for evaluation utilizing CMP analysis criteria and requirements of the City of Chino Hills and City of Chino. The eighteen (18) existing key study intersections listed below provide local access to the study area and define the extent of the boundaries for this traffic impact investigation (Figure 17. Study Area Map). The jurisdictions where the study intersections are located are identified as well:

- 1. Peyton Avenue at Chino Hills (SR-142) Parkway (Caltrans/Chino Hills)
- 2. Pipeline Avenue at Chino Hills (SR-142) Parkway (Caltrans/Chino Hills)
- 3. Pipeline Avenue at Rosewood Way/Clubhouse Way (Chino Hills)
- 4. Pipeline Avenue at Glen Ridge Drive (Chino Hills)
- 5. Pipeline Avenue at Los Serranos Boulevard (Chino Hills)
- 6. Pipeline Avenue at Valle Vista Drive (Chino Hills)
- 7. Pipeline Avenue at Bayberry Drive/Country Club Drive (Chino Hills)
- 8. Montecito Drive at Los Serranos Boulevard (Chino Hills)
- 9. SR-71 SB Ramps at Chino Hills Parkway (Caltrans/Chino Hills)
- 10. SR-71 NB Ramps at Chino Hills Parkway (Caltrans/Chino)
- 11. Los Serranos Boulevard at Valle Vista Drive (Chino Hills)
- 12. Ramona Avenue at Chino Hills Parkway (Chino)
- 13. Ramona Avenue at SR-71 NB Ramps Caltrans (Chino Hills)
- 14. Ramona Avenue at SR-71 SB Ramps Caltrans (Chino Hills)
- 15. Ramona Avenue at Valle Vista Drive/Bird Farm Road (Chino Hills)
- 16. Yorba Avenue at Fairway Boulevard (N) (Chino Hills)
- 17. Yorba Avenue at Fairway Boulevard (S) (Chino Hills)
- 18. Yorba Avenue/Los Serranos Country Club Drive at Los Serranos Road (Chino Hills)

These key locations were selected for evaluation based on coordination with the City of Chino Hills and City of Chino in order to define the study area and other major details. The LOS investigations at these key locations were used to evaluate automobile delay associated with area growth, cumulative projects and the proposed Project.

#### 4.17.1 Environmental Setting

The Chino Valley Freeway (State Route-71) provides primary regional access to the proposed Project site via one freeway interchange at Ramona Avenue/Chino Hills Parkway located directly east. Local access is provided via the intersection of Chino Hills Parkway at Pipeline Avenue. The principal local network of streets serving the Project site consists of Peyton Drive, Pipeline Avenue, Ramona Avenue, Eucalyptus Avenue, Chino Hills Parkway and Los Serranos Boulevard. The following discussion provides a brief synopsis of these key area streets.

#### 4.17.1.1 Existing Street Network

**Peyton Drive** is a four-lane divided roadway oriented in the north-south direction west of the Project site. The posted speed limit on Peyton Drive is 45 miles per hour (mph). Peyton Drive is classified as a Minor

Arterial on the Chino Hills General Plan Circulation Element within the vicinity of the Project site. On-street parking is prohibited on Peyton Drive. The City of Chino Hills Bicycle Master Plan identifies Peyton Drive as a Class II bicycle facility.

**Pipeline Avenue** is a four-lane divided roadway oriented in the north-south direction east of the Project site. The posted speed limit on Pipeline Avenue is 40 mph north of Eucalyptus Avenue, 35 mph between Eucalyptus Avenue and Chino Hills Parkway and 40 mph south of Chino Hills Parkway within the vicinity of the Project. Pipeline Avenue is classified as a Collector south of Chino Hills Parkway and a Minor Arterial north of Chino Hills Parkway on the Chino Hills General Plan Circulation Element. On-street parking is prohibited on Pipeline Avenue.

**Ramona Avenue** is a four-lane divided lane roadway east of the SR-71 Freeway and Project site. The posted speed limit on Ramona Avenue is 45 mph north of Chino Hills Parkway and 40 mph south of Chino Hills Parkway. On-street parking is prohibited along this roadway. Ramona Avenue is designated as a Major Arterial on the Chino General Plan Circulation Element.

**Eucalyptus Avenue** is a two-lane divided roadway oriented in the east-west direction north of the Project site. The posted speed limit on Eucalyptus Avenue is 45 mph. Eucalyptus Avenue is classified as a Collector on the Chino Hills General Plan Circulation Element. On-street parking is prohibited along this roadway.

The City of Chino Hills Bicycle Master Plan identifies Eucalyptus Avenue, west of Peyton Drive, as a Class II bicycle facility and a Class III bicycle facility east of Peyton Drive.

Chino Hills Parkway is a four- to six-lane divided highway oriented in the east-west direction north of the Project site. Chino Hills Parkway is classified as a State Route on the Chino Hills General Plan Circulation Element. Four travel lanes are provided to the west of Pipeline Avenue, six travel lanes are provided east of Pipeline Avenue to Ramona Avenue and five travel lanes are provided east of Ramona Avenue. Chino Hills Parkway has raised medians along the majority of its length, with several two-way left-turn lanes between Peyton Drive and Pipeline Avenue within the Project vicinity. On-street parking is prohibited on Chino Hills Parkway. The posted speed limit on Chino Hills Parkway is 50 mph west of Peyton Drive, 40 mph east of Pipeline Avenue to Ramona Avenue and 45 mph west of Pipeline Avenue and east of Ramona Avenue. The City of Chino Hills Bicycle Master Plan identifies Chino Hills Parkway as a Class II bicycle facility.

**Los Serranos Boulevard** is a two-lane undivided roadway oriented in the east-west direction directly to the south of the Project site. The posted speed limit on Rosewood Way and Clubhouse Way is 25 mph. On-street parking is permitted on the south side of the roadway. On-street parking along the north side of the roadway along the Project frontage will be removed with the completion of the Project.

#### 4.17.1.2 Existing Intersection Conditions

Table 3-3 of the Traffic Study, Appendix I, summarizes the existing peak hour service level calculations for the eighteen (18) key study intersections based on existing traffic volumes and current street geometry. The calculations indicate that the intersection of Peyton Avenue at Chino Hills Parkway currently operates

at unacceptable LOS during the PM peak hour. The remaining seventeen (17) of the eighteen (18) key study intersections currently operate at an acceptable level of service during the AM and PM peak hours.

## 4.17.1.3 Future Without-Project Conditions

In order to acknowledge regional population and employment growth outside of the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. An annual growth rate of two percent was used for the future scenarios. In addition to the application of the ambient traffic growth rate, traffic from sixteen (16) cumulative projects in the City of Chino Hills and six (6) cumulative projects in the City of Chino within the vicinity of the subject site. These twenty-two (22) cumulative projects have been included as part of the cumulative background setting. The cumulative projects are forecast to generate a total of 30,616 daily trips, with 1,828 trips (1,088 inbound and 740 outbound) forecast during the AM peak hour and 2,508 trips (1,156 inbound and 1,352 outbound) forecast during the PM peak hour. Cumulative project trip generation is discussed further in Appendix I.

### 4.17.1.4 Future Without-Project Intersection Performance

Year 2026 Without-Project Traffic Conditions

Table 8-2 of the Traffic Study, Appendix I, presents, presents the Existing Traffic Conditions and the Year 2026 Without Project AM and PM peak hour cumulative traffic volumes at the eighteen (18) key study intersections, respectively. The cumulative traffic volumes represent the accumulation of existing traffic, ambient growth traffic and cumulative projects traffic. Of the intersections analyzed by the Traffic Study, three intersections operate at unacceptable LOS without the addition of the Project: 1) Peyton Avenue at Chino Hills Parkway, 2) Pipeline and Chino Hills Parkway and 3) Ramona Avenue at Valle Vista Drive/Bird Farm Road.

Year 2040 Without Project Traffic Conditions

Table 8-3 of the Traffic Study, Appendix I, summarizes Year 2040 Without Project traffic conditions, showing that four (4) key study intersections will be cumulatively impacted by future buildout traffic and are forecast to operate at an adverse level of service. The remaining key study intersections are forecast to operate at an acceptable LOS during the weekday AM peak hour and PM peak hour under Year 2040 Without Project traffic conditions (see Appendix I). The intersections forecast to operate at an adverse level of service in the Year 2040 Without Project traffic conditions during the AM peak hour and/or PM peak hour are: Peyton Avenue at Chino Hills Parkway; Pipeline Avenue at Chino Hills Parkway; Ramona Avenue at Chino Hills Parkway; Pipeline at Chino Hills Parkway and Ramona Avenue at Valle Vista Drive/Bird Farm Road.

## 4.17.2 Regulatory Setting

## 4.17.2.1 Chino Hills Traffic Impact Guidelines

According to the City of Chino Hills guidelines included in the Circulation Element of the Chino Hills General Plan, a significant traffic impact occurs when the intersections or roadway projected to operate at LOS D or better without the Project would exceed LOS D with the Project (City of Chino Hills 2001). Significant traffic impact is also considered to occur if the Project results in an increase of 0.01 or more in the volume-to-capacity (V/C) ratio at a location that is projected to operate at LOS E or F without the Project. Automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion is no longer considered a significant impact on the environment under CEQA under Public Resources Code section 21099 and case law (Citizens for Positive Growth & Preservation v. City of Sacramento), but this metric is still analyzed to determine the Project's consistency with the City's General Plan.

#### 4.17.2.2 Chino Traffic Impact Guidelines

The City of Chino utilizes the following thresholds of significance. First, when the pre-Project condition is at or above LOS D and Project traffic causes deterioration below LOS D, a significant impact is deemed to occur. However, when the pre-Project condition is already below LOS D (i.e., LOS E or F), the Project will be responsible for fully mitigating its impacts to a level of service equal to or better than it was without the Project. This is a standard protocol in many urban jurisdictions because to require a Project to mitigate to LOS D would in effect force the Project to mitigate beyond its Project impacts. Thus, for intersections within the City of Chino jurisdiction currently operating at LOS E or F during either the AM and/or PM peak hours under existing conditions, improvements have been identified to mitigate the impacts of the Project to an intersection LOS that is equal to or better than pre-Project conditions.

#### 4.17.2.3 San Bernardino County CMP Criteria

The most current San Bernardino County CMP definition of deficiency is based on maintaining a level of service standard of LOS "E" or better, except where an existing LOS "F" condition is identified in the CMP document. From review of the County CMP network, this criterion would not apply to any of the study intersections (Appendix I, p. 12.)

#### 4.17.2.4 Caltrans Criteria

Caltrans District 8 has established that LOS D is the operating standard for all Caltrans facilities. Caltrans has determined that all state-owned facilities that operate below LOS D should be identified and improved to an acceptable LOS. The Caltrans Traffic Impact Study Guidelines dated December 2002 does state that if an existing state-owned facility operates at less than LOS D, the existing service level should be maintained.

#### 4.17.3 Transportation (XVII) Environmental Checklist and Discussion

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				

#### 4.17.3.1 Construction Impacts

The proposed Project would generate temporary construction related vehicle trips over the approximately four-year construction period. Phasing progression would commence with development of the East Village, followed by the West Village. Without implementation of effective construction management measures, traffic generated by construction of the proposed Project would have the potential to disrupt neighboring residential uses. However, as a Condition of Approval, and prior to issuance of grading permits, the developer shall submit to the City Engineer for review and approval a Construction Management Plan. This plan would feature methods to minimize disruption to the neighborhood residential uses to the fullest extent reasonable and practicable in accordance with City standards. The plan would include construction parking and vehicle access and specifying staging areas and delivery and hauling truck routes. The plan would address disruption to residents during construction and preclude major truck traffic during peak hours. All construction vehicles and equipment would be stationed in a designated area on-site within the Project site boundaries. Access along surrounding roadways would be maintained throughout temporary construction activities. Construction traffic impacts would be less than significant.

#### 4.17.3.2 Operational Impacts

#### **Project Trip Generation**

Based on the Project description, the average trip rates for the average trip rates for ITE Land Use 221: Multifamily Housing (Low Rise) was utilized to forecast the Project's trip generation potential. The proposed Project is forecast to generate 2,591 weekday daily trips (one half arriving, one half departing), with 162 trips (37 inbound, 125 outbound) produced during the AM peak hour and 198 trips (125 inbound, 73 outbound) produced during the PM peak hour.

Table 3-3 of the Traffic Study, Appendix I, summarizes the peak hour level of service results at the eighteen (18) key study intersections for Existing With Project traffic conditions. The following Project Design Features (PDF) are to be implemented as a Project responsibility in conjunction with development of the proposed Project to ensure adequate access and egress to the site is provided. PDF-6 and PDF-7 will be conditioned to be completed prior to issuance of the first certificate of occupancy. In addition, the Project will be conditioned to contribute, prior to issuance of a building permit, a fair share payment to

the intersection improvements at Ramona Avenue and Valle Vista Drive/Bird Farm Road, as described in PDF-8, below;

- PDF-6 Intersection No. 8 Montecito Drive at Los Serranos Boulevard: Construct the north leg and provide a shared southbound left-turn/through/right-turn lane and one inbound lane. All improvements need to conform to the City of Chino Hills Standard Design Guidelines and/or California Manual on Uniform Traffic Control Devices (CA MUTCD).
- **PDF-7 Adjacent Street Improvements:** Construct to City standards: ADA ramp(s), curb and gutter, sidewalk, applicable one-half width road widenings, and streetlight improvements along all adjacent project streets. Along Ramona Avenue, one-half width roadway widening shall be sufficient to accommodate planned intersection at Valle Vista Drive/Bird Farm Road improvements described in PDF-8.
- PDF-8 Intersection No. 15 Ramona Avenue and Valle Vista Drive/Bird Farm Road
  Adjacent Street Improvements: Contribute a fair share payment of \$51,062.50 toward the following intersection improvements: Widen and restripe the northbound approach to provide an exclusive northbound left-turn lane. Widen and restripe the southbound approach to provide an exclusive southbound left-turn lane. Install a traffic signal.

  Additional improvements beyond those required for construction/installation of a traffic signal equipment on all four corners may be necessary and will be subject to review and approval of the City Engineer, inclusive of traffic signal phasing. All improvements need to conform to the City of Chino Hills Standard Design Guidelines and/or California Manual on Uniform Traffic Control Devices (CA MUTCD).

As shown in Table 8-1 of the Traffic Study, Appendix I, traffic associated with the proposed Project will not significantly impact any of the eighteen (18) key study intersections during the AM and PM peak hours when compared to the LOS standards and significant impact criteria. The intersections of Peyton Drive at Chino Hills Parkway currently operate at an unacceptable level of service during PM peak hour. Although the intersection of Peyton Drive at Chino Hills Parkway is forecast to continue to operate at unacceptable levels of service during the PM peak hour with the addition of Project traffic, the Project is expected to add less than the allowable threshold to the delay based on City of Chino Hills LOS standards. The remaining seventeen (17) key study intersections currently operate and are forecast to continue to operate at an acceptable LOS during the AM and PM peak hours with the addition of the Project generated traffic to existing traffic.

Year 2026 With Project Traffic Conditions

Table 8-2 of the Traffic Study, Appendix I, summarizes Year 2026 traffic associated with the proposed Project, and shows that the Project when added to cumulative traffic conditions will add a recognized delay increase to one (1) of the eighteen (18) key study intersections (Intersection 15. Ramona Avenue at Valle Vista Drive/Bird Farm Road). PDF-8, above, will be added as condition of approval to facilitate local traffic safety conditions and reduce vehicular idling and associated air pollutant and GHG emissions.

Implementation of recommended improvements at the cumulatively impacted intersection completely reduces cumulative impacts of the proposed Project and future background traffic, as the intersection is forecast to operate at LOS D.

#### Year 2040 With Project Traffic Conditions

Under the Year 2040 with Project Traffic scenario, one (1) of the eighteen (18) key study intersections, Intersection 1515. Ramona Avenue at Valle Vista Drive/Bird Farm Road, is forecast to operate adversely when compared to the LOS standards and significant impact criteria (Appendix I, Table 8-3). Table 8-3 indicates that traffic associated with the proposed Project will have a contributory impact at three (3) of the eighteen (18) key study intersections. Although the intersections of Peyton Avenue at Chino Hills Parkway and Pipeline Avenue at Chino Hills Parkway are forecast to operate at unacceptable levels of service during the AM and/or PM peak hours with the addition of Project traffic, the proposed Project is expected to add less than 0.01 to the volume-to-capacity ratio at this location and therefore is considered less than significant based on the City's LOS standards and impact criteria. Further, although the intersection of Ramona Avenue at Chino Hills Parkway is forecast to operate at LOS E during the PM peak hour with the addition of Project traffic, the Project's impact at this location is considered insignificant as there is no change in delay and no change in volume-to-capacity ratio.

The intersection of Ramona Avenue and Valle Vista Drive/Bird Farm Road is forecast to operate significantly adversely based on the City's LOS standard and impact criteria. However, as shown in column (5) of Table 8-3, the implementation of PDF-8 at this intersection completely resolves this concern. As a result, under Year 2040 With Project traffic conditions will not be adverse based on the City's LOS standard. Implementation of PDF-8 as condition of approval will also facilitate traffic safety conditions and reduce vehicular idling and associated air pollutant and GHG emissions.

#### SR-71 Off-Ramp Queuing Analysis

Based on the estimated storage now provided on the off-ramp intersections from the SR-71 Freeway to Chino Hills Parkway and Ramona Avenue, adequate storage is provided. Therefore, no modifications to the freeway off-ramps are required (see Appendix I).

#### **Public Transit**

Public transit bus service is provided in the Project area by Omnitrans, a public transportation agency in San Bernardino County. In Chino Hills, OmniRide On-Demand service provides a reservation-based, ondemand, shared transit service (like Uber or Lyft), providing local service, and connecting to the Chino Transit Center linking the City of Chino Hills with the City of Chino. Future Project residents would have access to the OmniRide service. Impacts to the public transit system would be less than significant.

#### Pedestrian Circulation

Pedestrian circulation would be provided via existing public sidewalks along Pipeline Avenue within the vicinity of the Project, as well as along the south side of Los Serranos Boulevard. The proposed Project would construct sidewalks Project frontage along the north side of Los Serranos Boulevard and the west

side of Ramona Avenue. The existing sidewalk system within the Project vicinity provides direct connectivity to the major thoroughfares of Pipeline Avenue and Ramona Avenue and pedestrian connectivity to the existing residential, recreational, institutional and commercial development in the surrounding area. The Project would not otherwise conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) in the City of Chino Hills.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				

CEQA Guidelines Section 15064.3, subdivision (b) provides criteria for analyzing transportation impacts based on a vehicle miles traveled (VMT) methodology instead of the now superseded (as of January 1, 2019) LOS methodology. Linscott, Law & Greenspan, Engineers (LLG) conducted a VMT Analysis Technical Memorandum for the proposed Project (Appendix J) which presents the VMT screening criteria, analysis methodology, significance thresholds and VMT analyses. Since the City of Chino Hills is still in the process of finalizing and adopting it's VMT Guidelines and Thresholds, the approach and methodology outlined in the Memorandum is generally consistent with the Technical Advisory for Evaluating Transportation Impacts In CEQA, published by the Governor's Office of Planning and Research (OPR), December 2018.

#### Project Screening Criteria

Under the VMT methodology, screening is used to determine if a project will be required to conduct a detailed VMT analysis. Since the City of Chino Hills currently does not have adopted VMT screening criteria, the analysis utilized the various screening methods recommended in the OPR Technical Advisory and whether the Project will screen-out, either in its entirety, or partially based on individual land uses.

A project would be screened out of VMT analysis if it falls under any of the following criteria:

- Projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor
- Projects which are forecast to generate 110 or more average daily trips
- Projects fully located within an area identified as having a below-threshold VMT
- Projects that are considered local-serving developments
- Projects that consist of 100% affordable housing

This Project is located in a low VMT area (for both VMT/Service Population and VMT/Capita) but since the City currently does not have adopted VMT screening criteria, it was determined to conduct a full VMT analysis to be conservative (Appendix J, p. 6).

## 4.17.3.3 VMT Analysis

Residential development that would generate vehicle travel that is 15 or more percent below the existing residential VMT per capita, measured against the region or city, may indicate a less-than-significant transportation impact. In Metropolitan Planning Organization areas, development measured against City VMT per capita (rather than regional VMT per capita) should not cumulatively exceed the population or number of units specified in the SCS for that City because greater-than-planned amounts of development in areas above the region-based threshold would undermine the VMT containment needed to achieve regional targets under SB 375.

Summarized below are the average VMT/Capita values utilizing San Bernardino County Transportation Analysis Model (SBTAM) for the City of Chino Hills and for the Project. It should be noted that the Project is located in Traffic Analysis Zone 53614301 (ID 1462) and the Project development totals were converted into Socio-Economic Data and inputted into the SBTAM.

The City Average VMT/Capita is listed below:

- Year 2016 Average VMT/Capita = 20.65
- 15 percent Below Year 2016 Average VMT/Capita = 17.55

The Project Average VMT/Capita is listed below:

Year 2016 Average VMT/Capita = 16.24 (21.36 percent Below City Average)

As shown above, the proposed Project Average VMT/Capita is 21.36 percent below the City average VMT/Capita and based on the criteria outlined in this report, the proposed Project does not exceed a level of 15 percent below existing City of Chino Hills VMT/Capita (i.e. VMT/Capita = 17.55). Consistent with the OPR Technical Advisory and based on the VMT methodology, criteria, guidelines, thresholds and results outlined in the Technical Memorandum, the proposed Project would have a less than significant impact. Hence, there would be no cumulative significant VMT impact (Appendix J, p. 10.) **PDF-8** would facilitate cumulative traffic flow and reduce vehicular idling and congestion. **PDF-8** would not increase roadway capacity in a manner that would significantly increase VMT<sup>2</sup>.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous				

<sup>&</sup>lt;sup>2</sup>According to the California Office of Planning and Research (OPR:) Technical Advisory on Evaluating Transportation Impacts in CEQA, "Projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis, include: Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes (OPR 2018)."

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
intersections) or incompatible uses (e.g., farm equipment)?				

The overall site layout does not create significant vehicle-pedestrian conflict points such that access for the Project are not impacted by internal vehicle queuing/stacking (Appendix I). Project traffic is not anticipated to cause significant internal queuing/stacking at the Project driveways. The alignment and spacing of the Project driveways are also deemed adequate. Turning movements into and out of the Project site at the Project driveways are anticipated to operate at acceptable service levels. As such, motorists entering and exiting the Project site from this driveway will be able to do so comfortably, safely and without undue congestion. According to the Traffic Impact Assessment, the installation of Multi-Way Stop Control is not justified at the intersections of Yorba Avenue at Fairway Boulevard (N) and Yorba Avenue at Fairway Boulevard (S) (Appendix I). No other hazardous geometric design features or incompatible uses are proposed. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?			$\boxtimes$	

The City of Chino Hills updated the Hazard Mitigation Plan (HMP) in 2011. This plan seeks to reduce the loss of life, personal injury, and property damage that can result from a disaster through long- and short-term strategies. The Project would comply with the goals, objectives, and mitigation measures outlined in the HMP to reduce risks associated with emergency access.

Access to the subject property is provided via three (3) driveways. One (1) unsignalized driveway will be located at the existing intersection of Montecito Drive at Los Serranos Boulevard. One (1) unsignalized driveway will be located along Valle Vista Drive and one (1) unsignalized driveway will be located along Ramona Avenue. A temporary road connection is proposed for the West Village (Phase 4) at the approximate location of the property's existing entry gate on Los Serranos Boulevard. The connection is proposed as an interim, emergency only, secondary ingress/egress and would be removed upon completion of Phase 6. No offsite roadway improvements are proposed that would interfere with emergency access, response times, or impede circulation of emergency vehicles on surrounding roadways. All construction vehicles and equipment would be stationed in a designated area on-site within the Project site boundaries. The Project would require limited offsite improvements, and thus construction of new infrastructure (e.g. water lines or sewers) may require trenching or other limited localized activities which may cause traffic lane closures and traffic congestion delays. However, access along surrounding roadways would be maintained throughout Project construction activities.

During the course of the City of Chino Hills' required review of the proposed Project's applications, the site plan would be reviewed to ensure that adequate access to and from the site and around the proposed buildings is provided for emergency vehicles. With adherence to the City of Chino Hills requirements for emergency vehicle access, impacts would be less than significant.

### 4.17.4 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.18 Tribal Cultural Resources

#### 4.18.1 Environmental Setting

Tribal Cultural Resources are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are 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 I of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of Tribal Cultural Resources and impacts thereto.

On January 23, 2020, the City of Chino Hills contacted the Soboba Band of Luiseno Indians and the Gabrieleño Band of Mission Indians-Kizh Nation via letter in accordance with CEQA (AB 52) in response to the Gabrieleño Band of Mission Indians-Kizh Nation request for notification of projects in the designated geographic area. The correspondence provided information about the location and proposed project features and information about the initiation of formal consultation under AB 52 if requested by the Soboba Band of Luiseno Indians and the Gabrieleño Band of Mission Indians-Kizh Nation.

Chairman Andy Salas of the Gabrieleño Band of Mission Indians-Kizh Nation, requested a consultation meeting on February 4, 2020 by email. On April 16, 2020 two tribal representatives discussed the project with City personnel via a teleconference call. On April 24, 2020, Chairman Andy Salas provided the City with background documentation and requested mitigation measures. On June 3, 2020, the City of Chino Hills concluded Tribal consultation with Chairman Andy Salas.

#### 4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	<ul> <li>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</li> </ul>				
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.				

AB 52 consultation with the Gabriel Band of Mission Indians—Kizh Nation has indicated the project site is located within the ancestral territory of the Gabrieleño. Thus, significant impacts may occur from the discovery of unknown TCRs during ground disturbing activities from Project construction. Impacts to unknown TCRs would be less than significant with the implementation of mitigation measures **TCR-1** through **TCR-5** and that includes an opportunity for tribal participation in monitoring of subsurface excavations.

## 4.18.3 Mitigation Measures

**TCR-1: Retain a Native American Monitor/Consultant.** The Project Applicant shall retain and compensate for the services of a Tribal monitor/consultant who is of a Gabrieleño heritage recognized by the Native American Heritage Commission (NAHC). The Tribal monitor/consultant would only be present on-site during the project construction phases that involve ground disturbing activities, including pavement removal, auguring, boring, grading, excavation, potholing, trenching, grubbing, or disturbance of soils to a maximum

depth of 10 feet below ground surface or if bedrock or loose sediments encountered can be demonstrated to be more than 10,000 years old. The Tribal Monitor/consultant will complete daily monitoring logs that will provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when the Project site grading and excavation activities described above are completed, or when the Tribal monitor/consultant has indicated that the site has a low potential for impacting Tribal Cultural Resources.

- TCR-2: Unanticipated Discovery of Tribal Cultural and Archaeological Resources. Upon discovery of any tribal cultural or archaeological resource, all construction activities in the immediate vicinity of the find shall cease until the find can be assessed. All archaeological resources unearthed by project construction activities shall be evaluated by the qualified archaeologist (retained as specified in Mitigation Measure CUL-1) and Tribal monitor/consultant (retained as specified in Mitigation Measure TCR-1). If the resources are Native American in origin, the Tribal monitor/consultant shall coordinate with representatives for expected tribe of origin and the landowner regarding treatment and curation of these resources. Typically, the Tribal monitor/consultant will recommend reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (CEJA Guidelines Section 15064.5 [f]).
- **TCR-3:**Public Resources Code Sections 21083.2(b) for unique archaeological resources. If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, they shall be offered to a local school or historical society in the area for educational purposes.
- TCR-4: Unanticipated Discovery of Human Remains and Associated Funerary Objects. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American

Heritage Commission (NAHC) and PRC 5097.98 shall be followed. Native American human remains may be, as defined in PRC 5097.98 (d)(1), an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute.

Tribal Cultural/Archaeological Reports: Upon completion of all monitoring/mitigation activities, the Tribal monitor/consultant and qualified archaeologist shall provide copies of daily monitoring logs and or monitoring reports to the City Community Development Director, or designee for verification that the project approved tribal cultural resource mitigations have been satisfied. With concurrence of the City, Tribal monitor/consultant and qualified archaeologist, these logs and reports made be made available to other interested tribal or archaeological repositories.

## 4.19 Utilities and Service Systems

### 4.19.1 Environmental Setting

#### 4.19.1.1 Water Service

The City of Chino Hills is one of eight members of the Inland Empire Utilities Agency (IEUA), a wholesale water agency which provides the City's imported water purchased from the Metropolitan Water District of Southern California (MWDSC). The City purchases and imports treated surface water via the Water Facilities Authority (WFA) in Upland and the Monte Vista Water District in Montclair. The remainder of the City's supply is from local wells and recycled water. According to the City's 2015 Urban Water Management Plan (UWMP) the City provided 21,491 municipal connections with 14,260 acre-feet (AF) of potable water and 1,810 AF of recycled water in the year 2015.

#### 4.19.1.2 Wastewater

Wastewater collection and conveyance within the City is provided by the City's Sewer Division. The City of Chino Hills Storm Drain Master Plan and the Water, Recycled Water, and Sewer Master Plan anticipate the infrastructure improvements needed to serve current and expected development. The City's wastewater collection system conveys the entire City collected wastewater to the Inland Empire Utilities Agency (IEUA) for treatment and reuse, or disposal. Capacity at current wastewater treatment facilities are expected to be adequate to serve the City's wastewater requirements through year 2030 (Chino Hills 2015a).

#### 4.19.1.3 Solid Waste

The City of Chino Hills contracts with Republic Services for all trash and recyclable collection services in the City. Construction, demolition, and municipal waste from the Project site would likely be disposed of at the Olinda Alpha Landfill in Brea, CA. This is the nearest landfill to the Project site and is located approximately 8 miles southwest of the property. Olinda Alpha is permitted for 8,000 tons per day (TPD) and its average disposal rate is 7,000 TPD. The landfill has enough capacity to serve until 2030 (OC Waste & Recycling 2019).

## 4.19.1.4 Electricity

Southern California Edison provides electricity to over 15 million people in 50,000 square miles of service area, encompassing 15 counties in central, coastal, and southern California. SCE would extend electric service to the Project in accordance with rules and policies for extension of service on file with the California Public Utilities Commission.

#### 4.19.1.5 Natural Gas

The Southern California Gas Company provides natural gas services to the area and would extend service to the Project site at the time contractual arrangements are made in accordance with SoCalGas policies and extension rules on file with the California Public Utilities Commission.

#### 4.19.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			$\boxtimes$	

All dry (electricity, gas, telecommunications) and wet (water, sewer, storm drainage) utilities are currently available on or adjacent to the Project site.

#### 4.19.2.1 Water

There is an existing 10" water line which traverses the eastern portion of the Property which would be abandoned. The existing 8", 10", 12", and 16" water lines in the adjacent streets have adequate flow and pressure to meet domestic and fire flow requirements. Rancho Cielito would tie into the existing water lines within the Project site. No upgrade of existing water mains is anticipated.

The 2020 UWMP projects the City's water demands via a land use-based water demand model. The water use projections are based on land use designations identified by the City's General Plan and current population and employment growth projections provided by the City Community Development Department. The model accounts for changes to water demands over time as well as new water demands based on vacant land developments and the intensification of underutilized lands (City of Chino Hills 2020). Because the Project is consistent with the General Plan land use designation of Medium Density Residential; the City's water supply projections that indicate there are sufficient water supplies to serve the project and region; and because the development/connection fees required for Project implementation would help mitigate future new or expanded entitlements that potentially may be needed with future

regional growth, Project impacts would not result in the need for new or expanded water supplies (City of Chino Hills 2020). The Project would also incorporate various features to reduce water demand on site. Water-wise, California-friendly shrubs, grasses, and groundcovers would complement the architectural theme and also reduce overall water use in the landscape. An automatic irrigation system with low volume equipment would minimize water loss due to run-off. Groundcovers or bark mulch would also help conserve water, lower the soil temperature, and reduce evapotranspiration. The Project would also comply with the Water Shortage Contingency Plan outlined in the UWMP, if implemented. For example, limits may be applied to the number of days, frequency and duration of outdoor watering. Therefore, the Project would not result in additional demand on water supplies as future development has been previously accounted for and analyzed in the General Plan EIR and 2020 UWMP.

#### 4.19.2.2 Wastewater

The existing 16" sewer line that traverses through the eastern portion of the Property is of ample size and depth to serve a majority of the site through gravity flow. This line is proposed to be relocated with additional gravity sewers provided to accommodate the Project. There are also existing sewer lines in the adjacent streets that may provide connections for the Project. No sewer pumping facilities would be required to serve the Project.

#### 4.19.2.3 Storm Drainage

The majority of runoff from inside and outside the Project boundaries would be conveyed to the lake in much the same manner as the existing condition. The site runoff would be conveyed primarily by surface flow within parking areas and across open spaces toward the lake. However, the northeasterly portion of the Property is an exception to this condition. Approximately 8.55 acres do not flow toward the lake in the existing condition, but instead flow toward the northeast corner of the site. In the developed condition approximately 5.3 acres would flow toward the northeast corner and approximately 3.22 acres would flow toward the lake. Runoff flowing to the northeast corner would be collected by area drains and catch basins and conveyed by storm drain pipes to a proposed retention-filtration basin. The prescribed low flows would be treated in the basin, while runoff exceeding the prescribed treatment rate would be discharged into a proposed storm drain within Ramona Avenue north to the County Flood Control District Channel. Additionally, offsite runoff into the Meadow and Cove Naturalized Creek areas would be diverted into water quality swales to be constructed by the Project, a condition which would remove a good portion of the urban contaminants prior to flowing into the lake.

### 4.19.2.4 Electric Power and Natural Gas

As shown in Section 4.6 Energy, the increase in electricity usage as a result of the Project would constitute an approximate 0.03 percent increase in the typical annual electricity consumption attributable to residential uses in San Bernardino County. However, this is a conservative estimate. In May of 2018 the California Energy Commission (CEC) adopted the 2019 California Energy Code that applies to all project construction after January 1, 2020. The 2019 Code is designed to move the state closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install solar

photovoltaic panels sized to offset all the electricity needs of each residential unit (CCR, Title 24, Part 6, Section 150.1(c)4). The Code is enforced through the local plan check and building permit processes. Project increases in natural gas usage, 0.02 percent, across the County would also be negligible.

In conclusion, impacts to utility infrastructure would be less than significant.

Woi	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			$\boxtimes$	

The City extracts groundwater from the Chino Groundwater Basin using its own wells that are located within the City of Chino, and this water is conveyed to Chino Hills' lower pressure zone through a system of transmission mains. The City also relies on water purchased from the Monte Vista Water District. The water provided by MVWD consists of a mix of groundwater extracted from the Chino Groundwater Basin, MVWD wells, and imported water from WFA treatment plant.

According to the 2020 UWMP, the City benefits from its diversified water supply during dry years. In 2020, the City's water supply totaled 14,436 AF (2020c Table 6-2) and the projected waster supply for 2025 is 33,684 AF (2020c Table 6-1). The UWMP projects that in cooperation with its member agencies, the City will be able to meet a 100 percent of retail water demands during average, dry, and multiple-dry-year scenarios over the next 20 years (Chino Hills 2020). During a drought event, City leadership would adopt the appropriate stage of the Water Shortage Contingency Plan to effectively preserve water supply sustainability.

The Project would incorporate various features to reduce water demand on site. Water-wise, California-friendly shrubs, grasses, and groundcovers would complement the architectural theme and also reduce overall water use in the landscape. An automatic irrigation system with low volume equipment would minimize water loss due to run-off. Groundcovers or bark mulch would also help conserve water, lower the soil temperature, and reduce evapotranspiration. Additionally, the Project would comply with any restrictions imposed by the Water Shortage Contingency Plan during drought conditions. As discussed above, the Project would not result in additional demand on water supplies as future development has been previously accounted for and analyzed in the General Plan EIR and 2020 UWMP water demand projections. Thus, impacts on water supplies would be less than significant.

Wo	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			$\boxtimes$	

According to the General Plan, an extensive wastewater infrastructure system is already in place in the developed portions of the City. The City's wastewater collection system conveys the entire City collected wastewater to the IEUA for treatment and reuse, or disposal. Sewer lines are relatively new and in good condition in the majority of the City and can accommodate additional development proposed under the General Plan (Chino Hills 2015a).

Using the wastewater generation factors provided in the City of Los Angeles CEQA Thresholds Guide, the apartment complex would general approximately 120 gallons per day (gpd) per 1-bedroom unit, 160 gpd per 2-bedroom unit, and 200 gpd per 3-bedroom unit. The Project would construct 129 1-bedroom units, 169 2-bedroom units, and 26 3-bedroom units. Among all 354 units, the Project is anticipated to produce approximately 47,720 gallons of wastewater per day (Los Angeles 2006).

Wastewater treatment within the City is provided by the IEUA through two treatment plants: Regional Plant No. 5 (RP-5) and the Carbon Canyon Water Recycling Facility (CCWRF). The wastewater treatment capacity of RP-5 is 16.3 million gallons per day, and it treats approximately 9 million gallons per day. The CCWRF treatment capacity is 11.4 million gallons per day, and it treats approximately 7 million gallons per day (IEUA 2019). The Project would contribute an incremental increase to the IEUA wastewater treatment capacity.

As discussed above, there is an existing 16" sewer line that traverses through the eastern portion of the Property that is of ample size and depth to serve a majority of the site through gravity flow. This line is proposed to be relocated with additional gravity sewers provided to accommodate the Project. There are also existing sewer lines in the adjacent streets that may provide connections for the Project. No sewer pumping facilities would be required to serve the Project. Impacts to wastewater demand would be less than significant.

Wou	uld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			$\boxtimes$	

Construction of the proposed Project would result in generation of waste construction materials, excess fill, and other similar materials. The construction contractor would be required to dispose of these materials in accordance with engineering practices and County regulations for disposal in sanitary landfills. In the operational phase, Rancho Cielito would generate household waste and be serviced by Republic Services for residential trash hauling.

Construction, demolition, and municipal waste from the Project site would likely be disposed of at the Olinda Alpha Landfill in Brea, CA. This landfill is permitted for 8,000 TPD and its average disposal rate is 7,000 TPD. The landfill has enough capacity to serve until 2030 (OC Waste & Recycling 2019). Waste may also be disposed of at various landfills across San Bernardino, Los Angeles, Orange, and Riverside Counties. According to San Bernardino County's Integrated Solid Waste Management Plan, the County-owned system of municipal solid waste landfills includes a total of 5 landfills, which have capacity for well in excess of 15 years (San Bernardino County 2018). Therefore, the Project is not anticipated to generate solid waste in excess of the capacity of local infrastructure. Additionally, the proposed Project would not interfere with implementation of existing solid waste disposal regulations. A less than significant impact would occur.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

The proposed Project would be required to comply with all Resource Conservation and Recovery Act (RCRA) Regulations, including Title 40 of the Code of Federal Regulations (CFR), as well as City and County waste reduction programs. Additionally, the Project would comply with City requirements for receptacles, solid waste collection, and provisions regarding service rates, fees, and charges. The implementation of these programs would reduce the amount of solid waste generated be the proposed Project and diverted to landfills. No impact would occur in this area.

#### 4.19.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

#### 4.20 Wildfire

#### 4.20.1 Environmental Setting

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CALFIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30 to 50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to buildings.

According to CALFIRE, the Project site is not located on land designated as VHFHSZ (CALFIRE 2008). The proposed Project is located within a developed area and is not in the immediate vicinity of any large natural or wildlife areas.

The Safety Element in the City's General Plan addresses protection of the community from risks associated with the effects of flooding, seismic, and other geologic hazards, hazardous materials and wild land fires. According to the Fire Hazard Overlay District Map, the Project site is not located in a fire hazard zone (Chino Hills 2015a).

### 4.20.2 Wildfire (XX) Environmental Checklist and Discussion

la	located in or near state responsibility areas or nds classified as very high fire hazard severity ones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	

The City of Chino Hills updated the Hazard Mitigation Plan in 2011. This plan seeks to reduce the loss of life, personal injury, and property damage that can result from a disaster through long- and short-term strategies. The Project would comply with the goals, objectives, and mitigation measures outlined in the HMP to reduce risks associated with wildfires.

All construction vehicles and equipment would be stationed in a designated area on-site within the Project site boundaries. The Project would require limited offsite improvements, and thus construction of new infrastructure (e.g. water lines or sewers) may require trenching or other limited localized activities which may cause traffic lane closures and traffic congestion delays. However, access along surrounding roadways would be maintained throughout Project construction activities.

A temporary road connection is proposed for the West Village (Phase 4) at the approximate location of the property's existing entry gate on Los Serranos Boulevard. The connection is proposed as an interim, emergency only, secondary ingress/egress and would be removed upon completion of Phase 6.

Upon completion, emergency access to the East Village would be available at one entryway on Ramona Avenue and a second entryway on Valle Vista Drive. One entryway would be provided for the West Village along Los Serranos Boulevard. There would be an interior 30' wide primary drive aisle which would run through the center and length of the Project connecting the neighborhoods and parking areas, allowing for fire access throughout the site. As such, impacts to emergency response and evacuation plans would be less than significant.

lanc	cated in or near state responsibility areas or ds classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			$\boxtimes$	

The Project would not substantially alter slope, wind patterns, or other factors that could exacerbate wildfire risks. According to the Fire Hazard Overlay District Map, the Project site is not located in a fire hazard zone (Chino Hills 2015a). The proposed Project is not located in or near land classified as VHFHSZ, therefore the Project is unlikely to expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. A less than significant impact is anticipated.

land	ocated in or near state responsibility areas or ds classified as very high fire hazard severity es, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				

The Project would construct 354 dwelling units and associated features and facilities including two clubhouses, a leasing/management office, three active recreation areas, passive open spaces, trails, a maintenance garage, and associated infrastructure. The Project is located within a developed area and would require utility connections to serve the proposed residential use. However, the proposed Project is not located in or near land classified as VHFHSZ, therefore the proposed Project would not exacerbate fire risk resulting in temporary or ongoing impacts to the environment. Additionally, according to the Fire Hazard Overlay District Map, the Project site is not located in a fire hazard zone (Chino Hills 2015a). No impact would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

The Project is not located in or near a VHFHSZ nor in a fire hazard zone according to the General Plan Safety Element Fire Hazard Overlay District Map (Chino Hills 2015a). The site is relatively flat with a few moderate slopes that range in elevation from approximately 626 to 670 feet above mean sea level. Construction of the Project would not require substantial grading of slopes or creation of slopes. Accordingly, the Project is not likely to expose people or structures to landslides or downstream flooding as a result of runoff, post-fire slope instability, or drainage changes. A less than significant impact would occur.

## 4.20.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

## 4.21 Mandatory Findings of Significance

## 4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				

Impacts to biological resources, cultural resources, geology and soils (paleontological resources), and tribal cultural resources are discussed in the respective sections of this Initial Study. Impacts would be less than significant with implementation of Mitigation Measures **BIO-1** through **BIO-13**, **CUL-1**, **GEO-1** and **TCR-1** through **TCR-5**.

Doe	s the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				

Impacts from the proposed Project on transportation, air quality, greenhouse gas emissions and noise are discussed in corresponding sections of this Initial Study. Each of these analyses included the list of cumulative projects contained in Table 6-1 of Appendix I within their respective analysis of Project impacts. As discussed in their respective sections of this Initial Study document, no significant impacts associated with transportation, air quality, greenhouse gas, or noise have been identified.

According to the Traffic Study prepared for the Project (Linscott Law & Greenspan Engineers 2021), the Project is anticipated to generate 2,591 daily trips on average. As shown in Table 8-2 of Appendix I, the implementation of improvements in Project Design Feature **PDF-8** at Ramona Avenue and Valle Vista Drive/Bird Farm Road would ensure that the impacts of the proposed Project traffic as well as future background traffic would not be cumulatively significant based on the applicable City impact criteria. Transportation improvements in Project Design Features **PDF-6**, **PDF-7** and **PDF-8** facilitate traffic flows associated with cumulative traffic volumes. With inclusion of these transportation design features, cumulative traffic impacts would be less than significant. Consequently, Project impacts when considered with identified cumulative projects would not be cumulatively considerable.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				

As identified in this Initial Study, the impact categories of Hazards and Hazardous Materials, Noise, and Tribal Cultural Resources may have adverse effects on human beings, either directly or indirectly. However, all of the Project's impacts on human beings, both direct and indirect, were identified and mitigated if necessary, to less than significant impact, or less than significant impact with mitigation. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

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## 7.0 LIST OF APPENDICES

The following Appendices are incorporated into the Initial Study/Mitigated Negative Declaration by this reference.

Appendix A – Air Quality/Greenhouse Gas Emissions Technical Report

Appendix B – Biological Resources Assessment/Tree Survey Reports

Appendix C – Cultural Resources Assessment

Appendix D – Energy Consumption Analysis

Appendix E – Geotechnical/Geologic Study

Appendix F – Phase I Environmental Site Assessment

Appendix G – Hydrology and Hydraulics Report

Appendix H – Noise Impact Assessment

Appendix I – Traffic Impact Assessment

Appendix J – Vehicle Miles Traveled (VMT) Technical Memorandum