BELCARO at sand canyon



DRAFT ENVIRONMENTAL IMPACT REPORT

SCH NO. 2025061338

JULY 2026

LEAD AGENCY: CITY OF SANTA CLARITA

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BELCARO AT SAND CANYON PROJECT

DRAFT
ENVIRONMENTAL IMPACT REPORT
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Acronyms and Abbreviations

Acronym	Term
°F	Fahrenheit
µg/g	microgram(s) per gram
µg/m³	microgram(s) per cubic meter
µPa	micropascal(s)
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disabilities Act
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AFY	acre-feet per year
AHMP	All-Hazards Mitigation Plan
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
APS	Alternative Planning Strategy
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
AT&T	American Telephone & Telegraph Company
BIOS	Biogeographic Information and Observation System
BMP	best management practice
BRTR	*Biological Resources Technical Report for Belcaro Sand Canyon Project*
C_2H_3Cl	Vinyl chloride
CAA	Federal Clean Air Act
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health Administration
CalEEMod	California Emission Estimator Model
CalEnviroScreen	California Communities Environmental Health Screening Tool
CalEPA	California Environmental Protection Agency
CalGEM	California Geologic Energy Management
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	California Action Team
CBC	California Building Code
CBSC	California Building Standards Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation

Acronym	Term
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFPP	Construction Fire Protection Plan
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHL	California Historical Landmark
CHRIS	California Historical Resources Information System
City	City of Santa Clarita
CLWA	Castaic Lake Water Agency
CMP	Congestion Management Program
CMP	Conservation Management Plan
CMU	concrete masonry unit
CNEL	Community Noise Equivalent Level
CNEL	Community noise equivalent level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Government
County	County of Los Angeles
CPUC	California Public Utilities Commission
CRC	California Residential Code
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSMD	Consolidated Sewer Maintenance District
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
CWUIC	California Wildland-Urban Interface Code
dB	decibel(s)
dBA	A-weighted decibel(s)
DOF	Department of Finance
DOT	Department of Transportation
DPR	California Department of Parks and Recreation
DSOD	California Division of Safety of Dams
DTSC	California Department of Toxic Substance Control
DWR	California Department of Water Resources

Acronym	Term
EDD	California Employment Development Department
EIR	environmental impact report
EMFAC	EMission FACtor
EO	Executive Order
EOP	Emergency Operations Plan
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
EV	Electric vehicles
EWMP	Enhanced Watershed Management Program
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FMZ	Fuel Modification Zone
FPP	Fire Protection Plan
FPPA	Farmland Protection Policy Act
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information System
gpd	gallons per day
GSP	Groundwater Sustainability Plan
GWh	gigawatt-hours
GWP	global warming potential
H_2S	hydrogen sulfide
HAPs	hazardous air pollutants
HCD	California Department of Housing and Community Development
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
HMMP	Habitat Mitigation and Monitoring Plan
HMMP	Hazardous Material Management Program
HOA	homeowners' association
HPI	Healthy Places Index
HRA	health risk assessment
HSIP	Highway Safety Improvement Program
HUC	Hydrologic Unit Code

Acronym	Term
HVAC	heating, ventilation, and air conditioning
I-	Interstate
IFC	International Fire Code
IPCC	Intergovernmental Panel on Climate Change
ips	inch(es) per second
IRWMP	Integrated Regional Water Management Plans
kWh	kilowatt-hours
L_0	highest ambient noise level that occurred at the site
$L_{1.7}$	ambient noise level exceeded for 1.7% of the time of the measurement duration
L_{25}	ambient noise level exceeded for 25% of the time of the measurement duration
L_{50}	ambient noise level exceeded for 50% of the time of the measurement duration
$L_{8.3}$	ambient noise level exceeded for 8.3% of the time of the measurement duration
LACDPW	Los Angeles Department of Public Works
LACoFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LACWWD	Los Angeles County Waterworks District
LARWQCB	Los Angeles Regional Water Quality Control Board
LASD	Los Angeles County Sheriff's Department
LCFS	Low Carbon Fuel Standard
L_{dn}	Day-Night Sound Level
LEED	Leadership in Energy and Environmental Design
L_{eq}	Equivalent noise level
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L_{max}	root-mean-squared maximum noise level
LRA	Local Responsibility Area
LRSP	Local Roadway Safety Plan
LRSP	Local Roadway Safety Plan
LST	localized significance threshold
LUST	Leaking underground storage tank
L_{xx}	percentile-exceeded sound level
MATES V	Multiple Air Toxics Exposure Study V
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
Metro	Los Angeles County Metropolitan Transit Authority railroad
MG	million-gallon
mgd	million gallons per day
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons

Acronym	Term
MOCA	Mineral/Oil Conservation Area Overlay Zone
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MPO	Metropolitan Planning Organization
MRF	Minerals Recovery Facility
MRZ	Mineral Resource Zones
MS4	Municipal Separate Storm Sewer System
$MTCO_2e$	metric tons CO_2e
MW	megawatts
MWELO	Model Water Efficient Landscape Ordinance
MWh	megawatt-hours
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NIMS	National Incident Management System
NMTP	Nonmotorized Transportation Plan
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NU5	Non-Urban 5
NWI	National Wetland Inventory
O_3	ozone
OAEOP	Operational Area Emergency Operations Plan
OHWM	ordinary high-water mark

Acronym	Term
OPR	California Governor's Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Administration
OVOV	One Valley One Vision Santa Clarita Valley Planning Area
Pb	Lead
PCC	Portland cement concrete
PD	Planned Development
PDF	Project Design Features
PFC	perfluorocarbons
PI	Public/Institutional
PM	particulate matter
PM_{10}	particulate matter 10 microns or less in diameter
$PM_{2.5}$	particulate matter 2.5 microns or less in diameter
PPV	peak particle velocity
PRC	Public Resources Code
PRMMP	Paleontological Resources Mitigation and Monitoring Program
project	Belcaro at Sand Canyon Project
PV	Solar Photovoltaic
PVS	peak vector sum
RAP	Ridgeline Alteration Permit
RAP	Remedial Action Plan
REC	recognized environmental conditions
RFS	Renewable Fuel Standard
RFW	red flag warning
RHNA	Regional Housing Needs Assessment
RMS	Reservoir Management System
ROG	reactive organic gases
ROW	right-of-way
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCMC	Santa Clarita Municipal Code

Acronym	Term
SCOTUS	Supreme Court of the United States
SCOTUS	Supreme Court of the United States
SCP	Scientific Collecting Permit
SCS	Sustainable Community Strategy
SCVJSS	Santa Clarita Valley Joint Sewerage System
SCVSD	Santa Clarita Valley Sanitation District
SCVWA	Santa Clarita Valley Water Agency
SDWA	Safe Drinking Water Act of 1974
SEA	Significant Ecological Area
SEMS	Standardized Emergency Management System
sf	square feet or square foot
SF_6	sulfur hexafluoride
SFHA	Special Flood Hazard Area
SFP	School Facilities Program
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act
SLCP	short-lived climate pollutants
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
SMP	Soil Management Plan
SO_4^{2-}	sulfates
SoCalGas	Southern California Gas Company
SOI	Sphere of Influence
SOx	sulfur oxides
SPRR	South Pacific Railroad
SQMP	stormwater quality management program
SR-	State Route
SRA	source receptor area
SRTS	Safe Routes to School
SSARP	Systemic Safety Analysis Report Program
SSC	Species of Special Concern
SSMP	Sewer System Management Plan
SSO	sanitary sewer overflows
SSUSD	Sulphur Springs Unified School District
STP	shovel test pit
SVP	Society of Vertebrate Paleontology
SWCA	SWCA Environmental Consultants
SWPPP	Stormwater Pollution Prevention Plan
TAC	toxic air contaminant

Acronym	Term
TAU	Transportation Analysis Updates
TAZ	Traffic Analysis Zone
TMDL	Total Maximum Daily Load
TSCA	Toxic Substances Control Act of 1976
UFP	Ultrafine particles
UR1	Urban Residential 1
USACE	U.S. Army Corps of Engineers
USCRW	Upper Santa Clara River Watershed
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WDR	Waste Discharge Requirement
WEAP	Worker Environmental Awareness Program
WMA	Watershed Management Area
WMC	Watershed Management Committee
WRP	Water Reclamation Plant
WSA	Water Service Analysis
WUI	wildland-urban interface

SUMMARY

1. PURPOSE OF THE EIR

The City of Santa Clarita (City), as the Lead Agency under the California Environmental Quality Act (CEQA), has prepared this Environmental Impact Report (EIR) to assess the impacts that would result from the approval of the proposed Belcaro at Sand Canyon Project (project). This EIR will serve as a public information document to be used by the general public, responsible agencies, and decision-making bodies to review and evaluate the environmental effects associated with the project, potential mitigation measures recommended to address or minimize those effects, and reasonable alternatives to the project. The review process gives both agencies and individuals an opportunity to share expertise, discuss agency analyses, check for accuracy, detect omissions, discover public concerns, and solicit mitigation measures and alternatives capable of avoiding or reducing the significant effects of the project while still attaining most of the basic objectives of the project.

2. PROJECT LOCATION

The project is proposed for the easternmost portion of the City, south of the Santa Clara River and north of the Sand Canyon Country Club. The project site would be located on 193.8 acres of vacant land controlled by New Urban West, Incorporated (the applicant). The project site consists of the following Assessor Parcel Numbers (APNs): 2840-001-118, 2840-015-025, -031, -032, -033, -034, -035, -045, and -047. The project site is separated into two development areas by the Los Angeles County Metropolitan Transit Authority (Metro) railroad, which runs in an east–west direction, south of the Santa Clara River.

In addition to the residential development proposed on the project site, the project proposes off-site improvements. The project area, which comprises the project site and all off-site improvements, would total approximately 208 acres. The project site is approximately 26 miles north of downtown Los Angeles and is locally accessible via Lost Canyon Road and Oak Spring Canyon Road. Regionally, the project site is accessible from State Route (SR-) 14 via Sand Canyon Road, west of the project site. The project site is found on the Mint Canyon, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle in Sections 13, 14, 23, and 24, Township 4 North, Range 15 West.

3. PROJECT OVERVIEW

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a 3.1-acre recreation center; and private trails within the 193.8-acre project site. The project would include the following off-site improvements:

- A railroad undercrossing below the Metro-owned railroad;
- An extension of Lost Canyon Road with a bridge connecting the project site to provide access from the existing Lost Canyon Road;
- A roundabout at Lost Canyon Road and Sand Canyon Road;
- The development of the proposed J Street, which would connect to Robinson Ranch Road;
- Infrastructure improvements within the existing right-of-way (ROW) on Lost Canyon Road adjacent to the project site, including the expansion of local utilities infrastructure (water, sewer, and storm drain lines) and roadway improvements; and
- The development of public trails along existing and expanded sections of Lost Canyon Road, as well as along the new J Street.

See Chapter 2, *Project Description*, for a detailed description of the project.

4. PROJECT OBJECTIVES

The applicant identifies these as the project objectives:

- Develop a planned, age-qualified (55+) residential community that aligns with the City vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.
- Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
- Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.
- Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.
- Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
- Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
- Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.

5. SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED

Impacts of the project and alternatives have been classified using the categories described below:

- **Significant, unavoidable, adverse impacts:** Significant impacts that cannot be fully and effectively mitigated. No measures could be taken to avoid or reduce these adverse effects to insignificant or negligible levels. This EIR does not identify any significant, unavoidable, adverse impacts for the project.
- **Significant, but mitigable impacts:** These impacts are potentially similar in significance to those of significant, unavoidable, adverse impacts, but can be reduced or avoided by the implementation of mitigation measures.
- **Less than significant impacts:** Mitigation measures may still be required for these impacts as long as there is rough proportionality between the environmental impacts caused by the project and the mitigation measures imposed on the project.

The term "significance" is used throughout the EIR to characterize the magnitude of the projected impact. For the purpose of this EIR, a significant impact is a substantial or potentially substantial change to resources in the local project area or the area adjacent to the project. In the discussions of each environmental resource area, thresholds are identified that are used to distinguish between significant and insignificant impacts. Mitigation measures have been identified to reduce project impacts to less-than-significant levels. CEQA requires that public agencies not approve projects as proposed if there are feasible mitigation measures available that would substantially lessen the environmental effects of such projects (CEQA Statute § 21002). Included with each mitigation measure are the plan requirements needed to ensure that the mitigation is included in the plans and construction of the project.

The impacts and associated mitigation measures identified for the project are shown in Table ES-2, Summary of Impacts and Mitigation Measures. The table includes significant and less-than-significant impacts, all of which are identified with an impact number (e.g., AQ Impact 1). The impact summary table describes and classifies each impact, lists recommended mitigation when applicable, and states the level of impact remaining after implementation of identified mitigation. A summary of project alternatives, including the environmentally superior alternative, is included in Section 8, *Project Alternatives*, of this Executive Summary.

Table S-1. Summary of Impacts and Mitigation Measures

Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Aesthetics			
Impact AES-1: The project would not have a substantial adverse effect on a scenic vista.	LTS	Mitigation is not necessary.	LTS
Impact AES-2: The project would not substantially damage scenic resources within a State Scenic Highway.	NI	Mitigation is not necessary.	NI
Impact AES-3: The project would not conflict with applicable zoning and other regulations governing scenic quality.	LTS	Mitigation is not necessary.	LTS
Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	LTS	Mitigation is not necessary.	LTS
Impact AES-5: The project would not contribute to any cumulative impacts related to aesthetics.	LTS	Mitigation is not necessary.	LTS
Agriculture			
Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	NI	Mitigation is not necessary.	NI
Impact AG-2: The project would not conflict with existing zoning for agricultural use or a Williamson Act contract.	NI	Mitigation is not necessary.	NI
Impact AG-3: The project would not result in other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.	NI	Mitigation is not necessary.	NI
Impact AG-4: The project would not contribute to the cumulative loss of farmland.	NI	Mitigation is not necessary.	NI
Air Quality			
Impact AQ-1: The project would not conflict with an applicable air quality plan.	LTS	Mitigation is not necessary.	LTS

Note: LTS = less than significant; LTSM = less than significant with mitigation incorporated; NI = no impact

Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact AQ-2: The project 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.	LTS	Mitigation is not necessary.	LTS
Impact AQ-3: The project could expose sensitive residential receptors to substantial pollutant concentrations during construction related to diesel exhaust.	LTSM	**MM AQ-3.1: Construction Equipment Exhaust Minimization.** Before allowing any construction vehicles on-site, the permittee must provide evidence to the Director of Community Development that, for off-road equipment with diesel engines rated at 25 horsepower or greater, no construction equipment may be used that is less than Tier 4 Final as defined by the U.S. Environmental Protection Agency's Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuel; Final Rule (EPA 2004). An exemption from this requirement may be granted by the Director if 1) the permittee documents equipment with Tier 4 Final engines are not reasonably available, and 2) the required corresponding reductions in criteria air pollutant emissions can be achieved for the project from other combinations of construction equipment. Before an exemption may be granted, the permittee must 1) demonstrate that at least three construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Los Angeles County during the desired construction schedule, and 2) the proposed replacement equipment was evaluated using the California Emissions Estimator Model or other industry standard emission estimation method and documentation has been provided to the City to confirm that necessary project-generated emissions reductions are achieved.	LTS
Impact AQ-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.	LTS	Mitigation is not necessary.	LTS
Impact AQ-5: The project's air pollutant emissions related to diesel exhaust during construction could result in a cumulative contribution to air pollution in the region.	LTSM	Implement Mitigation Measure MM AQ-1.	LTS
Biological Resources			
Impact BIO-1: The project could have a substantial adverse effect on 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. Direct impacts could occur to Crotch's bumble bee, California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard, and indirect impacts could occur to the same	LTSM	**MM BIO-1.1: Biological Monitoring. Crotch's Bumble Bee Habitat Preservation and Minimization.** A preconstruction survey for Crotch's bumble bee must be conducted within the project area before starting initial vegetation removal or initial grading activities occurring during the Crotch's bumble bee nesting period (February 1–October 31). The survey must confirm that no nests for Crotch's bumble bee are located within the construction area. The preconstruction survey must include 1) a habitat assessment and	LTS

Note: LTS = less than significant; LTSM = less than significant with mitigation incorporated; NI = no impact

Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
species listed for direct impacts, in addition to slender mariposa lily and Peirson's morning glory.		2) focused surveys, both of which will be based on recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023 (CDFW 2023), or the most current at the time of construction. a. The habitat assessment must, at a minimum, include historical and current species occurrences; document potential habitat on-site, including foraging, nesting, and/or overwintering resources; and identify which plant species are present. Nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted. b. If required, the focused survey must be performed by a biologist approved by the Director of Community Development and with the two official qualification credentials from the CDFW that authorizes the biologist to handle and conduct surveys for Crotch's bumble bee (a Memorandum of Understanding [MOU] and Scientific Collecting Permit [SCP] for bumble bees), and include at least three survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys must coincide with the Colony Active Period (April 1–August 31 for Crotch's bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least one hour following rain. Optimal survey conditions are when there are sunny to partly sunny skies with temperatures that are greater than 60 degrees Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys may not be conducted when it is windy (i.e., sustained winds greater than eight miles per hour). The biologist must look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, a qualified biologist must watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then the individual bumble bee must be	

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		identified to species. The biologist should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). c. Identification will include netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the *National Protocol Framework for the Inventory and Monitoring of Bees* (U.S. Fish and Wildlife Service [USFWS] 2016), by the biologist who holds the MOU and SCP for bumble bees. The bee must be placed in a clear container for observation and photographically documented. The bee will be photographed using a macro lens from various angles to record key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee will be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee must be released into the same area from which it was captured upon completion of identification. d. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities may occur within 100 feet of the nest, or as determined by the biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1–October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, and males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. e. A written survey report will be submitted to the Director of Community Development within 30 days of the	

Note: LTS = less than significant; LTSM = less than significant with mitigation incorporated; NI = no impact

Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		preconstruction survey and be reviewed and approved by the Director of Community Development before the start of grading and construction activities. The survey report must also be submitted to the CDFW within the same timeframe for its consideration and action in accordance with applicable laws and regulations. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and biologist who holds the MOU and SCP for bumble bees, detailed habitat assessment, and photo vouchers. If Crotch's bumble bee nests are observed, the survey report must also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database at the time of, or before, submittal of the survey report. Once the habitat assessment and survey results (if applicable) are available, the applicant must consult with the CDFW to determine whether an Incidental Take Permit is required. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee must be incorporated into the Habitat Mitigation and Monitoring Plan described in MM BIO-1.5. If Crotch's bumble bee is no longer a candidate for listing under the California Endangered Species Act (CESA) or listed under CESA at the time of the start of construction of the project, MM BIO-1.1 will no longer be required as removal of the candidate status without a successfully listing of the species would indicate that CDFW determined that the threshold for listing under CESA was not met. **MM BIO-1.2: Biological Monitoring.** Before the City Engineer issues a grading permit, the applicant must submit the qualifications of potential Biological Monitor(s) to the Director of Community Development for review and approval. The applicant must then fund the City-approved Biological Monitor(s) during project construction to monitor construction activities and ensure compliance with all mitigation measures. The Biological Monitor must be present on-site during all vegetation removal and each day before the commencement of grading activities. The Biological Monitor is responsible for conducting a preconstruction clearance survey and any special-status species shall be relocated to the Conservation Area (see MM BIO-1.4). Preconstruction clearance surveys must be conducted before construction of each new phase of the development. The Biological Monitor must monitor to ensure that	

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		wildlife does not become entrapped in excavation or trenching areas. Safeguards must be implemented during daytime periods of non-activity and overnight, such as placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction must be halted until the Biological Monitor arrives on-site and authorizes resumption of work (in compliance with all applicable permits and authorizations). The Biological Monitor must regularly inspect the project as needed after the completion of all grading activities. During visits, the Biological Monitor must: 1) address the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM BIO-1.10; 2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; and 3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources. Daily monitoring reports must be prepared by the Biological Monitor that, at a minimum, provide documentation of the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective actions taken during the reporting period. The monitoring reports must include photos as appropriate and be made available to the Director of Community Development upon request. **MM BIO-1.3: Worker Environmental Awareness Program.** Before the initiation of the initial vegetation removal or initial grading activities, all personnel associated with those activities must attend a Worker Environmental Awareness Program (WEAP) conducted by a Qualified Biologist approved by the Director of Community Development. In general, the WEAP must review any potentially occurring sensitive biological resources or species and habitat preference(s), occupied habitat in the area, and life histories, as well as potential construction impacts, protection measures, and project limits. Legal protections and regulations pertinent to the biological resources that may be present on-site must also be included in the WEAP. A species and habitat fact sheet must be drafted before the training program and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project. After the kickoff meeting, the applicant must notify the Qualified Biologist in advance if additional contractors are employed during the initial vegetation removal or initial grading activities. A sign-in sheet will be circulated for signatures to all personnel that attend the	

Note: LTS = less than significant; LTSM = less than significant with mitigation incorporated; NI = no impact

Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation

workers educational training to confirm that program materials were received and that they understand the information presented.

MM BIO-1.4: On-Site Conservation Area

Establishment of a Conservation Area

The on-site conservation easement area must be designated on the final map. Additionally, the applicant must obtain a letter of intent from the Conservation Easement holder, the qualifications for which are described below. Before the City Engineer issues a grading permit, the applicant must record an easement in favor of a qualified conservation organization or land trust, as defined by Civil Code § 815.1, that permanently preserves 50.78 acres of open space within the project boundaries for long-term conservation and management as a natural Conservation Area. The table below lists the vegetation communities that would be preserved, which includes 24.49 acres of sensitive vegetation communities.

Vegetation Community / Land Cover	Preserved via Conservation Easement
Adenostoma fasciculatum-(Ceanothus cuneatus) Association	4.27
Adenostoma fasciculatum-Eriogonum fasciculatum Association	0.34
Artemisia californica Association	1.69
Artemisia tridentata-Ericameria nauseosa Association	5.61
Artemisia tridentata ssp. *parishii* Association[1]	0.61
Disturbed habitat	2.55
Eriogonum fasciculatum-Artemisia tridentata Association[1]	0.01
Hirschfeldia incana Association	0.01
Lepidospartum squamatum-Atriplex canescens Association[1]	2.45
Lepidospartum squamatum-Eriogonum fasciculatum Association[1]	14.92
Nonnative Grassland General Habitat	8.22

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation

Populus fremontii Association[1]	1.27
Prunus ilicifolia ssp. *ilicifolia* Association[1]	5.22
Quercus agrifolia Association	0.49
Quercus john-tuckeri Association	3.11
Total Acres	**50.78**

[1] Sensitive Vegetation Community

Conservation Management Plan

As part of recording the Conservation Easement, a long-term Conservation Management Plan (CMP) applicable to the On-Site Conservation Area must be prepared and submitted to the Director of Community Development for approval. The CMP must identify the required resource management activities and the entities that are responsible for managing those activities in perpetuity. The CMP must set forth the following requirements that must be implemented by the entity that holds the Conservation Easement and/or manages and stewards the Conservation Area:

a. Grading and construction activities are prohibited within the Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance;

b. Off-trail activities (e.g., hiking, biking, horseback riding) are prohibited;

c. Signage must be installed at the trailheads and at any access points to the On-Site Conservation Area, which includes information on the organization that holds the Conservation Easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities;

d. Signage must be placed in visible locations and that require humans and domesticated pets to remain within the limits of designated hiking trails, all domesticated pets must be on leashes, owners must clean up after domesticated pets, and smoking is prohibited;

e. No fencing or other barriers to wildlife movement may be installed;

f. Dog waste bag dispensers and wildlife-proof receptacles for trash must be provided at appropriate locations on the trail;

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		g. Commercial honeybee operations are prohibited from using the Conservation Area for storing their apiaries; h. Rodenticides are prohibited; i. Herbicides and pesticides are discouraged, and only those typically used for invasive plant management in California wildlands are allowed, per the California Invasive Plant Council and Pesticide Research Institute's Best Management Practices for Wildland Stewardship;[1] j. At least one annual walk-through survey must be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; k. Collect and remove trash, repair vandalized signs, and rectify trespass impacts; and l. Provide annual reporting to the Director of Community Development that documents the conditions of the Conservation Area. Approved work must be outlined in the CMP and Conservation Easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities must be delineated. The Conservation Easement holder must be a public or private sector entity, which has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The entity that holds the endowment must meet the criteria outlined in Government Code § 65968(b). Funding for implementation of the tasks in the CMP must be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association, a Land Trust organization, or other equivalent mechanism(s). The recorded Conservation Easement document must: a. Clearly delineate the boundaries of all preserved open space areas; b. Prohibit uses inconsistent with the CMP; c. Provide management of the land in perpetuity and be binding on all successors and assigns;	

[1] California Invasive Plant Council and Pesticide Research Institute. 2015. *Best Management Practices for Wildland Stewardship*. Available at: https://cal-ipc.org/docs/bmps/dd9jwo1ml8vttq9527zjhek99qr/BMPHerbicide.pdf. Accessed October 2023.

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		d. Designate the Land Manager organization as the responsible party for all monitoring, maintenance, and reporting obligations; and e. Expressly relieve the City of any maintenance, monitoring, or financial obligation with respect to the preserved areas. **MM BIO-1.5: Habitat Mitigation and Monitoring Plan.** Before the City Engineer issues a grading permit, a Director of Community Development-approved Restoration Biologist must be retained by the applicant to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area and special-status species transplant location, and will outline detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. The HMMP must be submitted to and approved by the Director of Community Development before the onset of project-related ground-disturbing activities. The minimum acreages allotted for on-site establishment apply to a total of 10.78 acres of nonnative grassland and disturbed habitat in the Conservation Area (see MM BIO-1.4). The locations of the restoration areas are shown in Figure 4.4-4 of the Environmental Impact Report. Artemisia tridentata ssp. parishii association, a sensitive community, would be established in the Conservation Area. The implementation of the HMMP will be funded and implemented by the applicant. The HMMP must include and address the following performance criteria, requirements, and elements. The HMMP must be implemented by the applicant, including all required planting and seeding, weed control, maintenance, monitoring, reporting, and final agency sign-off efforts necessary to reach the required performance standards. <u>Schedule</u> Establishment of restoration/revegetation sites will be conducted between October 15 and January 30, with planting and/or seeding occurring immediately after the restoration sites are prepared. <u>Stressors</u> Any stressors causing habitat degradation should be addressed before starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species will include the following: a. Removal of nonnative species in patches of native habitat must be conducted in such a way as to minimize impacts to the existing native vegetation.	

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		b. Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates: that other methods of invasive species control have been tested, and that a single application of herbicide has been determined to be the best solution; c. that there is a post-application plan for revegetation and/or mulching; and d. that the treatment is a one-time application. e. Preemergent herbicide is prohibited. <u>Plant Material</u> The following will be implemented: a. Details regarding the planned source of their plant material will be provided. b. All stock from nurseries will be derived from plants originally collected within cismontane Los Angeles County. c. Plant material used for habitat restoration purposes will consist of native species that are local to the immediate area of the mitigation site. d. All plant material proposed for use in a habitat restoration program will be inspected by a City-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species. e. Container plants and other landscaping materials (including organic mulches) should be inspected by the City-approved Restoration Biologist to ensure they do not contain Argentine ants. f. Native seed mixes will be inspected by the City-approved Restoration Biologist before their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens. g. Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility. h. One application of mulch will be done, except for areas that will provide nesting opportunities for native bees. <u>Maintenance Plan/Guidelines</u> A Maintenance Plan will be included that outlines the following:	

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		a. Weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; b. Herbivory control; c. Trash removal; d. Irrigation system maintenance; e. Maintenance training; and f. Replacement planting. <u>Signage and Fencing</u> Signage specifications will be developed to identify the site as a restoration/preserve area and to either state that trespassing is not allowed or to instruct visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access will be provided. <u>Monitoring Methods</u> Proposed plantings, enhancement/restoration, and receptor sites will be monitored for five years following the completion of seeding or planting. The monitoring program will consist of the observation and evidence of vegetative growth; observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants; photo-documentation; and measurements of annual rainfall. A Director of Community Development-approved Restoration Biologist, restoration specialist, biologist, or horticulturist with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments. The Director of Community Development-approved Restoration Biologist will conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites will be monitored on a monthly basis through seed production for five years to document the growth of the enhanced or restored habitat type or replacement population. Qualitative surveys, consisting of a general site walkover and habitat characterization, will be completed during each monitoring visit. General observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, will be noted in each site walkover. The Director of Community Development-approved Restoration Biologist will also	

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		note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records will be kept of mortality and other problems such as insect damage, weed infestation, and soil loss. <u>Surveying Flowering and Seed Production</u> In the case of replacement populations for specific species, flowering individuals observed within receptor sites will be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits will aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots will be tallied and recorded on data sheets. The total yearly population will be calculated each year for the annual monitoring results. <u>Photo Documentation</u> Permanent stations for photo documentation will be established before or during the first annual monitoring event. Photos must be taken each monitoring period from the same vantage point and in the same direction each year and reflect material discussed in the annual monitoring report. <u>Monitoring Schedule</u> During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site will be monitored monthly through seed production for five years. <u>Annual Monitoring Reports</u> At the end of each monitoring period an annual report will be prepared for submittal to the Director of Community Development. The report will summarize the information collected during the qualitative and quantitative monitoring. Each report will document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of success, and recommendations for the project and/or remedial measures, if necessary. Since seeding of particular species may not occur when planned, monitoring must be tied to the actual implementation date (e.g., the first annual report must be delivered on January 15 of the year following the first growing season after enhancement/restoration and/or seeding). These reports will describe the success of the relocation and will discuss the efficacy of the various methods	

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		employed to propagate this species. These reports will also include the following: a. a list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year; b. a vicinity map indicating location of the mitigation site; c. a mitigation site plan, identifying plot locations, photo station locations, etc., as appropriate; d. copies of all monitoring photographs; and e. an analysis of all qualitative and quantitative monitoring data. <u>Performance Standards</u> The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards will be considered to have been achieved if during any three years of the five-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory. The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan proposes a five-year monitoring term to track flowering individuals which provides the best and easiest indicators to track that the translocation is succeeding. Various threats to plants must be minimized to ensure survival, and ultimate flowering of seeded individuals leading to future germination/successful reproduction. Habitat characteristics, including nonnative grasses and herbaceous weeds, are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory. Should the performance standards be achieved early in the program, monitoring will continue for the full five years to ensure that there is no degradation of the habitat values during the five-year period. <u>Performance Standards for Five-Year Monitoring Period</u> The performance standards for the five-year monitoring period include the following:	

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		a. Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the two-year monitoring period (at least three years of the five-year monitoring period). b. Survival of 80% of established individuals. c. Habitat subject to translocation must exhibit same or less cover by nonnative grasses; and forbs than during the initial planting (30%). <u>Adaptive Management</u> The HMMP must include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the five-year monitoring period, the applicant must implement remedial measures to attempt to achieve the performance standards. These include installing additional container plants, broadcasting additional seeds, and extending the irrigation period. **MM BIO-1.6: Off-Site Habitat Preservation.** Implementation of MM BIO-1.4 would preserve 24.49 acres of sensitive vegetation communities, and MM BIO-1.5 would create 10.78 acres of *Artemisia tridentata* ssp. *parishii* association within areas of nonnative vegetation. Because a total of 39.62 acres of sensitive vegetation communities would be permanently impacted by the project, the mitigation described under MM BIO-1.4 and MM BIO-1.5 does not fully compensate for the direct habitat impacts on-site and additional on-site mitigation is not available with the proposed site configuration and project. Therefore, additional off-site mitigation will be required. Off-site acquisition of sensitive vegetation communities at a 2:1 ratio must be attained for the remaining 4.9 acres of direct impact to sensitive vegetation communities, for a total of 9.8 acres of off-site sensitive vegetation mitigation. Acceptable forms of off-site mitigation include bank credits, and/or turnkey projects with mitigation banks (as approved by the Director of Community Development) before the City Engineer issues a grading permit. Off-site mitigation may be used for additional acres of impacts as well, but only if it is not feasible to address the mitigation of impacts on-site and the Director of Community Development approves the approach and use of off-site mitigation beyond the 9.8 acres. All off-site mitigation shall be provided at least at a 2:1 (mitigation-to-impact) ratio. **MM BIO-1.7: Demarcation of Disturbance Limits.** Before commencement of earthwork for each phase of project construction, the construction area boundaries must be clearly demarcated (e.g., installation of flagging or temporary high-visibility construction fence), as recommended by the Director of Community Development-approved Biological Monitor. All construction activities, including	

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		equipment staging and maintenance, must be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging must be maintained throughout construction. **MM BIO-1.8: Special-Status Wildlife Relocation Plan.** Before commencement of any vegetation-clearing, earthmoving, or other ground-disturbing activities or the preconstruction staging of equipment on the project site, the applicant must contract with a Director of Community Development-approved biologist to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard. San Diego black-tailed jackrabbit is highly mobile and would be expected to leave areas of the project site on its own volition. The Preconstruction Wildlife Survey and Relocation Plan must be submitted to the Director of Community Development for review before any ground-disturbing activities within potentially occupied habitat. The Preconstruction Wildlife Survey and Relocation Plan must include, at a minimum, the following: a. Protocols for preconstruction surveys to flush out and/or move identified special-status wildlife within the project area, as feasible. b. Relocation to the on-site Conservation Area is the primary location, unless otherwise approved by the City. c. The timing, frequency, and locations where surveys should be conducted. d. Surveys will be conducted 24 hours before construction activities and repeated the morning of the proposed activity. e. Surveys must be conducted in all areas anticipated to be subject to vegetation clearing. f. The habitat and conditions in the proposed relocation site(s). g. The methods that would be used for trapping and relocating identified species. h. All equipment used in the effort will be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens. i. Any wildlife handling and relocation methodology from the California Department of Fish and Wildlife (CDFW)-issued Streambed Alteration Agreement, if any, will be	

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		incorporated in the Preconstruction Wildlife Survey and Relocation Plan. j. Protocols for documentation/recordation of the species and number of animals relocated. k. Relocations must be logged and made available to the City, if requested. l. Protocols for notifying the CDFW if identified species cannot be relocated. m. Attempts at relocation must be logged and notification must occur within 24 hours. n. Notations of the timing and frequency of reports documenting the results of the surveys. **MM BIO-1.9: Nesting Bird Avoidance.** Project construction must be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal may only occur during the non-breeding season for nesting birds and raptors; no vegetation removal shall occur between February 1–September 30. Project activities other than vegetation removal may occur within the breeding season for nesting birds and raptors (February 1–September 30), as long as a preconstruction survey is conducted by the Biological Monitor (see MM BIO-1.2) for nesting birds and/or raptors within three days before any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitor does not find any active nests immediately adjacent to the impact areas, the project activity may proceed. If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor must establish an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts must be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the Director of Community Development within three days after the completion of the survey. The active nest must be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active, as determined by the Biological Monitor: 1) work limits must be established within a buffer around any occupied nest (the	

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		buffer must be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor, and 2) access and surveying must be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest is only allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor determines that fledglings have left the nest, or the nest has failed. **MM BIO-1.10: Invasive Species Prevention Plan.** To prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the project, the following measures must be implemented: a. The Worker Environmental Awareness Program (WEAP) (see MM BIO-1.3) will include invasive species prevention measure implemented for the project. b. All mobile vehicles and construction equipment must be washed before entering the project in an upland location where any seed material from invasive species will be contained and not carried onto the project. Logs of the washing will be submitted monthly to the Director of Community Development. c. Following the completion of grading activities, for those areas of the project site that are graded but not yet developed/landscaped, the Director of Community Development approved Biological Monitor must conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM BIO-1.2). If abundant invasive species are identified, the Biological Monitor must inform the construction contractor about the infested area and recommend that the invasive species be removed. The recommendation will be included in the daily report. All vegetative material removed from the project footprint must be transported in a covered vehicle and will be disposed of at a certified disposal site. **MM BIO-1.11: Landscaping Plan.** Before the City Engineer issues the first grading permit and before vegetation clearance, the applicant must prepare a landscaping plan for the Homeowners' Association (HOA)-maintained areas and submit the Landscaping Plan to the Director of Community Development for review and approval. The Landscaping Plan for the HOA-maintained areas must include, without limitation, the following:	

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		a. Plant species list shall include scientific name, common name, plant container size, and quantities. b. Invasive plant species (designated by California Invasive Plant Council) may not be included in the Landscaping Plan. c. Nonnative milkweeds shall not be included in the Landscaping Plan. d. Plant layout must indicate the location of the plant species. e. Planting notes must include irrigation and plant installation requirements such as mulch requirements. f. Ornamental varietals and selections of native species must be avoided if they have the potential to hybridize with local native populations. g. Where native species are required, the species must be indigenous native species of the region (locally indigenous native species). **MM BIO-1.12: Homeowners' Association Covenants, Conditions, and Restrictions.** The Homeowner's Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs) must include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species: a. Invasive plant species (designated by the California Invasive Plant Council) are prohibited on all residential lots. b. All trash/garbage waste and recycling receptacles have locking devices that discourage wildlife foraging in common areas/parks and encourages the use of such locking devices on residential receptacles, as feasible. c. Intentional feeding of wildlife, including mule deer, is prohibited. d. The exterior use of rodenticides is prohibited. e. Speed limits of 15 miles per hour must be posted, and the CC&Rs must require residents to comply with the posted speed limits. f. Smoking is prohibited in common space areas. g. The HOA may not use balloons for any community events, and the use of balloons by individual homeowners must be discouraged. h. Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife is prohibited.	

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		i. Public information signage must be installed at the trailhead and in the recreation facility and printed information must be provided to the HOA in order to: 1. Educate and inform the public about wildlife, especially mountain lions present in the area; 2. Advise on proper avoidance measures to reduce human-wildlife conflicts; 3. Advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and 4. Provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.	
Impact BIO-2: The project could have substantial adverse effects on riparian habitat and sensitive natural communities.	LTSM	Implement MM BIO-1.4 through MM BIO-1.7 and MM BIO-1.10 through MM BIO-1.12.	LTS
Impact BIO-3: The project could have substantial adverse effects on federally protected wetlands as defined by Section 404 of the Clean Water Act.	LTSM	Implement MM BIO-1.4. **MM BIO-3.1: Jurisdictional Waters Compensation.** Mitigation for up to 3.57 acres of direct impacts to jurisdictional waters must be implemented through off-site acquisition, such as mitigation bank credits, and/or turnkey projects with mitigation banks (as approved by the City of Santa Clarita) after the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Los Angeles Regional Water Quality Control Board issue permits and before the City Engineer issues a grading permit.	LTS
Impact BIO-4: The project could interfere substantially with established native resident or migratory wildlife corridors.	LTSM	Implement MM BIO-1.4.	LTS
Impact BIO-5: The project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	LTSM	Implement MM BIO-1.2 through MM BIO-1.5, MM BIO-1.7, MM BIO-1.10, and MM BIO-1.11.	LTS
Impact BIO-6: Construction and operation of the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	NI	Mitigation is not necessary.	NI

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact BIO-7: The project would not contribute to cumulative biological resources impacts.	LTSM	Implement MM BIO-1.1 through MM BIO-1.12 and MM BIO-3.1.	LTS
Cultural Resources			
Impact CR-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5.	LTS	Mitigation is not necessary.	LTS
Impact CR-2: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5 during project construction.	LTSM	**MM CR-2.1: Monitoring and Reporting for Archaeological Resources.** Archaeological monitoring must occur during initial ground-disturbing activities. Before starting construction, the developer must retain an archaeological principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. The archaeological principal investigator must direct the monitoring activities and must be provided with a copy of the Cultural Resources Report and its appendices before monitoring. A monitoring scope of work must be developed and implemented to provide monitoring for initial ground-disturbing activities that are to occur within 50 feet of the previously recorded resources. Lower sensitivity areas require weekly spot checks. The frequency of archaeological monitoring may be adjusted at the discretion of the archaeological principal investigator based on inspection of exposed cultural material and the potential for soils to contain intact cultural deposits or significant archaeological material. The archaeological monitor, under the supervision of the archaeological principal investigator, may temporarily halt work to inspect areas for potential cultural material or deposits. If unanticipated archaeological deposits or features are discovered during construction activities, all construction work within 50 feet of the discovery must immediately stop until the archaeological principal investigator can assess the significance of the find and determine if an additional study is required. The archaeological principal investigator may recommend to the Director of Community Development, or designee, that adjustments to the work exclusion buffer be made to allow construction activities to continue. If necessary, temporary flagging may be installed around discoveries to avoid disturbance from construction equipment. If the archaeological principal investigator determines the discovery to be potentially significant under the California Environmental Quality Act or § 106 of the National Historic Preservation Act, the Director of Community Development may determine that an archaeological treatment plan, testing, and/or data recovery may be warranted before construction can proceed.	LTS

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		The on-site archaeological monitor(s) must complete monitoring logs for each day they are present to observe ground disturbance at the project site. The qualified archaeological principal investigator must provide an archaeological monitoring report to the Director of Community Development within 60 days following completion of construction. This report must include cultural monitoring results (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates all mitigation measures defined in the environmental document were appropriately met. Archaeological monitoring logs and documentation of any newly identified or updated cultural resources must be included in the appendices. This report must also be submitted to the South Central Coastal Information Center once finalized.	
Impact CR-3: The project would be required to comply with PRC § 5097.98, which specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. With implementation of this requirement, the project would not cause a significant impact to previously unidentified human remains, including those interred outside of dedicated cemeteries.	LTS	Mitigation is not necessary.	LTS
Impact CR-4: The project could result in the cumulative disturbance and destruction of cultural resources, including historic and archaeological resources, pursuant to CEQA Guidelines § 15064.5.	LTSM	Implement MM CR-2.1.	LTS
Energy			
Impact EN-1: The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact EN-2: The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	LTS	Mitigation is not necessary.	LTS
Impact EN-3: The project would not contribute to cumulative energy impacts.	LTS	Mitigation is not necessary.	LTS
Geology and Soils			
Impact GEO-1: The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an Alquist-Priolo earthquake fault.	NI	Mitigation is not necessary.	NI

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Impact GEO-2: The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	LTS	Mitigation is not necessary.	LTS
Impact GEO-3: The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction.	LTSM	**MM GEO-3.1: Geotechnical Investigation Report Design and Construction Recommendations.** The permittee must implement all methods outlined in the Geotechnical Investigation Report, Proposed Residential Development, Belcaro at Sand Canyon, Vesting Tentative Map 084497, City of Santa Clarita, California (LGC Valley, Inc. 2024), which details design and construction requirements to address project-specific soil conditions. The methods must be approved by the City of Santa Clarita (City) Engineer before the City Engineer issues grading permits and must be included on all grading and construction plans.	LTS
Impact GEO-4: The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	LTSM	Implement MM GEO-3.1.	LTS
Impact GEO-5: The project would not result in substantial soil erosion or the loss of topsoil.	LTS	Mitigation is not necessary.	LTS
Impact GEO-6: The project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	LTSM	Implement MM GEO-3.1.	LTS
Impact GEO-7: The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and would not create substantial direct or indirect risks to life or property.	LTS	Mitigation is not necessary.	LTS
Impact GEO-8: The project does not include the construction of any septic tanks or alternative wastewater systems.	NI	Mitigation is not necessary.	NI
Impact GEO-9: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	LTSM	**MM GEO-9.1: Paleontological Resources Mitigation and Monitoring Program and Paleontological Monitoring.** Before starting grading, the permittee must retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP) Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010 guidelines). Before the permittee commences grading operations, the paleontologist must prepare a paleontological resources mitigation and monitoring program (PRMMP) for the project that is consistent with the 2010 SVP guidelines and outlines requirements for preconstruction meeting attendance and worker environmental awareness training, where paleontological monitoring is required within the project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		microinvertebrate and microvertebrate fossils), reporting, and collections management. A qualified paleontological monitor must be on-site during ground-disturbing activities (including augering) below a depth of five feet below the ground surface in areas underlain by Holocene alluvial deposits and Holocene gravel and sand of major stream channels to determine if they are old enough to preserve scientifically significant paleontological resources. Full-time paleontological monitoring is required in areas underlain by late Pleistocene deposits and the Mint Canyon Formation. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor must temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the paleontological monitor will allow grading to recommence in the area of the find. Costs associated with laboratory work and curation fees must be paid by the permittee.	
Impact GEO-10: The project would not result in cumulatively considerable impacts related to geology and soils.	LTSM	Implement MM GEO-3.1 and MM GEO-9.1.	LTS
Greenhouse Gas Emissions			
Impact GHG-1: The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	LTS	Mitigation is not necessary.	LTS
Impact GHG-2: The project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LTSM	**MM GHG-2.1: No Wood-Burning Fireplaces or Stoves and No Natural Gas Fireplaces.** Only electric fireplaces may be installed in residential units. Project residential units are prohibited from having wood-burning or natural gas fireplaces or wood-burning stoves. **MM GHG-2.2: Require All-Electric Development.** Only all-electric appliances and end uses (including heating, ventilation, and air conditioning; water heating; and induction cooking) are permitted within the project. Swimming pool and spa equipment and water heating must also use electricity or solar instead of natural gas.	LTS
Impact GHG-3: The project could contribute significantly to cumulative impacts associated with GHG emissions.	LTSM	Implement MM GHG-2.1 and MM GHG-2.2.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Hazards and Hazardous Materials			
Impact HAZ-1: The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during project construction. Construction workers, future residents of the project, and the public could be exposed to hazardous materials associated with arsenic-impacted soil present within the project site.	LTSM	**MM HAZ-1.1:** Before the City Engineer issues a grading permit and the project contractor commences earthwork activities, the project contractor must be required to prepare and implement a Remedial Action Plan (RAP) for the removal and off-site transportation of arsenic-contaminated soils. The RAP must be prepared in accordance with all applicable laws that govern the transportation and disposal of hazardous materials and waste. The RAP must be approved by the City's Director. The RAP must: a. Describe the methodology to identify and manage (reuse or off-site disposal) contaminated soil during soil excavation and/or construction; b. Provide protocols for confirmation sampling, segregation and stockpiling, profiling, backfilling, disposal, guidelines for imported soil, and backfill approval from the California Department of Toxic Substance Control (DTSC) Information Advisory on Clean Imported Fill Material; c. Provide the requirement that there shall be no reuse of excavated soil deemed inappropriate for reuse as defined in the project-specific Soil Management Plan (SMP); d. Require the excavation and disposal of the 1,817 cubic yards of arsenic-impacted soil exceeding residential screening levels; and e. Comply with South Coast Air Quality Management District (SCAQMD) Rule 1466 to minimize off-site fugitive dust emissions. **MM HAZ-1.2:** Before the City Engineer issues a grading permit and the project contractor commences earthwork activities associated with the project, the project contractor must prepare and a Soil Management Plan (SMP) for the removal of contaminated soils at the project site and their transportation off-site. The SMP must address all project activities associated with on- and off-site improvements. All project improvements must be addressed by a SMP. At the discretion of the City's Director, multiple SMPs may be developed to allow for different contractors for each of the project elements and potential differences in construction timing. The SMP(s) must be prepared in accordance with applicable laws that govern the transportation and disposal of hazardous materials and waste. The SMP(s) must be approved by the City's Director. The SMP(s) must:	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		a. Describe the methodology to identify and manage (reuse or off-site disposal) contaminated soil during soil excavation and/or construction; b. Provide protocols for confirmation sampling, segregation and stockpiling, profiling, backfilling, disposal, guidelines for imported soil, and backfill approval from the California Department of Toxic Substance Control (DTSC) Information Advisory on Clean Imported Fill Material; and c. Address the potential for any unrecognized or previously unidentified impacted soil that may be encountered during any future earth-moving activities. The SMP(s) must be implemented before and during soil excavation associated with the project.	
Impact HAZ-2: The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during project operation.	LTS	Mitigation is not necessary.	LTS
Impact HAZ-3: Project construction occurring within the 208-acre project area (project parcels and roadway improvements) would not result in the release of hazardous materials into the environment.	LTSM	Implement MM HAZ-1.1 and MM HAZ-1.2.	LTS
Impact HAZ-4: Project operation would not result in potentially significant impacts related to upset or accident conditions involving the release of hazardous materials.	LTS	Mitigation is not necessary.	LTS
Impact HAZ-5: The project could introduce hazardous materials within 0.25 mile of an existing or proposed school during construction.	LTSM	Implement MM HAZ-1.1 and MM HAZ-1.2.	LTS
Impact HAZ-6: The project would not introduce hazardous materials within 0.25 mile of an existing or proposed school during project operation.	LTS	Mitigation is not necessary.	LTS
Impact HAZ-7: The project would not create a significant hazard to the public or the environment as it relates to hazardous materials sites compiled pursuant to California Government Code § 65962.5 during project construction and operation.	NI	Mitigation is not necessary.	NI
Impact HAZ-8: The project would not result in an airport-related safety hazard during either project construction or operation.	NI	Mitigation is not necessary.	NI
Impact HAZ-9: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan during either project construction or operation.	LTS	Mitigation is not necessary.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact HAZ-10: The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.	LTS	Mitigation is not necessary.	LTS
Impact HAZ-11: The project would not result in any cumulatively considerable impacts associated with hazards or hazardous materials.	LTSM	Implement MM HAZ-1.1 and MM HAZ-1.2.	LTS
Hydrology and Water Quality			
Impact HYD-1: The project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	LTS	Mitigation is not necessary.	LTS
Impact HYD-2: The project would not substantially decrease groundwater supplies or interfere with groundwater recharge.	LTS	Mitigation is not necessary.	LTS
Impact HYD-3: The project would not substantially alter the existing drainage pattern of the project site or increase surface water runoff in a manner that would result in substantial erosion or siltation, flooding, or an exceedance of stormwater drainage systems.	LTS	Mitigation is not necessary.	LTS
Impact HYD-4: The project would not risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.	LTS	Mitigation is not necessary.	LTS
Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	Mitigation is not necessary.	LTS
Impact HYD-6: The project would not result in cumulatively considerable impacts related to hydrology and water quality.	LTS	Mitigation is not necessary.	LTS
Land Use and Planning			
Impact LUP-1: The project would not include features that would physically divide an established community.	NI	Mitigation is not necessary.	NI
Impact LUP-2: The project would not 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.	NI	Mitigation is not necessary.	NI
Impact LUP-3: The project would not result in cumulatively considerable impacts associated with land use and planning.	NI	Mitigation is not necessary.	NI

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Mineral Resources			
Impact MR-1: The project would not 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.	NI	Mitigation is not necessary.	NI
Impact MR-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	NI	Mitigation is not necessary.	NI
Impact MR-3: The project would not contribute to the cumulative loss of mineral resources within the City.	LTS	Mitigation is not necessary.	LTS
Noise and Vibration			
Impact NOI-1: The project would generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.	LTSM	**MM NOI-1.1: Temporary Construction Noise Reduction.** The project contractor must ensure that the following measures are implemented and monitored for compliance throughout construction: a. During the paving phase, construction equipment must have supplier-approved sound muffling devices (e.g., engine air intake or exhaust treatment) installed and used in compliance with relevant industry standards and California Occupational Safety and Health (Cal/OSHA) regulations pertaining to construction noise. Such devices must be properly maintained and used at all times the equipment is in operation. The combination of these techniques must reduce construction noise levels by a minimum of 4 A-weighted decibels (dBA), where feasible. If equipment capable of achieving this reduction is not available, the contractor must document the unavailability of compliant equipment through written confirmation from at least two equipment suppliers or manufacturers and provide such documentation to the Director of Community Development or designee before the paving phase. In such cases, the contractor must implement the next best available noise-reduction measures (e.g., use of quieter equipment models, temporary noise barriers, increased setback of equipment from sensitive receptors, or other feasible controls) to minimize construction noise to the maximum extent practicable. b. During the paving phase, when high-noise paving equipment is operating within approximately 10 feet of the nearest sensitive receptor, operation of that equipment in that location must be limited to a maximum of one hour per	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		day. Construction activities may continue beyond this period provided that the equipment is relocated farther from the receptor, substituted with quieter equipment where feasible, or other feasible noise-reduction measures are implemented. c. Stationary construction equipment must be placed so that emitted noise is directed away from noise-sensitive receptors. d. Equipment staging areas must be located so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during the construction period. e. All noise-producing construction activities, including warming up or servicing equipment and any preparation for construction, must be limited to between 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m.to 6:00 p.m. on Saturdays. f. An 8-foot-tall temporary noise barrier must be erected along the western project boundary for the site preparation and grading construction phases. **MM NOI-1.2: Construction Schedule.** The project contractor must, to the extent feasible, schedule construction activities to avoid concurrent operation of several pieces of construction equipment at the nearest distance to an off-site noise-sensitive receptor. **MM NOI-1.3: Construction Noise Reduction.** Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, must be used where feasible. **MM NOI-1.4: Contact Information.** Construction hours, allowable workdays, and the phone number of the job superintendent must be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event the City of Santa Clarita receives a complaint, appropriate corrective actions must be implemented by the contractor and a report of the action provided to the reporting party.	
Impact NOI-2: During project construction, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.	LTS	Mitigation is not necessary.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact NOI-3: During project operation, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.	LTS	Mitigation is not necessary.	LTS
Impact NOI-4: During operation, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.	LTS	Mitigation is not necessary.	LTS
Impact NOI-5: The project would not generate excessive groundborne vibration or groundborne noise levels either during project construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact NOI-6: The project would not expose people residing or working in the project area to excessive noise levels related to aircrafts during project construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact NOI-7: The project would not contribute considerably to cumulative noise and/or vibration impacts.	LTS	Mitigation is not necessary.	LTS
Population and Housing			
Impact PH-1: The project would not 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).	LTS	Mitigation is not necessary.	LTS
Impact PH-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.	NI	Mitigation is not necessary.	NI
Impact PH-3: The project would not result in cumulative impacts related to population and housing.	LTS	Mitigation is not necessary.	LTS
Public Services			
Impact PS-1: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities.	LTS	Mitigation is not necessary.	LTS
Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities.	LTS	Mitigation is not necessary.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public school facilities.	NI	Mitigation is not necessary.	NI
Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public park facilities.	LTS	Mitigation is not necessary.	LTS
Impact PS-5: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities.	LTS	Mitigation is not necessary.	LTS
Impact PS-6: The project would not result in a cumulatively considerable impact associated with the provision of new or physically altered governmental facilities.	LTS	Mitigation is not necessary.	LTS
Recreation			
Impact REC-1: The project would not result in substantial physical deterioration of existing parks and recreation facilities during either project construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact REC-2: The construction of the recreation center and expansion of existing passive recreational areas within the 193.8-acre project site would not have an adverse physical effect on the environment.	LTS	Mitigation is not necessary.	LTS
Impact REC-3: The project would not result in a cumulatively considerable impact to recreational facilities.	LTS	Mitigation is not necessary.	LTS
Transportation			
Impact TR-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LTS	Mitigation is not necessary.	LTS
Impact TR-2: The project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).	LTS	Mitigation is not necessary.	LTS
Impact TR-3: The project would not substantially increase hazards due to a geometric design feature or incompatible uses.	LTS	Mitigation is not necessary.	LTS
Impact TR-4: The project would not result in inadequate emergency access.	LTS	Mitigation is not necessary.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Impact TR-5: The project would not have potential to result in cumulatively considerable impacts associated with transportation.	LTS	Mitigation is not necessary.	LTS
Tribal Cultural Resources			
Impact TCR-1: During construction, the project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC §§ 5020.1(k) and 5024.1.	LTSM	**MM TCR-1.1: Full Time Monitoring, Multiple Monitors.** The project applicant must retain professional Tribal Monitors provided by the Fernandeño Tataviam Band of Mission Indians to observe all ground-disturbing activities in native soil as described in the following paragraphs, including, without limitation, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, or similar activities. During mass grading there must be one Tribal Monitor per 20 acres of active disturbance. Following mass grading, if ground-disturbing activities occur in native soil to a depth of five feet in areas not previously subject to mass grading, one Tribal Monitor per 20 acres must be assigned to monitor such ground-disturbing activity. If tribal cultural resources are encountered at any point, Tribal Monitors must observe all remaining ground-disturbing activities until all ground-disturbing activities are complete. Tribal monitoring must continue until the project applicant provides written confirmation to the Tribe that all mass grading and ground-disturbing activities in areas not subject to mass grading have been completed. If the project applicant pauses mass grading and ground-disturbing activities such that Tribal Monitors are no longer on site, before commencement of grading, the project applicant shall provide five days' notice before the start of further ground-disturbing activities. Upon discovery of tribal cultural resources, the Tribal Monitor may stop ground-disturbing activities within 60 feet of the discovery. A qualified archaeologist meeting Secretary of the Interior standards, retained by the project applicant, and the Tribal Monitor must assess the find before the Tribal Monitor allows further grading in that area. **MM TCR-1.2: Disposition and Treatment of Inadvertent Discoveries.** The lead agency and/or project applicant must, in good faith, consult with the Fernandeño Tataviam Band of Mission Indians on the disposition and treatment of any tribal cultural resource encountered during all ground-disturbing activities. **MM TCR-1.3: In the Event of Inadvertent Discovery, Human Remains.** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) must cease	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
		and the Los Angeles County Coroner must be contacted pursuant to California Health and Safety Code § 7050.5. Inadvertent discoveries of human remains and/or funerary object(s) are subject to Health and Safety Code § 7050.5, and the subsequent disposition of those discoveries must be decided by the Most Likely Descendant, as determined by the Native American Heritage Commission, should those findings be determined as Native American in origin.	
Impact TCR-2: Prior to the consideration of proposed mitigation measures, construction of the project could result in significant contributions to cumulative impacts related to the disturbance and destruction of tribal cultural resources.	LTSM	Implement MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3.	LTS
Utilities and Service Systems			
Impact USS-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	LTS	Mitigation is not necessary.	LTS
Impact USS-2: The project and reasonably foreseeable future development would be served by adequate water supplies to meet demands during normal, dry, and multiple dry years.	LTS	Mitigation is not necessary.	LTS
Impact USS-3: The project would be served with adequate capacity to meet its projected wastewater treatment demand in addition to the provider's existing commitments.	LTS	Mitigation is not necessary.	LTS
Impact USS-4: The project would not result in an increase in solid waste in excess of State or local standards or the capacity of local infrastructure.	LTS	Mitigation is not necessary.	LTS
Impact USS-5: The project would not conflict with Federal, State, and local management and reduction statutes and regulations related to solid waste.	LTS	Mitigation is not necessary.	LTS
Impact USS-6: The project would not result in a cumulatively considerable impact associated with the provision of new or expanded utilities.	LTS	Mitigation is not necessary.	LTS

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
Wildfire			
Project Design Features			
Related to Wildfire, the project includes Project Design Features (PDFs), which are essential components of the project description that address wildfire hazards. Due to their importance, they are included in this summary table.			
PDF-WF-1: A preconstruction meeting with the Los Angeles County Fire Prevention Unit would be held, before start of underground utility installation.			
PDF-WF-2: A Construction Fire Protection Plan (CFPP) that would be prepared by the project applicant that addresses fire safety practices to reduce the possibility of fire during construction activities.			
PDF-WF-3: Vegetation management requirements will be implemented at commencement of construction and throughout the construction phase in compliance with Chapter 33 of the CFC. Vegetation management for the project area will be performed in accordance with applicable law on all building locations before the start of work including importing combustible construction materials. Adequate fuel breaks will be created around all grading, site work, and other construction activities in areas where there is flammable vegetation to ensure that potential ignitions associated caused by construction activities do not transition offsite. Combustible materials will not be brought on-site without prior fire department approval regarding appropriate pre-construction fire safety features.			
PDF-WF-4: The project will include the construction of a 6-foot non-combustible fire wall (lower 1 to 2 feet is a concrete masonry unit (CMU) block wall and upper 4 to 5 feet is a dual pane (including one tempered glazing pane) window) to provide additional heat deflection along the perimeter of the lots in the southwest portion of the project where there are reduced fuel modification zones which are adjacent to areas identified as California Department of Fish and Wildlife (CDFW) jurisdictional stream areas. The fire wall will be constructed to function as a heat-deflecting wall.			
PDF-WF-5: Dual-pane, dual-tempered windows will be installed for structures facing the open space and naturally vegetated areas unable to achieve a minimum 100 feet of on-site FMZ (this area includes the lots in the southeast portion of the project site).			
PDF-WF-6: The project HOA will maintain the access roads, including a minimum of 10 feet of clearance on each side of the road(s) within the development footprint adjacent to open space areas.			

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
PDF-WF-7: To confirm that the project's FMZs and landscape areas are being maintained according to the FPP and the LACoFD's fuel modification guidelines. The project HOA will obtain a FMZ inspection and report from a qualified LACoFD-approved 3rd party inspector in May/June of each year certifying that vegetation management activities throughout the project site have been performed. If the FMZ areas are not compliant, the project HOA will have a specified period to correct any noted issues so that a re-inspection can occur and certification can be achieved. Annual inspection fees are subject to the current Fire Department Fee Schedule.			
PDF-WF-8: The project HOA will maintain all common areas, including trees planted along roadways and in other areas throughout project site.			
PDF-WF-9: A wildfire education program will be developed for the community—the Belcaro at Sand Canyon Wildfire Education Program. The education program will be implemented to maintain high wildfire awareness. The program will include the following: • **Biannual Email and Mailers:** Residents and occupants will be provided with biannual emails and mailers in April and August that will include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, and how to prevent wildfires. Links to various resources on where to get trusted information such as LACoFD, 211 LA County, and Ready LA County will be provided. • **Website:** There will be a dedicated community website with more detailed information and resources about wildfire awareness and prevention. The website will serve as a centralized resource for the fire education program and include information from the FPP. The website will also have fire watch and RFW alerts, as well as information on restrictions during fire weather conditions. Residents will also be able to use the website to sign up for an annual residential defensible space inspection from the HOA Fire Committee. • **Community Workshops and Webinars:** Either in-person or virtual community workshops will be held two times a year. The goal of the workshops will be to cover various fire topics more in-depth. Examples include having an LACoFD representative come to meet the community, a workshop on how to make a go-bag, a workshop on how to make a residential evacuation plan, or how to maintain the home ignition zone. • **New Resident Packet:** All residents and future new residents will be presented with a wildfire awareness and safety package upon purchase or rental of a home. Within the packet will be a memory stick with the evacuation plan, a list of fire protection features,			

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
information on the regional fire hazard, prohibited activities in fire risk areas, how to build a go-bag, and a list of agencies and resources for receiving trusted information. • **Emergency Alert Campaign:** Residents and homeowners will be encouraged to sign up for Alert LA County, which is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, State, and federal agencies. The campaign will occur annually and encourage residents to sign up for Alert LA County. Reminders will also be sent out in the biannual emails and mailers, on the community website, in the workshops, and in the new resident package. • **Fire Watch Groups:** Within the community, there will also be volunteer fire watch groups, which will be comprised of residents and/or businesses who volunteer to participate in a fire watch group for the community. During RFW days, this group will be responsible for reminding residents of fire-safe practices and restrictions. During RFW days, the fire watch group will also maintain vigilance for potential fires and will be trained on procedures for alerting LACoFD in the event of a fire. • **HOA Fire Safety Committee:** The fire safety committee will be responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee will be responsible for the coordination of the third-party FMZ inspections and the volunteer residential defensible space inspections. The committee will also be responsible for the creation and distribution of the educational program for the project. The committee will serve as a communication link between LACoFD and the community.			
PDF-WF-10: A "Ready, Set, Go!" approach to evacuation will be formally adopted, practiced, and implemented by the project's HOA or other approved entity. The project's HOA will coordinate with the LACoFD to hold an annual fire safety and evacuation preparedness informational meeting. Representatives of LACoFD will be invited to attend, and important fire and evacuation information will be reviewed. One focus of these meetings and the project's annual message will be on the importance of each resident to prepare and be familiar with their own "Ready, Set, Go!" evacuation plan. Because the project incorporates ignition resistant construction, wide fuel modification zones, ember protection, and fire defensibility throughout, responding fire and law enforcement personnel will be able to direct persons to temporarily refuge within buildings on-site in the rare situation where shelter-in-place is determined to be safer than evacuating. The project's HOA or other approved entity will organize annual evacuation			

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Impacts	Impacts Before Mitigation	Mitigation Measures	Impacts Following Mitigation
public outreach and engage directly with organizations such as the California Fire Safe Council.			
Mitigation Measures			
Impact WF-1: The project would not substantially impair an adopted emergency response plan or emergency evacuation plan during either construction or operation, block or reroute existing roadways or evacuation routes, or propose actions or approaches that are conflicting with local Emergency Operations or Response Plans.	LTS	Mitigation is not necessary.	LTS
Impact WF-2: The project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire during project construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact WF-3: The project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment as a result of installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities).	LTS	Mitigation is not necessary.	LTS
Impact WF-4: The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes during construction or operation.	LTS	Mitigation is not necessary.	LTS
Impact WF-5: The project would not result in a cumulatively considerable impact related to wildfire.	LTS	Mitigation is not necessary.	LTS

Note: LTS = less than significant; LTSM = less than significant with mitigation incorporated; NI = no impact

6. AREAS OF CONTROVERSY

CEQA Guidelines § 15123(b)(2) requires identification of the areas of controversy known to the Lead Agency, including issues raised by agencies and the public. In compliance with CEQA Guidelines § 15082, as amended, a Notice of Preparation (NOP) was circulated on June 27, 2025, to various agencies, organizations, and interested people throughout the region (Appendix A). The NOP provides a description of the project and the scope of the environmental review. Agencies and the public were invited to review and comment on the NOP up through the close of the NOP review period, which was July 28, 2025. The City also hosted a scoping meeting on July 7, 2025, so that jurisdictional agencies and interested people or groups could provide comments regarding, but not limited to, the range of actions, alternatives, mitigation measures, and environmental effects to be analyzed in the EIR. Following the close of the 30-day comment period on the NOP, a review of comment letters was conducted to identify any key issues that may require additional technical studies or background research.

Areas of controversy raised by public agencies, public organizations, and individual members of the public primarily included concerns regarding wildfire and emergency access/evacuation routes; neighborhood compatibility, including the density of the project; an increase in traffic congestion; and demand on infrastructure/utilities such as water, power, and sewage. To the extent these issues and concerns are within the scope of CEQA, they are addressed in the evaluation and identification of potential mitigation measures for each environmental issue area included in Chapter 4, *Environmental Impact Analysis*.

7. ISSUES TO BE RESOLVED

CEQA Guidelines § 15123(b)(3) requires the summary section of an EIR to identify any "issues to be resolved" by the decision-making body, including the choice among alternatives and whether or how to mitigate any significant effects. In consideration of the project, the City will need to weigh the consideration of project alternatives against the availability of mitigation measures to address the identified environmental impacts. Also, the City will need to determine to what degree the project meets the City's and the State of California's housing development goals, including whether the project appropriately applies California's density bonus laws as a driver of housing production and affordability. Both of these considerations are outside the scope of CEQA, although the EIR can be used to weigh the environmental consequences of the various development options.

8. PROJECT ALTERNATIVES

CEQA Guidelines § 15123(b)(3) of the CEQA Guidelines requires that an EIR summary identify the choice among project alternatives. Alternatives to the project are discussed in detail in Chapter 5, Alternatives Analysis, of this EIR in accordance with CEQA Guidelines § 15126.6. Alternatives required to be considered under CEQA are those that would avoid or substantially lessen one or more of the significant environmental effects identified during evaluation of the project. CEQA Guidelines § 15126.6(a) states that an EIR shall describe a range of reasonable alternatives. Chapter 5 of this EIR identifies, describes, and evaluates the following four alternatives:

- **No Project/No Build Alternative.** CEQA Guidelines § 15126.6(e) requires analysis of the No Project Alternative. In accordance with the State CEQA Guidelines, the No Project/No Build Alternative for a development project on an identifiable property consists of the circumstances under which the project does not proceed as provided by CEQA Guidelines § 15126.6(e)(3)(B). CEQA Guidelines § 15126.6(e)(3)(B) provides that, "In certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Under the

No Project/No Build Alternative, the development of a gated senior community and associated improvements would not occur at the project site, and the existing physical conditions of the areas within the boundaries of the project site would generally remain in their current state. As a result, the 193.8-acre project site would remain predominantly undeveloped, and the approximately 14-acre off-site improvement area would remain partially developed and disturbed as existing roadways and trails. This alternative assumes no development would occur on the project site to provide a clear comparison of the project to existing (undeveloped) baseline conditions.

- **Alternative 2: Reduced Development Alternative, Avoidance of Sensitive Habitats.** Alternative 2 would reduce impacts to biological resources by substantially decreasing the development footprint and reconfiguring the site layout to avoid sensitive vegetation communities, where feasible. This alternative would retain more land as open space and enhance long-term preservation of on-site natural resources, including oak woodlands, riparian corridors, and other sensitive habitats. Avoidance measures would reduce sensitive habitat impacts by approximately 31 acres and shrink the developable area by about 52%. To maintain the proposed unit count, residential density would increase and development would shift to smaller-lot or clustered housing types. While overall vegetation impacts would be reduced, the concentration of development would result in increased oak tree impacts, including several heritage oaks, and some sensitive habitat disturbance would still occur due to required infrastructure extensions.
- **Alternative 3: Existing Zoning Project.** Alternative 3 would include the development of the gated senior residential community on the 193.8-acre site, which includes Urban Residential 1 (UR1) and Non-Urban 5 (NU5) land use designations, with infrastructure extending into adjacent NU5 and Open Space areas and public rights-of-way. Development would rely on density bonus waivers but would not require a General Plan Amendment or zone change. If designed strictly to comply with minimum lot size and width requirements of UR1 and NU5 zoning, the feasible unit yield would be substantially reduced—from approximately 283 units based on slope density to about 109 units—and the subdivision pattern would extend into existing open space areas. This configuration would reduce preserved open space, introduce development into sensitive areas such as Oak Spring Canyon Creek and an oak grove, eliminate planned amenities including an emergency staging area and trailhead, and result in additional off-site grading, fuel modification impacts, and ridgeline encroachment.
- **Alternative 4: Full State Density Bonus Project.** Alternative 4 would include the development of the gated senior residential community using California's Density Bonus Law to substantially increase residential capacity through the inclusion of affordable housing. Under this alternative, the project would provide a total of 568 age-restricted units, consisting of approximately 482 market-rate units and 86 affordable units. The increased yield would be achieved through a 100% density bonus pursuant to Assembly Bill 1287, obtained by setting aside 15% of the units as very-low-income units and 15% as moderate-income units. Development of this alternative would generally follow the same residential footprint and street layout as the project, but would shift to smaller or clustered housing types to accommodate the higher density, including smaller lots or detached condominiums. Unlike the project, this alternative would not include a recreation center as part of the project amenities.

A summary of the environmental effects of the alternatives in comparison to the project is provided in Table S-2.

Table S-2. Comparison of Impacts Among Alternatives

Issue Area	Alternative 1: No Project/ No Build Alternative	Alternative 2: Reduced Development Alternative, Avoidance of Sensitive Habitats	Alternative 3: Existing Zoning Project	Alternative 4: Full State Density Bonus Project
Meets Project Objectives?	**No**	**Partially**	**No**	**Partially**
Aesthetics	Decreased	Similar	Increased	Increased
Agricultural Resources	Decreased	Similar	Decreased	Increased
Air Quality	Decreased	Similar	Decreased	Increased
Biological Resources	Decreased	Decreased	Increased	Similar
Cultural Resources	Decreased	Decreased	Increased	Similar
Energy	Decreased	Similar	Decreased	Increased
Geology and Soils	Decreased	Decreased	Similar	Similar
Greenhouse Gas Emissions	Decreased	Similar	Decreased	Increased
Hazards and Hazardous Materials	Decreased	Similar	Increased	Similar
Hydrology and Water Quality	Decreased	Similar	Increased	Increased
Land Use and Planning	Similar	Increased	Increased	Increased
Mineral Resources	Similar	Similar	Similar	Similar
Noise and Vibration	Decreased	Similar	Decreased	Increased
Population and Housing	Decreased	Similar	Decreased	Increased
Public Services	Decreased	Similar	Decreased	Increased
Recreation	Similar	Similar	Decreased	Increased
Transportation	Decreased	Similar	Decreased	Increased
Tribal Cultural Resources	Decreased	Decreased	Increased	Similar
Utilities and Service Systems	Decreased	Similar	Decreased	Increased
Wildfire	Increased	Similar	Similar	Increased

In determining the environmentally superior alternative, the analysis considers the relative severity and significance of environmental effects associated with each alternative rather than solely the number of resource areas in which impacts may be reduced.

As shown in Table 2-2, Alternative 3 would reduce impacts in a greater number of resource categories compared to Alternative 2. However, the comparison presented in Table 2-2 reflects the number of resource areas with reduced impacts and does not fully capture the relative importance or significance of those impact reductions.

Alternative 2 would be considered the Environmentally Superior Alternative among the built alternatives because it would reduce or avoid impacts in resource areas where the proposed project would result in potentially significant impacts requiring mitigation. In particular, Alternative 2 would reduce impacts to resource areas that include mitigation measures and where the proposed project's impacts could otherwise be potentially significant.

Because Alternative 2 would minimize adverse effects in the environmental issue areas with the greatest potential for significant impacts, it would result in an overall reduction in the severity of environmental impacts relative to the other built alternatives. In addition, Alternative 2 would meet six of the project objectives and partially achieve one of the project objectives.

It is important to note that all the identified impacts of the project could be reduced to less-than-significant levels through the implementation of the mitigation measures identified in this EIR (see Table S-1). In addition, Alternative 2 would not meet the project objectives as fully as the project. As identified in Section 7, *Issues to be Resolved*, it will be the City's determination whether to approve the project as proposed or consider a variation of the project based in whole or in part on this analysis contained within this EIR. The City, as the lead agency for the project, will consider the whole of the record when considering the project including, but not limited to, public comment and testimony related to the size and design of the project. In all scenarios, the Mitigation Monitoring and Reporting Program (MMRP) would be applied to the approved project.

CHAPTER 1. INTRODUCTION

New Urban West, Incorporated (the project applicant) is proposing the Belcaro at Sand Canyon Project (project), a development with 341 detached single-family senior housing units, private recreational amenities, private streets, public street improvements, and private and public open space. The proposed development would include a 20% density bonus under California law. The project would also include a railroad undercrossing below the Los Angeles County Metropolitan Transit Authority (Metro) railroad; an extension of Lost Canyon Road; the development of the proposed J Street, which would connect to Robinson Ranch Road; and infrastructure improvements.

The City of Santa Clarita (City), as the Lead Agency, determined that the proposed development is a project within the definition of the California Environmental Quality Act (CEQA). The City prepared this environmental impact report (EIR) to assess the environmental impacts of the project. The CEQA Guidelines identify the Lead Agency as the public agency with the principal responsibility for carrying out or approving a project (CEQA Guidelines § 15367).

This chapter provides an overview of the purpose and intended uses of this EIR. It includes a discussion of the organization of the EIR and a description of the environmental and public review process for the project.

1.1 PURPOSE OF THE EIR

An EIR uses a multidisciplinary approach, applying social and natural sciences to make a qualitative and quantitative analysis of all the foreseeable environmental impacts that a project would cause on the project's surrounding area and environs. This EIR was prepared in accordance with the CEQA Guidelines, established to comply with CEQA. As stated in CEQA Guidelines § 15151:

> An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

This EIR analyzes the project's impacts on the environment, identifies necessary mitigation and/or avoidance measures, and evaluates alternatives to the project that avoid or reduce the identified impacts. This EIR is intended to fully inform decision-makers when considering the project pursuant to CEQA Guidelines § 15121(a).

In accordance with CEQA Guidelines § 15126, this EIR describes the project and the existing environmental and regulatory setting, identifies environmental impacts associated with project implementation, identifies mitigation measures for potentially significant impacts, and provides an analysis of alternatives. Thresholds of significance for each environmental resource analyzed in this EIR are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. The thresholds of significance are defined within each impact analysis section. The environmental impact analyses in this EIR are based on a variety of sources, including agency consultation, technical studies, and field surveys. The City would consider the information presented in this EIR, public comments received on this EIR, and other factors, prior to approving the project. The Final EIR would be submitted for consideration and certification to the City Council before considering the project.

1.2 SCOPING AND NOTICE OF PREPARATION PROCESS

Pursuant to CEQA Guidelines § 15082, the Lead Agency is required to send a Notice of Preparation (NOP) stating that an EIR would be prepared to the State Office of Planning and Research, responsible and trustee agencies, and federal agencies involved in funding or approving the project. The NOP must provide sufficient information for responsible agencies to make a meaningful response. At a minimum, the NOP must include a description of the project, the location of the project, and the probable environmental effects of the project (CEQA Guidelines § 15082(a)(1)). Within 30 days after receiving the NOP, responsible and trustee agencies and the State Office of Planning and Research must provide the Lead Agency with specific details about the scope and content of the environmental information related to that agency's area of statutory responsibility that must be included in the EIR (CEQA Guidelines § 15082(b)).

On June 27, 2025, in accordance with CEQA Guidelines §§ 15063 and 15082, the City published an NOP for the EIR and circulated it to governmental agencies, organizations, and persons who may be interested in the project, including nearby landowners, homeowners, and tenants. The NOP requested comments on the scope of the EIR, asked interested parties to consider the potential environmental effects of the project, and invited suggestions for revising the project to reduce or avoid significant environmental impacts. The NOP provided a general description of the project, a description of the project site, and a preliminary list of potential environmental effects. The 30-day comment period extended through July 28, 2025. The NOP was available for public review on the City's website (https://santaclarita.gov/planning/environmental-impact-reports-under-review/) and at the Canyon Country Branch of Santa Clarita Public Library and the City Clerk's Office. Additionally, the NOP and notice of the in-person public scoping meeting were distributed via an advertisement placed in *The Signal* on June 27, 2025.

One in-person public scoping meeting was held on July 7, 2025, at 6:00 p.m., to solicit input from interested parties on the scope and content of the EIR in conformance with Public Resources Code (PRC) § 21083.9. The scoping meeting was held in the Oak Room of The Centre at 20880 Centre Pointe Parkway, Santa Clarita, California 91350.

A summary matrix of written comments received during the NOP comment period, as well as verbal comments recorded at the public scoping meeting, is provided as Appendix A to this EIR.

1.3 EIR CONTENTS

The scope of this EIR includes issues identified by the lead agency during the preparation of the NOP for the project, as well as environmental issues raised by agencies and the general public in response to the NOP and at the scoping meeting. The EIR is organized into the following chapters, sections, and appendices:

Summary. The Summary provides a synopsis of the project's potential impacts; identifies, in an overview fashion, the project under consideration and its objectives; presents a summary of areas of controversy and issues to be resolved; and summarizes the project's impacts and mitigation measures. This chapter also contains a summary analysis of the alternatives to the project, as well as a summary of environmental impacts in table format.

Chapter 1: Introduction. This chapter includes the purpose of an EIR and procedural information.

Chapter 2: Project Description. This chapter includes information about the project location, the existing setting, the project site history, project objectives, project characteristics, and project construction.

Chapter 3: Environmental Setting. This chapter describes the project's environmental setting, including existing physical characteristics of the project site. This chapter also provides a discussion of the cumulative context considered for the project, including growth projections and a list of past, present, and reasonably foreseeable future projects in the vicinity of the project site.

Chapter 4: Environmental Impacts Analysis. This chapter discusses the environmental setting as it relates to the various resource areas, regulatory settings, thresholds of significance, impact assessment and methodology, project-specific impacts and mitigation measures, cumulative impacts, and secondary impacts. The EIR analyzes the potentially significant impacts to the following resource areas, as identified during the preparation of the NOP:

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

Chapter 5: Alternatives Analysis. This chapter summarizes the environmental advantages and disadvantages associated with the project and alternatives. As required, the "No Project" alternative is included among the alternatives considered, and an "Environmentally Superior Alternative" is identified.

Chapter 6: Other CEQA Considerations. This chapter identifies growth-inducing impacts and a discussion of long-term/short-term productivity and irreversible environmental changes.

Chapter 7: References and Report Preparation. This chapter provides a list of the references cited in the EIR, as well as a list of individuals who contributed to the preparation of the EIR.

Appendices. The appendices contain important information used to support the analyses and conclusions made in the EIR. Among the appendices that are included are technical reports addressing air quality and greenhouse gas emissions, biological resources, archaeological and tribal resources, historic resources, geology and soils, noise and vibration, and traffic and transportation.

1.4 AGENCY USE OF THE DOCUMENT

Lead Agency reviewers and decision-makers will use the EIR as an informational document to assist in the decision-making process, ultimately resulting in approval, denial, or conditions of approval for the project. The following jurisdictions may also use this EIR in reviewing and issuing their respective authorizations (if applicable) and/or making recommendations during the project review process:

- Santa Clarita Valley Water Agency
- Los Angeles Sanitation Districts
- Southern California Gas
- Southern California Edison
- California Department of Fish and Wildlife
- South Coast Air Quality Management District

1.5 PROJECT REPRESENTATIVES

Lead Agency: City of Santa Clarita
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355
Andy Olson, AICP, Associate Planner

Project Applicant: New Urban West Incorporated-Sand Canyon, LLC
2001 Wilshire Boulevard, Suite 401
Santa Monica, CA 90403
Corey Harpole, Senior Vice President of Project Development

Environmental Consultant: SWCA Environmental Consultants
320 North Halstead Street, Suite 120
Pasadena, CA 91107
Jessica Cleavenger, Project Manager

1.6 REVIEW OF THE DRAFT EIR

This EIR was distributed to responsible and trustee agencies, other affected agencies, surrounding cities, interested parties, and all individuals who requested a copy, in accordance with PRC § 21092(b)(3). The Notice of Completion (NOC) and Notice of Availability (NOA) of the Draft EIR were distributed and posted as required by CEQA. During this circulation period, which begins on July 7, 2026, and closes on August 21, 2026, the EIR and all technical appendices will be available for review on the City's website (https://santaclarita.gov/planning/environmental-documents) and at the following locations:

Canyon Country Jo Anne Darcy Library
18601 Soledad Canyon Road
Santa Clarita, CA 91351

City of Santa Clarita City Hall
City Clerk's Office
23920 Valencia Boulevard, Suite 120
Santa Clarita, California 91355

On behalf of the lead agency, comments on the EIR must be addressed to:

City of Santa Clarita
Attn: Andy Olson, Associate Planner
23920 Valencia Boulevard, Suite 302
Santa Clarita, CA 91355

Written responses to all significant environmental issues raised will be prepared and included as part of the Final EIR and the administrative record for consideration by decision-makers for the project.

CHAPTER 2. PROJECT DESCRIPTION

This chapter describes the proposed Belcaro at Sand Canyon Project (project) and details the discretionary approvals that would be required for the project.

If approved, the project would develop 341 age-restricted, detached single-family homes; an approximately 3.1-acre recreation center; public and private hiking trails; a trailhead, emergency staging area, and firefighting HeloPod®; and associated infrastructure improvements, including, without limitation, a railroad undercrossing, a bridge connecting the project to Lost Canyon Road, and J Street, which connects to Robinson Ranch Road.

2.1 PROJECT LOCATION

The project site is proposed for the easternmost portion of the City (Figure 2-1), south of the Santa Clara River and north of the Sand Canyon Country Club. The project site would be located on 193.8 acres of vacant land controlled by New Urban West, Incorporated (the project applicant). The project site consists of the following Assessor Parcel Numbers (APNs): 2840-001-118, 2840-015-025, -031, -032, -033, -034, -035, -045, and -047. The project site is separated into two development areas by the Los Angeles County Metropolitan Transit Authority (Metro) railroad, which runs in an east–west direction, south of the Santa Clara River.

In addition to the residential development proposed on the project site, the project proposes off-site improvements. The project area, which comprises the project site and all off-site improvements, would total approximately 208 acres (Figure 2-2).

The project site is approximately 26 miles north of downtown Los Angeles and is locally accessible via Lost Canyon Road and Oak Spring Canyon Road. Regionally, the project site is accessible from State Route (SR-) 14 via Sand Canyon Road, west of the project site. The project site is found on the Mint Canyon, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle in Sections 13, 14, 23, and 24; Township 4 North; Range 15 West.

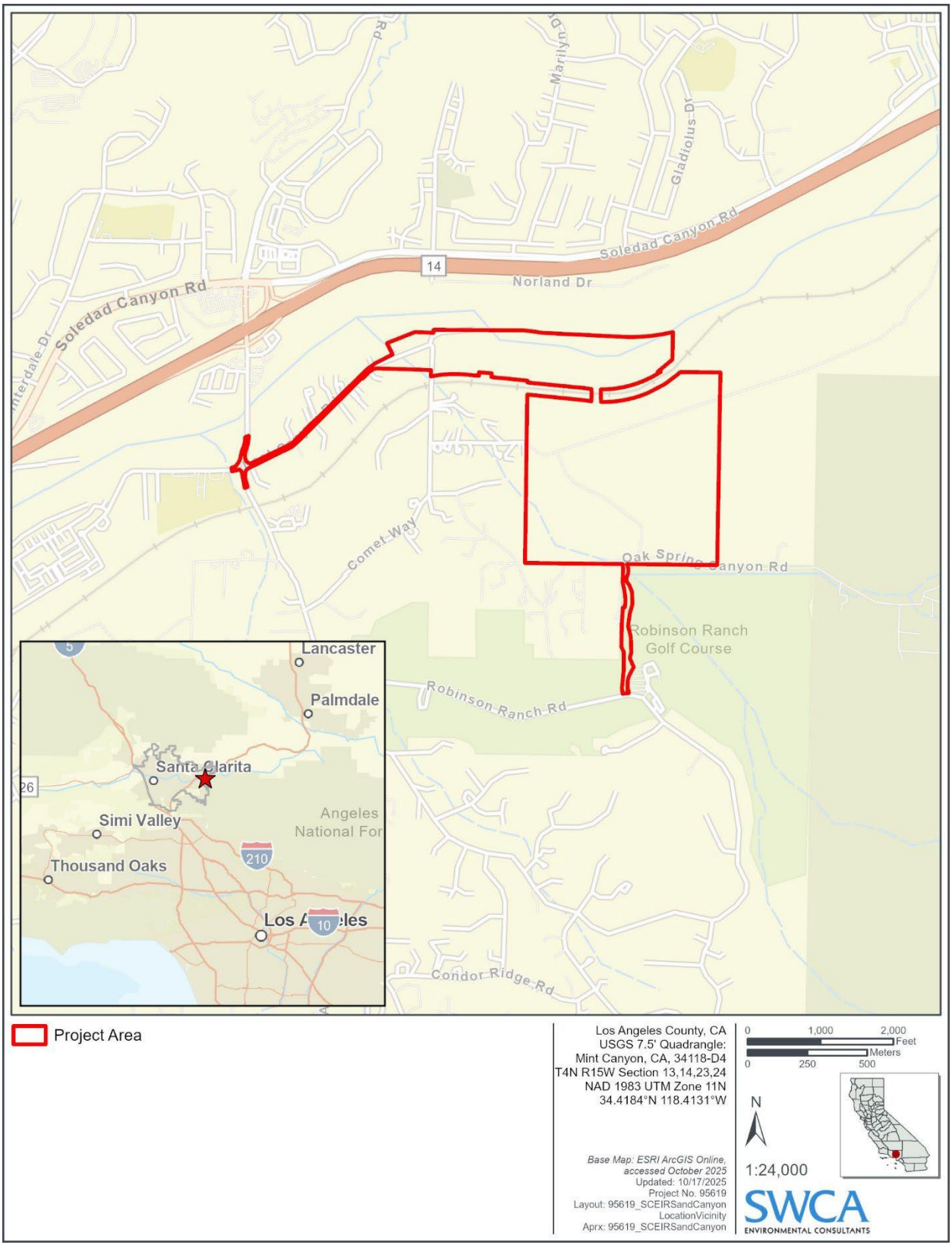


Figure 2-1. Project Vicinity Map.

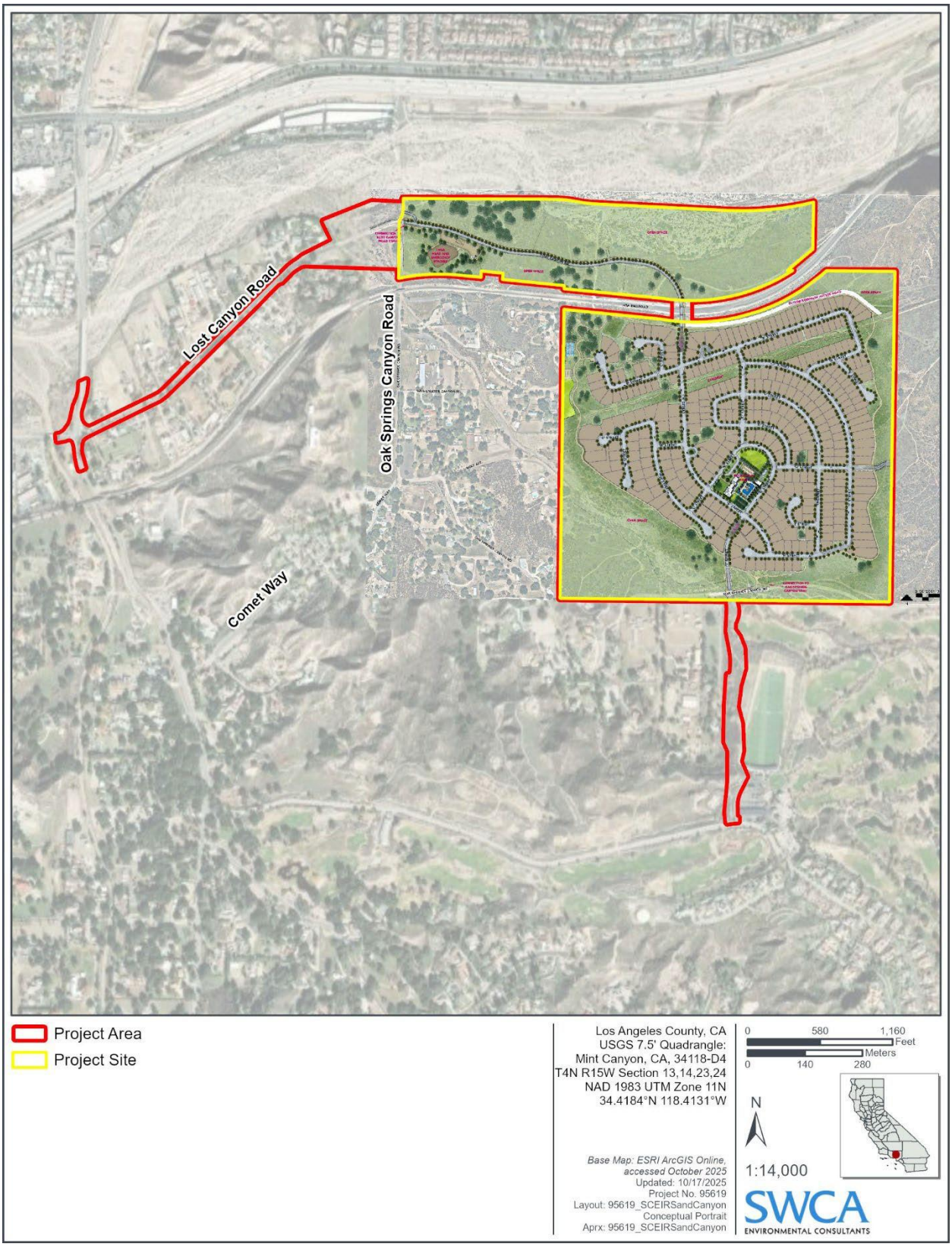


Figure 2-2. Conceptual Site Plan.

2.2 EXISTING CONDITIONS

2.2.1 Environmental Setting

Unpaved portions of Oak Spring Canyon Road cross the southern portion of the project site. Ruderal vegetation, grass, brush, and trees cover most of the project area. Several dirt paths and roadways traverse the project area and are primarily used by unauthorized off-road vehicles, horses, bicycles, and pedestrians. Existing water wells are located in the northern portion of the project area.

The project area has varying elevations and sits at an average elevation of 1,640 feet above mean sea level. As shown in Figure 2-3, the project area is bordered by the Santa Clara River to the north (and farther north by SR-14), existing single-family development to the west, Sand Canyon Country Club to the south, and undeveloped land to the east. Additionally, a City of Santa Clarita (City)–designated significant ridgeline intersects the project site's southeasternmost boundary. Unincorporated Los Angeles County is east of the project area, including the Angeles National Forest, which is approximately 0.25 mile east of the project area. Additionally, the entire project area is within a Very High Fire Hazard Severity Zone (FHSZ) in a Local Responsibility Area (LRA). Portions of the project area have been mapped by the Federal Emergency Management Agency (FEMA) as areas susceptible to flooding.

Southern California Gas Company (SoCalGas) has several easements on-site for pipelines and related infrastructure. Other on-site easements to remain include the County of Los Angeles (County) ingress/egress easement and public road and highway easement, Santa Clarita Valley Water Agency's (SCVWA's) utilities easement, and Southern California Edison Company easements for poles and lines.

2.2.2 Land Use and Zoning

Within the project site, 106.4 acres have a General Plan land use and zoning designation of Urban Residential 1 (UR1), and the remaining 87.4 acres are designated as Non-Urban 5 (NU5). The proposed infrastructure improvements associated with the project would be located within an area zoned as NU5 to the west of the project site, an area zoned as Open Space (OS) to the south of the project site, and within public rights-of-way (ROWs) throughout the project area, which have no zoning designations (City of Santa Clarita 2023a, 2023b).

Except for the southern edge of the project site, the entirety of the project site is within the City's Significant Ecological Area (SEA) Overlay Zone and includes biological resources, including oak trees, that are protected under Santa Clarita Municipal Code (SCMC) § 17.38.080 (SEA—Significant Ecological Area Overlay Zone). The SEA Overlay Zone was adopted to achieve the City's objective to preserve the SEA within the City limits for the public health, safety and welfare for the long-term benefit of the community, maintenance of the unique visual characteristics, resources, and ridgeline integrity (refer to Section 4.1, *Aesthetics*, and Section 4.4, *Biological Resources*). The proposed J Street, located in the southern portion of the project area, would be within the City's Planned Development (PD) Overlay Zone.

The surrounding land uses and zoning directly adjacent to the project site include OS to the north, UR1 to the east, NU5 and OS to the south, and UR1 and NU5 to the west. The areas east and north of the project site are within the SEA Overlay Zone. An aerial showing the zoning and land use designations of the project site and surrounding land uses is provided in Figure 2-4 (City of Santa Clarita 2023a, 2023b).

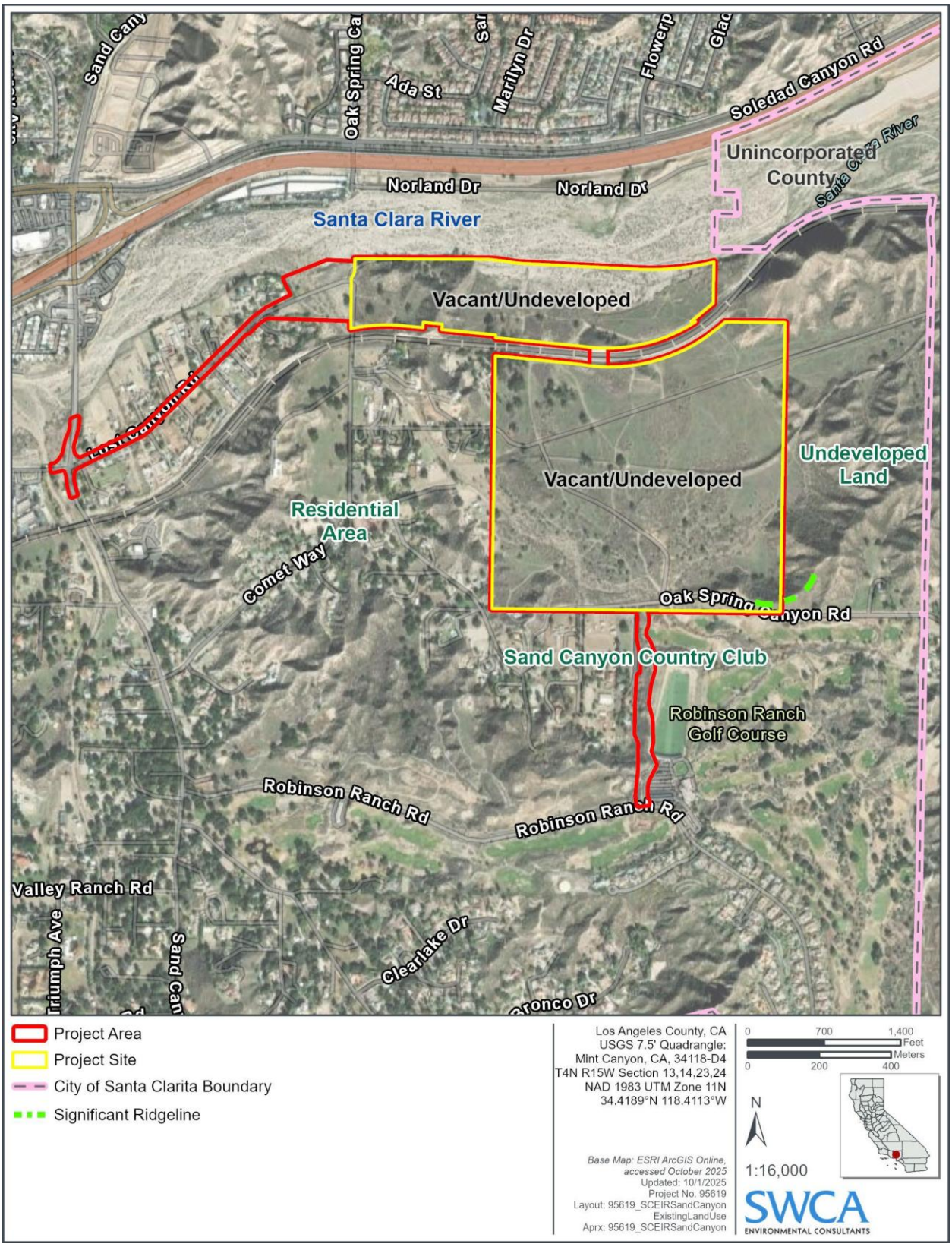


Figure 2-3. Existing Land Uses.

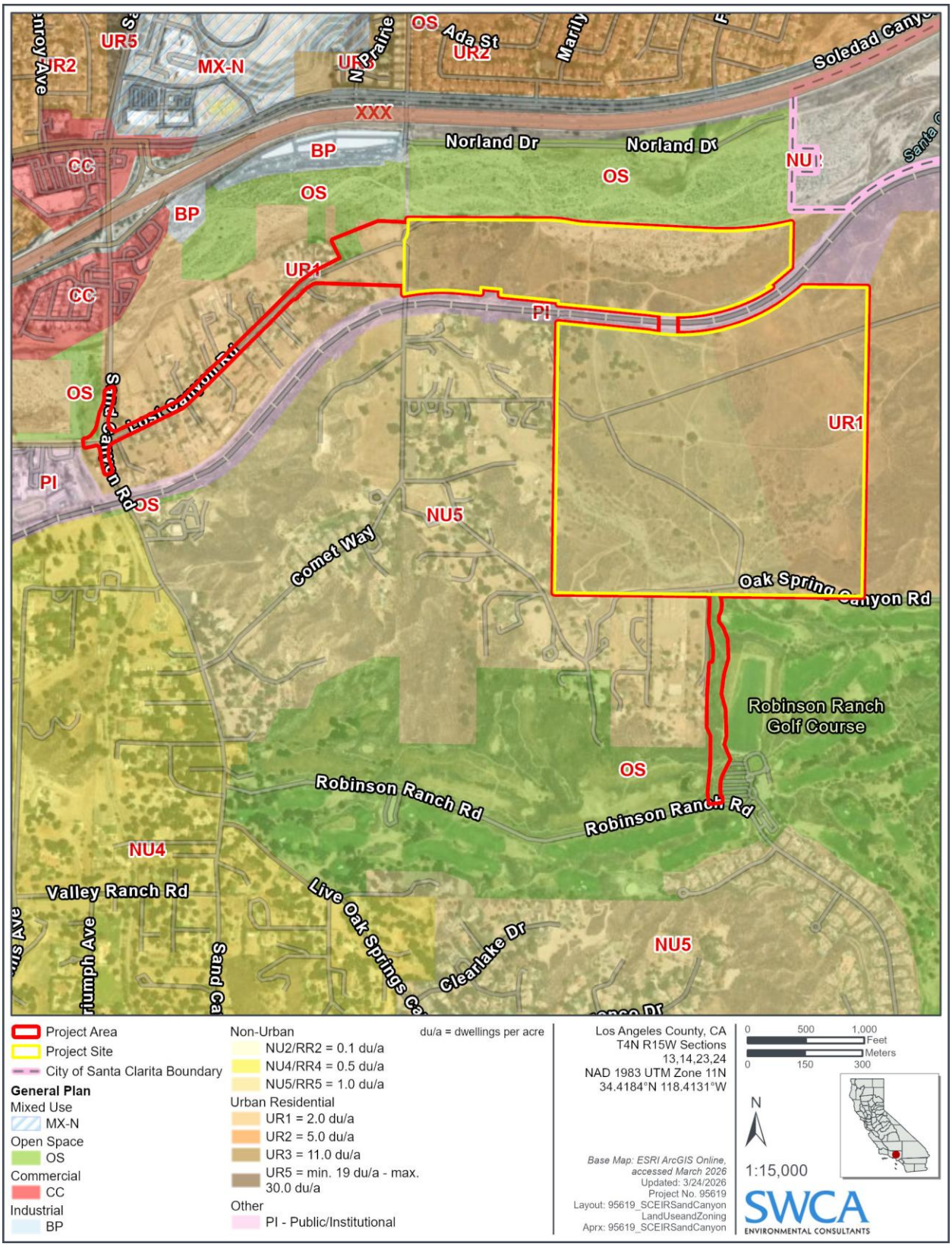


Figure 2-4. Land Use and Zoning Designations.

2.3 PROJECT OBJECTIVES

The applicant identifies these as the project objectives:

- Develop a planned, age-qualified (55+) residential community that aligns with the City vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.
- Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
- Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.
- Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.
- Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
- Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
- Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.

2.4 PROJECT COMPONENTS

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a 3.1-acre recreation center; and private trails within the 193.8-acre project site. The project would include the following off-site improvements:

- A railroad undercrossing below the Metro-owned railroad;
- An extension of Lost Canyon Road with a bridge connecting the project site to provide access from the existing Lost Canyon Road;
- A roundabout at Lost Canyon Road and Sand Canyon Road;
- The development of the proposed J Street, which would connect to Robinson Ranch Road;
- Infrastructure improvements within the existing ROW on Lost Canyon Road adjacent to the project site, including the expansion of local utilities infrastructure (water, sewer, and storm drain lines) and roadway improvements; and
- The development of public trails along existing and expanded sections of Lost Canyon Road, as well as along the new J Street.

Within the project site, through proposed Vesting Tentative Map 84497, 420 separate lots would be created, consisting of 341 residential lots, one recreational lot, 24 private street lots, and 54 publicly and Homeowners' Association (HOA)-owned open space lots (Vesting Tentative Map; Environmental Impact Report [EIR] Appendix B). "Open space" means existing land or project elements that are designated to

remain undeveloped with residential uses. Table 2-1 summarizes the project land uses and the associated lot numbers and acreage for the project site.

Table 2-1. Summary of Proposed Land Uses within the Project Site

Land Use	Lot Numbers	Acres
Age-restricted single-family units	1–341	58.7
Recreation area and clubhouse	342	3.1
Private streets and emergency vehicle access	343–365, 374	25.4
Open space (includes public and private trails)	366–373, 375–420	106.6
Total		**193.8**

2.4.1 Land Use Entitlements

2.4.1.1 General Plan and Zoning

As shown in Figure 2-4, the UR1 land use and zoning designation is located on the northern and eastern portions of the project site, and the NU5 land use and zoning designation is located on the southwestern portion of the project site.

The UR1 land use designation provides for residential neighborhoods at densities that require urban services. Many of these neighborhoods provide a transition between higher-density, urban development and rural communities throughout the planning area, and this designation is appropriate in such urban/rural interface areas.

The NU5 land use designation provides for the maintenance and expansion of rural communities in the planning areas that are distinguished by large lot sizes (generally one acre or greater), agricultural and equestrian uses, and the absence of urban services. Uses in the NU5 designation could include single-family homes at a maximum density of one dwelling unit per one acre, agriculture, equestrian uses, private recreation, and public and institutional facilities serving the local area. Specific allowable uses and development standards are determined by the underlying zoning designation.

The project would require Density Bonus waivers to develop the proposed dwelling units under the existing land use and zoning designations. However, no General Plan amendment or zone change is required. Section 2.4.2.2, *Density Bonus Program*, below discusses the Density Bonus and waiver.

2.4.2 Residential Development

2.4.2.1 Residential Lots

The 341 proposed residential lots would each consist of one single-family detached dwelling unit, ranging in size from approximately 1,531 to 3,782 square feet. The residential lots would range from approximately 5,000 to 7,500 square feet in size. The project would include nine distinct residential floor plans available in the following architectural styles: Spanish Hacienda, Adobe Ranch, and Agrarian Farmhouse. The floor plans include units with a minimum of two bedrooms and two bathrooms and a maximum of five bedrooms and 3.5 bathrooms. The dwelling units would be one story, with an option for a second story over a portion of the ground floor. All residential units would be located in the southern portion of the project site (south of the Metro-owned railroad) on Lots 1 through 341, and rooftop solar would be included on each new residential unit, which would supply approximately 1,206,186 kilowatt-

hours (kWh) of energy per year. Parking for the project would consist of two fully enclosed garage parking spaces per unit (682 spaces total), which meets the parking requirements for residential development as outlined in SCMC § 17.57.020, Residential Development Standards. The project would also provide approximately 518 street parking spaces.

2.4.2.2 Density Bonus Program

In accordance with Density Bonus Law (Government Code § 65915), the applicant requested a 20% Density Bonus. Because the project includes an age-restricted (senior citizen) housing development, the project applicant is eligible for a Density Bonus of 20% of the number of senior units. No income or affordability restrictions are associated with this Density Bonus. The Density Bonus Law also allows the applicant to request waivers from development standards. Accordingly, the applicant is requesting the following waivers:

1. **Minimum Lot Size and Lot Width per SCMC Chapter 17.57.** The SCMC requires a minimum lot area of 20,000 square feet for UR1 and 43,560 square feet for NU5. The project applicant is requesting a minimum net lot area of 5,000 square feet with a minimum lot width of 50 feet.
2. **Minimum Setback per SCMC Chapter 17.57.** Most of the 341 single-family lots would meet the SCMC's development standards. The project applicant, however, is requesting reductions in front yard setbacks, rear yard setbacks, reverse corner lot side yard setbacks, and/or cul-de-sac lot widths for 40 lots.
3. **Maximum Retaining Wall Height per SCMC § 17.57.020SCMC.** The SCMC requires that retaining walls not exceed six feet in height. The project applicant is requesting an increase in height limits of certain retaining walls to 8.5 feet.
4. **Maximum Length of Continuous Retaining Wall per SCMC § 17.57.020.** The SCMC requires that the maximum length of any continuous retaining wall not be more than 100 linear feet. The project applicant is requesting a waiver to increase the continuous length of certain retaining walls in excess of 100 linear feet. The longest continuous wall would be approximately 450 linear feet in length.
5. **Ridgeline Preservation per SCMC § 17.38.070.** The SCMC requires a 100-foot vertical and a 100-foot horizontal distance from an identified significant ridgeline. The project applicant is requesting a waiver for a reduction in the vertical setback.

2.4.3 Open Space, Recreational Facilities, and Trails

2.4.3.1 Open Space

Two areas of the project site would be designated to be within a Conservation Area—the first is within the northern portion of the project site (north of the Metro-owned railroad) and the second is to the southwest of the project footprint and impact area. These areas would include natural open space, landscaped areas, manufactured slopes, trails, fuel modification zones, and flood control features. The area proposed for conservation and permanent preservation totals 50.78 acres, of which 24.39 acres are of sensitive vegetative communities; the location and boundaries of the proposed Conservation Area are shown in Figure 2-5. The project applicant would fund the development of a long-term Conservation Management Plan (CMP) and a conservation easement over this property would be established to provide for monitoring and maintenance and long-term management of the lands. No grading or other construction activities would occur within the Conservation Area, except for proposed habitat enhancement and restoration, construction and maintenance of signage, and trail maintenance.

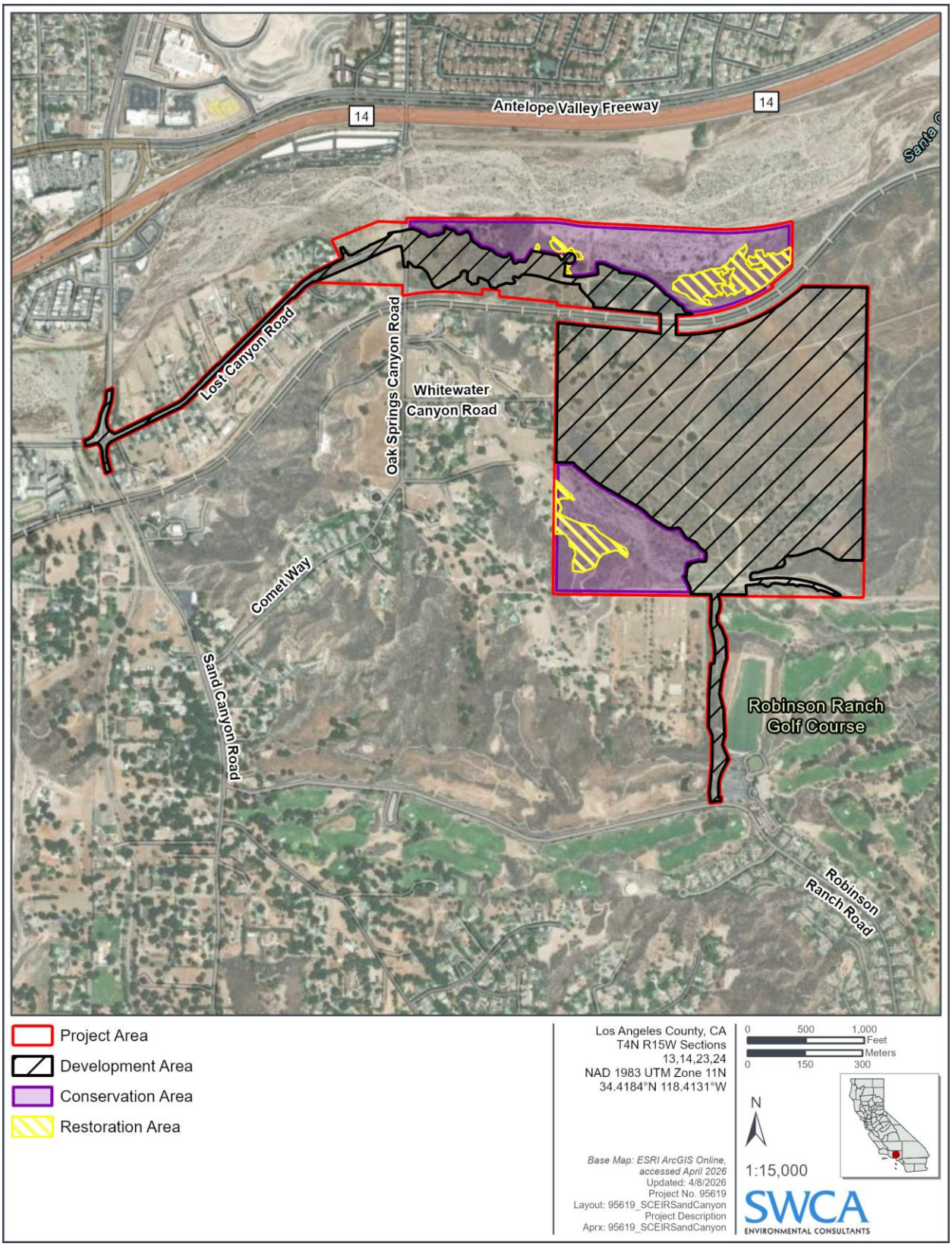


Figure 2-5. Conservation and Restoration Areas.

As noted, the project applicant is also proposing that certain lands within the Conservation Area be enhanced as Restoration Areas, as shown in Figure 2-5. Specifically, the project applicant proposes that the project would improve portions of the Conservation Area (10.78 acres) that are currently nonnative grasslands, upland mustards, and disturbed habitat. For this area, a specific approach for each type of habitat restoration and establishment area and special-status species transplant location would be specified in a Habitat Mitigation and Monitoring Plan (HMMP). The acreages allotted for on-site establishment apply to 10.78 acres of nonnative grassland and disturbed habitat in the Conservation Area. The implementation of the HMMP would be funded and implemented by the project applicant.

Additional features within the open space area would include a trailhead and emergency staging area, an associated surface parking lot, and a connection to Lost Canyon Road trail. The emergency staging area would also be available for use as an emergency equestrian area for the public. The open space would also include a HeloPod® for firefighting purposes; this would provide a water source for firefighting helicopters to refill from the air or ground.

An HOA would be required to maintain improved open space, trails, slopes, and common landscaped areas. The HOA would also maintain the new flood control basins and landscaped areas within the project site north of the railroad.

The project site would include approximately 74.1 acres of undisturbed open space. The undisturbed open space lots mostly border existing open space outside of the project site boundaries and would preserve the prominent portion of a significant ridgeline (in the southeasternmost portion of the project site), conserve habitat areas, and provide a buffer and transition to the proposed developed uses at the project site. The improved open space lots would generally be located throughout the project site.

2.4.3.2 Recreational Facilities

The project would provide a 3.1-acre recreation center in the central portion of the project site. The recreation center would include a clubhouse, which may include a club room, kitchen, lobby, flex space, fitness center, yoga room, and restrooms. Other amenities at the recreation center would include a courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, pickleball courts, horseshoe pits, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop. The recreation center would also have 10 dedicated parking spaces. Additional recreational amenities would be provided throughout the project site, including a pickleball court, horseshoe pits, a dog park, gathering areas, and community gardens.

2.4.3.3 Trails

The project would include the development of a trail network, which would include both private and public trails within the 193.8-acre project site, as well as new public trails elsewhere throughout the project area. The new public trails would provide connections to existing and planned trails in the vicinity of the project site and would fulfill the planned expansion of the Sand Canyon Road and Oak Spring Canyon Road Trails as included in the City's Trail Plan (City of Santa Clarita 2016). A trailhead and emergency staging area would be located at the northern portion of the project site to provide trail connectivity to the proposed Lost Canyon Road Trail and perimeter trails. Several types of public and private trails are proposed throughout the project site:

- **Lost Canyon Road Trail (public).** A 2.5-mile public trail would extend from Sand Canyon Road through the project area, primarily along Lost Canyon Road. This public trail would wrap around the eastern side of the project site and would then generally parallel J Street to connect to existing public trails within Robinson Ranch, south of the project area. The public trail along Lost Canyon Road would range from eight to 12 feet wide. The entire approximately 2.5-mile trail would be surfaced with native soils and fenced with lodge poles.

- **Primary Multi-Use Trail (private).** A 12-foot-wide trail for project residents would be provided along the western perimeter of the project site, which would connect with the public trail described above to form a loop around the project site. The trail would be accessed by two six-foot-tall pedestrian gates and would be composed of native soils. The trail would be classified as a primary multi-use trail and would be used by pedestrians, equestrians, and bicyclists.
- **Secondary Pedestrian Use Trail (private).** An eight-foot-wide secondary pedestrian trail for project residents would be located along the SoCalGas easement (generally running east-west through the project site), which would connect the public and private 12-foot multi-purpose trails. This trail would be accessed by one six-foot-tall pedestrian gate and would be surfaced with decomposed granite.
- **Tertiary Footpath (private).** A private, six-foot-wide tertiary footpath, surfaced with native soil, would be located within the gated portions of the community and would connect to sidewalks and other trails within the project area.

2.4.4 Landscaping

The project would include landscaping throughout the residential, recreational, and improved open spaces within the project area. New trees planted on-site would include, without limitation, oaks, maidenhair tree, crape myrtle, bay laurel, fruitless olive, and Chinese pistache trees. Landscaping would also include shrubs, vines, succulents, grasses, and groundcover. Plants with low to moderate water needs would be selected for landscaping purposes.

2.4.5 Oak Trees

In accordance with SCMC § 17.51.040 (Oak Tree Preservation), the project would require an Oak Tree Permit. Within the project area, which includes the residential development area and associated infrastructure improvement areas, there are 421 oak trees, including 360 within the residential development area. Of these, 355 oak trees (300 within the project site) meet the criteria for regulation under the SCMC, and 73 of these trees (61 within the project site) are considered heritage trees by the City.

The project would remove 16 regulated oak trees (including three heritage trees). The project would further result in major encroachment into the protected zone of seven regulated oak trees (including one heritage tree) and minor encroachment into the protected zone of 81 regulated oak trees (including 44 heritage trees). The remaining 250 regulated trees (including 25 heritage trees) would remain in place (Dudek 2026; EIR Appendix C).

2.4.6 Fire Protection and Fuel Modification

The entire project area is located within a Very High FHSZ in an LRA. Accordingly, as discussed in Section 4.20, *Wildfire,* of this EIR, fire protection measures would be implemented as part of the project design to reduce the risk of wildfire hazards, including fuel modification zones. Fire access would include 20-foot, 26-foot, and 28-foot clear roadways, and emergency vehicle access, addressing, water supply, defensible space, fire protection systems, and the use of fire-resistant building materials would be required to comply with the California Building Standards Code (CBSC), California Fire Code (CFC), and SCMC Title 22 (Fire Code). All commercial properties and gates would be required to install a KNOX Box in a location approved by the Los Angeles County Fire Department (LACoFD) to allow for emergency fire access to the project site.

The project would include the implementation of fuel modification requirements of LACoFD to reduce fire hazards around all structures by providing a defensible space or firebreak between structures and areas of flammable vegetation. Landscaping in public areas of the project site would be designed to include fire-resistant plants that are strategically placed to resist the spread of fire to nearby homes, and hardscaping would be limited to combustible materials in or near structures.

The project also includes a proposed HeloPod®, which would be constructed on the northern portion of the project area adjacent to the proposed trailhead. The proposed HeloPod® would consist of a high-capacity aerial firefighting dip tank and associated infrastructure designed to support rapid water refill operations for firefighting helicopters. Connected to the SCVWA water supply, the system would provide a reliable hovering dip source that allows helicopters to refill without landing or traveling to distant water bodies, thereby reducing turnaround times and improving the efficiency and responsiveness of aerial firefighting operations during wildfire incidents. Additionally, residential developments would be required to comply with requirements identified in the California Building Code (CBC) Chapter 7A and California Residential Code (CRC) Chapter R337 for roofs and roof edges, exterior walls and siding, eaves and porch ceilings, vents, windows and exterior doors, exterior decking and stairs, underfloor and appendages, and residential sprinklers.

The following Project Design Features (PDFs) would be implemented if the project is approved by the City:

PDF-WF-1 A preconstruction meeting with the Los Angeles County Fire Prevention Unit would be held, before start of underground utility installation.

PDF-WF-2 A Construction Fire Protection Plan (CFPP) would be prepared by the project applicant that addresses fire safety practices to reduce the possibility of fire during construction activities.

PDF-WF-3 Vegetation management requirements will be implemented at commencement of construction and throughout the construction phase in compliance with Chapter 33 of the CFC. Vegetation management for the project area will be performed in accordance with applicable law on all building locations before the start of work, including importing combustible construction materials. Adequate fuel breaks will be created around all grading, site work, and other construction activities in areas where there is flammable vegetation to ensure that potential ignitions associated caused by construction activities do not transition offsite. Combustible materials will not be brought on-site without prior fire department approval regarding appropriate pre-construction fire safety features.

PDF-WF-4 The project will include the construction of a 6-foot non-combustible fire wall (lower 1 to 2 feet is a concrete masonry unit (CMU) block wall and upper 4 to 5 feet is a dual pane (including one tempered glazing pane) window) to provide additional heat deflection along the perimeter of the lots in the southwest portion of the project where there are reduced fuel modification zones which are adjacent to areas identified as California Department of Fish and Wildlife (CDFW) jurisdictional stream areas. The fire wall will be constructed to function as a heat-deflecting wall.

PDF-WF-5 Dual-pane, dual-tempered windows will be installed for structures facing the open space and naturally vegetated areas unable to achieve a minimum 100 feet of on-site FMZ (this area includes the lots in the southeast portion of the project site).

PDF-WF-6 The project HOA will maintain the access roads, including a minimum of 10 feet of clearance on each side of the road(s) within the development footprint adjacent to open space areas.

PDF-WF-7 To confirm that the project's FMZs and landscape areas are being maintained according to the FPP and the LACoFD's fuel modification guidelines. The project HOA will obtain a FMZ inspection and report from a qualified LACoFD-approved 3rd party inspector in May/June of each year certifying that vegetation management activities throughout the project site have been performed. If the FMZ areas are not compliant, the project HOA will have a specified period to correct any noted issues so that a re-inspection can occur and certification can be achieved. Annual inspection fees are subject to the current Fire Department Fee Schedule.

PDF-WF-8 The project HOA will maintain all common areas, including trees planted along roadways and in other areas throughout project site.

PDF-WF-9 A wildfire education program will be developed for the community -- the Belcaro at Sand Canyon Wildfire Education Program. The education program will be implemented to maintain high wildfire awareness. The program will include the following:

- **Biannual Email and Mailers:** Residents and occupants will be provided with biannual emails and mailers in April and August that will include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, and how to prevent wildfires. Links to various resources on where to get trusted information such as LACoFD, 211 LA County, and Ready LA County will be provided.
- **Website:** There will be a dedicated community website with more detailed information and resources about wildfire awareness and prevention. The website will serve as a centralized resource for the fire education program and include information from the FPP. The website will also have fire watch and red flag warning (RFW) alerts, as well as information on restrictions during fire weather conditions. Residents will also be able to use the website to sign up for an annual residential defensible space inspection from the HOA Fire Committee.
- **Community Workshops and Webinars:** Either in-person or virtual community workshops will be held two times a year. The goal of the workshops will be to cover various fire topics more in-depth. Examples include having an LACoFD representative come to meet the community, a workshop on how to make a go-bag, a workshop on how to make a residential evacuation plan, or how to maintain the home ignition zone.
- **New Resident Packet:** All residents and future new residents will be presented with a wildfire awareness and safety package upon purchase or rental of a home. Within the packet will be a memory stick with the evacuation plan, a list of fire protection features, information on the regional fire hazard, prohibited activities in fire risk areas, how to build a go-bag, and a list of agencies and resources for receiving trusted information.
- **Emergency Alert Campaign:** Residents and homeowners will be encouraged to sign up for Alert LA County, which is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, State, and federal agencies. The campaign will occur annually and encourage residents to sign up for Alert LA County. Reminders will

also be sent out in the biannual emails and mailers, on the community website, in the workshops, and in the new resident package.

- **Fire Watch Groups:** Within the community, there will also be volunteer fire watch groups, which will be comprised of residents and/or businesses who volunteer to participate in a fire watch group for the community. During RFW days, this group will be responsible for reminding residents of fire-safe practices and restrictions. During RFW days, the fire watch group will also maintain vigilance for potential fires and will be trained on procedures for alerting LACoFD in the event of a fire.
- **HOA Fire Safety Committee:** The fire safety committee will be responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee will be responsible for the coordination of the third-party FMZ inspections and the volunteer residential defensible space inspections. The committee will also be responsible for the creation and distribution of the educational program for the project. The committee will serve as a communication link between LACoFD and the community.

PDF-WF-10 A "Ready, Set, Go!" approach to evacuation will be formally adopted, practiced, and implemented by the project's HOA or other approved entity. The project's HOA will coordinate with the LACoFD to hold an annual fire safety and evacuation preparedness informational meeting. Representatives of LACoFD will be invited to attend, and important fire and evacuation information will be reviewed. One focus of these meetings and the project's annual message will be on the importance of each resident to prepare and be familiar with their own "Ready, Set, Go!" evacuation plan. Because the project incorporates ignition resistant construction, wide fuel modification zones, ember protection, and fire defensibility throughout, responding fire and law enforcement personnel will be able to direct persons to temporarily refuge within buildings on-site in the rare situation where shelter-in-place is determined to be safer than evacuating. The project's HOA or other approved entity will organize annual evacuation public outreach and engage directly with organizations such as the California Fire Safe Council.

2.4.7 Utility and Flood Control Improvements

Once constructed, the project would include new sources of lighting and infrastructure improvements, including curb and gutter, storm drain, and water and sewer connections to existing facilities within the local vicinity. The project infrastructure would connect to and utilize existing utilities and service systems surrounding the project site and nearby development. The project would be served by the following utility service providers:

- **Potable water:** SCVWA
- **Sanitary sewer:** Los Angeles County Sewer Maintenance Department
- **Natural gas:** SoCalGas
- **Electricity:** Southern California Edison Company
- **Cable TV:** Charter Communications
- **Telephone:** AT&T

The project infrastructure would connect to an existing sewer line and water line located to the west of the project site along Lost Canyon Road. In addition, the following utility infrastructure improvements would be needed to facilitate the buildout of the project:

- Water supply for the project would be provided by tying into an existing 16-inch water line at the southern tract boundary in Oak Spring Canyon Road. A secondary connection would be made in Lost Canyon Road to an existing eight-inch water line, approximately 670 feet west of the project area. To provide adequate water storage for the project, a new one million-gallon (MG) concrete water storage tank will be constructed. The new tank would be located at the existing Live Oak Storage Reservoir site, located off-site, southeast of the intersection of Live Oak Spring Canyon Road and Canyon End Road. As part of the new tank scope, a Reservoir Management System building would be constructed within the existing Live Oak Storage Reservoir site. These improvements would not result in ground disturbance as the new water tank and reservoir management system would be constructed atop the existing cement foundation at the Live Oak Storage Reservoir site.
- A sewer connection would be provided in Lost Canyon Road with connection to an existing 18-inch vitrified clay pipe sewer line approximately 670 feet from the western boundary of the project site.
- Arched or box culverts will convey storm flows from the Sand Canyon Golf Course under Oak Spring Canyon Road and J Street, including downstream rock protection for stability and erosion control. The construction of these improvements will require FEMA flood map revision. These facilities will replace three deteriorating CMP pipes. This system will be maintained by the HOA.
- Existing Lost Canyon Road crosses through the active channel of Oak Spring Canyon Creek (Arizona crossing). A new bridge, approximately 170 feet long and supported by center piers, will replace this existing crossing. The construction of these improvements will require FEMA flood map revision.
- A HeloPod® would be constructed on the northern portion of the project area adjacent to the proposed trailhead and emergency staging area.

2.4.7.1 Basins

The project would include the installation of two water quality treatment basins, two debris basins, and a debris swale. The water quality treatment basins would be installed on the northern portion of the project site, north of the Metro-owned railroad. These basins would be maintained by the HOA.

The two debris basins would be installed in the southern portion of the project site. The debris swale would be located along the proposed residences on the eastern side of the project site and would be separated by a proposed trail running north–south between the homes and debris swale. These features would also be managed by the HOA.

2.4.7.2 Culverts

Hydraulic modeling indicates that the three existing four-foot-diameter culvert barrels at Oak Spring Canyon Road are substantially undersized and overtops during storm events with a recurrence interval of approximately 10 years or greater (Pacific Advanced Civil Engineering, Inc. [PACE] 2025; EIR Appendix D). As a result, the natural channel immediately downstream of the culvert outlet has experienced notable erosion. The project would include replacing the existing culvert at Oak Spring Canyon Road with a larger-capacity culvert that would extend farther downstream, consisting of three 10-foot-diameter barrels. The culvert replacement would restore adequate hydraulic conveyance beneath

Oak Spring Canyon Road and improve the channel's ability to transport sediment. The upstream segment of the proposed culvert would be approximately 230 feet in length.

Additionally, the project includes the construction of a new roadway, J Street, to provide access to the proposed residential development area. The alignment would cross Oak Spring Canyon Creek approximately 250 feet downstream of the existing Oak Spring Canyon Road culvert. As such, a new culvert would also be installed beneath J Street and Oak Spring Canyon Road, north and east of the intersection of the two roads. The new culvert would replace the existing culvert beneath Oak Spring Canyon Road, and would consist of a broken back design which includes three 10 × 10–foot box culverts and riprap elements (PACE 2026; EIR Appendix E). As a result of these improvements, the flow patterns would remain mostly unchanged as compared to existing conditions (PACE 2025; EIR Appendix D).

2.4.8 Walls and Fencing

The project would include the installation of new walls and fences within the project site. A four-foot-tall equestrian fence would line one side of Lost Canyon Road that runs through the project site and the emergency staging area, and along portions of Oak Spring Canyon Road. Residential units would have 5.5-foot-tall solid vinyl fencing at side yards and gates. The project would also include other types of walls and fencing throughout the project site, where necessary.

2.4.9 Roadway Improvements and Access

Access to the project area would be via Lost Canyon Road, which would be extended to connect to the proposed A Street within the project site. Access would also be provided via Robinson Ranch Road, which would connect via the proposed J Street to the southern end of A Street. Pedestrian sidewalks are proposed throughout the project site (Tentative Map; EIR Appendix B).

The northern and southern portions of the project site are separated by the existing Metro-owned railroad. The project would include a railroad undercrossing to provide access between the northern and southern portions of the project site. The railroad undercrossing would include two 14-foot-wide travel lanes, three- to five-foot parkways on each side, and a 12-foot-wide multi-use trail on the eastern side of the street.

The project would have gated entries on the proposed A Street (just south of the proposed railroad undercrossing) and proposed J Street (north of the J Street intersection with Oak Spring Canyon Road). Accordingly, public access to the project site would be restricted behind the gated entries on A and J Streets. However, the proposed extension of Lost Canyon Road and portions of J Street outside of the project site would be open for public vehicular access. In addition, the project gates could be opened in an emergency event to allow for through-traffic to meet evacuation and first responder needs.

2.4.9.1 Lost Canyon Road

Currently, Lost Canyon Road terminates at the project area near the northwesternmost corner of the project site, where it turns southerly into Oak Spring Canyon Road. Lost Canyon Road would be extended into the project area, aligned east–west and generally parallel to the existing Southern Pacific Metro-owned railroad to the south, and then would turn southerly. The on-site portions of Lost Canyon Road would include two 14-foot-wide travel lines, parkways, and a 12-foot-wide multi-use trail along its northern ROW.

The project would also include improvements along the alignment of the existing Lost Canyon Road until its intersection with Sand Canyon Road. All improvements in Lost Canyon Road would be within the existing 60-foot ROW. The improved portions of the existing Lost Canyon Road would include two 13-foot-wide travel lanes, with an eight-foot-wide trail on one side and associated parkways and rolled curbs and gutters. The project would also include the construction of a bridge at Lost Canyon Road, west of the project site, that would include two 14-foot-wide lanes and an eight-foot-wide pedestrian pathway/trail, and a roundabout at Lost Canyon Road and Sand Canyon Road.

2.4.9.2 Private Access Roads

Pedestrian sidewalks would be located on both sides of the private roadways within the project site. The proposed A Street would be the primary gated access road into the residential portion of the project site. Other private streets (A through I Streets and K through O Streets) would provide vehicular and pedestrian access throughout the proposed residential community. These private streets would consist of two 10-foot-wide travel lanes, one eight-foot-wide parallel parking area along both sides of the street, five-foot-wide sidewalks along both sides of the street, and associated curb and gutter improvements, for a total street width of 46 feet. These private streets provide connectivity throughout the project site and would terminate in eight cul-de-sacs. Two turnarounds would be included in the project site as well, which would provide lot access and guest parking spaces.

2.4.9.3 J Street

Portions of the proposed J Street would be located within the residential development area but would ultimately connect to Robinson Ranch Road, south of the project site, including a connection through the Sand Canyon Country Club property. J Street would consist of two 13-foot-wide travel lanes and a 12-foot-wide multi-use trail on the west side, for a total width of approximately 34 to 38 feet along its alignment. J Street would also intersect existing Oak Spring Canyon Road at the southern end of the project site.

2.4.9.4 Oak Spring Canyon Road

Oak Spring Canyon Road would be improved from the intersection with J Street to the eastern boundary of the project area with 26-foot-wide pavement, banked to the north, where a rolled curb would be provided. West of J Street, Oak Spring Canyon Road would transition back to the existing dirt road.

2.4.9.5 Future Access and Circulation

The project would provide space and easement access for future road access to the parcel to the east of the project area. This future road would be located north of the proposed residences and would ultimately connect to the proposed A Street before the gates located on-site. In addition, a future 28-foot gated emergency vehicle access road could be provided from the end of H Street.

2.4.10 Construction

The project is anticipated to be constructed over a five-year period, commencing in 2027 and ending by 2032, with a full operational buildout in 2032. The initial grading, paving, and infrastructure and utility installation activities would occur in 2027 and 2028, with building construction and landscaping activities for residences and recreational components occurring thereafter.

Grading for the project would require approximately 800,000 cubic yards of cut and 300,000 cubic yards of fill. Construction would result in 3,300,000 cubic yards of over-excavation, which has an expected shrinkage of 15%, reducing the total amount of cut by 500,000 cubic yards. Consequently, the grading would be balanced on-site, and no import or export of soils would be required for the project.

The project would result in approximately 22.67 acres of asphalt paving. Within the project site, the project would require 18.50 acres of paving, including paving at the proposed on-site Lost Canyon Road, trailhead, emergency staging area, private streets, and recreation center parking areas.

Associated infrastructure improvements would require repaving Lost Canyon Road (2.0 acres) and paving the Sand Canyon/Lost Canyon Roundabout (0.89 acre), Oak Spring Canyon Road (0.12 acre), and the public J Street (1.16 acres) connection to Robinson Ranch Road.

Unless otherwise noted, construction activities are anticipated to occur between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday, consistent with the noise regulations in SCMC Chapter 11.44 (Noise Limits). If construction is required on one or more Saturdays, construction activities would be limited to the hours between 8:00 a.m. and 5:00 p.m., also consistent with the City's noise regulations. No work may be performed on Sundays and/or the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas Day, Memorial Day, and Labor Day. The City's Community Development Department may issue a permit for work to be done after hours, provided that the project includes measures to contain construction noise.

2.5 INTENDED USES OF THIS EIR

An EIR is a public document used by a lead agency to analyze the environmental effects of a project and to disclose possible ways to reduce or avoid significant environmental impacts, including through mitigation measures and/or alternatives to the project. As an informational document, an EIR does not make recommendations for or against approving a project. The main purpose of an EIR, as described in California Environmental Quality Act (CEQA) Guidelines § 15121, is to inform public agency decision-makers and the public about potential environmental impacts of a project. This EIR will be used by the City, as the Lead Agency under CEQA, in making decisions regarding the project and the associated actions described below and used by State and local agencies described in Section 2.5.2, *Other Agency Permits and Approvals*, from which discretionary approvals and permits are required.

2.5.1 City Discretionary and Ministerial Actions

The City, as the Lead Agency for the project, has the responsibility for reviewing, processing, and approving the project. If development is proposed that results in environmental impacts not assumed within this EIR or covered under the impact analyses and mitigation measures set forth in this EIR, or if substantial changes to the circumstances under which the project is undertaken and/or new information of substantial importance becomes available after the certification of this EIR, the City will evaluate the need for supplemental environmental documentation per CEQA Guidelines §§ 15162 to 15164.

The project would require several permits and approvals from the City. The following is a summary of discretionary actions the City will consider:

- **Environmental Impact Report 24-001:** For development to occur, certification of this EIR would be required under CEQA to analyze project impacts that have the potential for significant environmental impacts.
- **Vesting Tentative Map 084497 24-001:** A Tentative Map is required to subdivide the existing parcels into the 420 proposed lots.

- **Oak Tree Permit (Class IV) 24-001:** An Oak Tree Permit (Class IV) is required for the removal of four or more oak trees.
- **Hillside Development Review (Class IV) 24-002:** A Hillside Development Review (Class IV) is required for development on a property with an average cross slope above 15%.
- **Architectural Design Review 24-011:** An Architectural Design Review is required for all new development projects.
- **Conditional Use Permit 24-008:** A Conditional Use Permit is required for gating more than five single-family residences.
- **Development Review 24-006:** A Development Review is required for all new development projects.

If the above discretionary approvals are issued by the City on the project, subsequent permits and approvals required by the City will be required through the building permit review process, including grading and building permit and fuel modification plan consideration, in order to implement the project.

2.5.2 Other Agency Permits and Approvals

A public agency, other than the lead agency, that has discretionary approval over a project is known as a "responsible agency," as defined by CEQA Guidelines § 15381. The following is a preliminary listing of responsible agencies that may have approval authority of the project:

- FEMA
- U.S. Army Corps of Engineers
- California Department of Fish and Wildlife
- State Water Resources Control Board
- Los Angeles Regional Water Quality Control Board
- SCVWA
- LACoFD
- Southern California Regional Rail Authority
- California Public Utilities Commission
- Metro
- Los Angeles County Sanitation District

Various permitting requirements are required for the project. Table 2-2 summarizes the Federal, State, and local permits that may be required for the project and the agencies that are expected to use the EIR in their decision-making and permitting processes. Also, additional agencies may be identified through the ongoing CEQA and planning process that are required to provide permit or planning approvals for the project to be implemented.

Table 2-2. Agency Permit Requirements

Agency	Approval/Permit Required
Federal Emergency Management Agency	Letter of Map Revision
U.S. Army Corps of Engineers	Section 404 permit for impacts to waters of the United States
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement
State Water Resources Control Board	Coverage under National Pollutant Discharge Elimination System Permit No. CAS000002 General Construction Activity Storm Water Permit Stormwater Pollution Prevention Plan
Los Angeles Regional Water Quality Control Board	Section 401 Certification
Santa Clarita Valley Water Agency	Permits for construction of infrastructure improvements

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CHAPTER 3. ENVIRONMENTAL SETTING

This chapter of the Environmental Impact Report (EIR) describes the environmental setting of the proposed Belcaro at Sand Canyon Project (project), including the physical conditions of the project site and its vicinity, and the cumulative context for the project.

3.1 PHYSICAL SETTING

3.1.1 Regional Setting

Los Angeles County is geographically one of the largest counties in the country, encompassing approximately 4,083 square miles of land with an estimated population of 9,876,811, as of January 1, 2025 (California Department of Finance [DOF] 2025). Los Angeles County stretches along 75 miles of the Pacific Coast of Southern California and is bordered by Kern County to the north, Orange County to the southeast, San Bernardino County to the east, and Ventura County to the west.

The City of Santa Clarita constitutes approximately 73.7 square miles (47,138 acres) of land within Los Angeles County with an estimated population of 232,377 as of October 2025 (DOF 2025). The City is bordered by the Los Padres and Angeles National Forests to the north, the Angeles National Forest to the east, the San Fernando Valley to the south, and Ventura County to the west. Unincorporated areas near the City include the communities of Stevenson Ranch, Castaic, Val Verde, Agua Dulce, and Newhall Ranch. Regional access to the City is provided by Interstate (I-)5 and State Route (SR-)14, which run north–south along the west side and through the eastern side of the City, respectively.

Surrounded by mountains, the City is situated in a valley with elevations ranging from 1,200 to 1,400 feet above mean sea level. The climate is generally semi-arid and warm and is characterized as Mediterranean, with hot, dry summers and mild, wet winters. With wide variations in rainfall between the flat and mountainous areas, proximity to dense forest lands, and exposure to Santa Ana winds, the region is susceptible to periodic wildfires.

Considering the City is situated within, and forms an integral part of, the larger Santa Clarita Valley in northern Los Angeles County, the project region is included in the One Valley One Vision (OVOV) joint planning effort between the City of Santa Clarita (City) and the County of Los Angeles (County) (Figure 3-1). The City's Planning Area includes its incorporated boundaries and adopted Sphere of Influence (SOI), while the County's Planning Area includes unincorporated land outside the City's boundaries and its adopted SOI. Collectively, the City and County Planning Areas are referred to as the OVOV Planning Area, which includes the City and its four communities, including Canyon Country, Newhall, Saugus, and Valencia, and County unincorporated communities, including Agua Dulce, Castaic, Stevenson Ranch, Val Verde, and Newhall Ranch.

3.1.2 Local Setting

The project site is located at the far northeastern portion of the City. County-owned unincorporated land, and the Angeles National Forest, is located to the east. The project site is bounded by the Santa Clara River and SR-14 to the north, Sand Canyon Country Club to the south, undeveloped land to the east, and existing rural residential development to the west. Primary regional access to the project site is provided by SR-14, which runs north–south less than 0.2 mile north of the project site. Figure 3-2 provides an aerial view of the project area boundary.

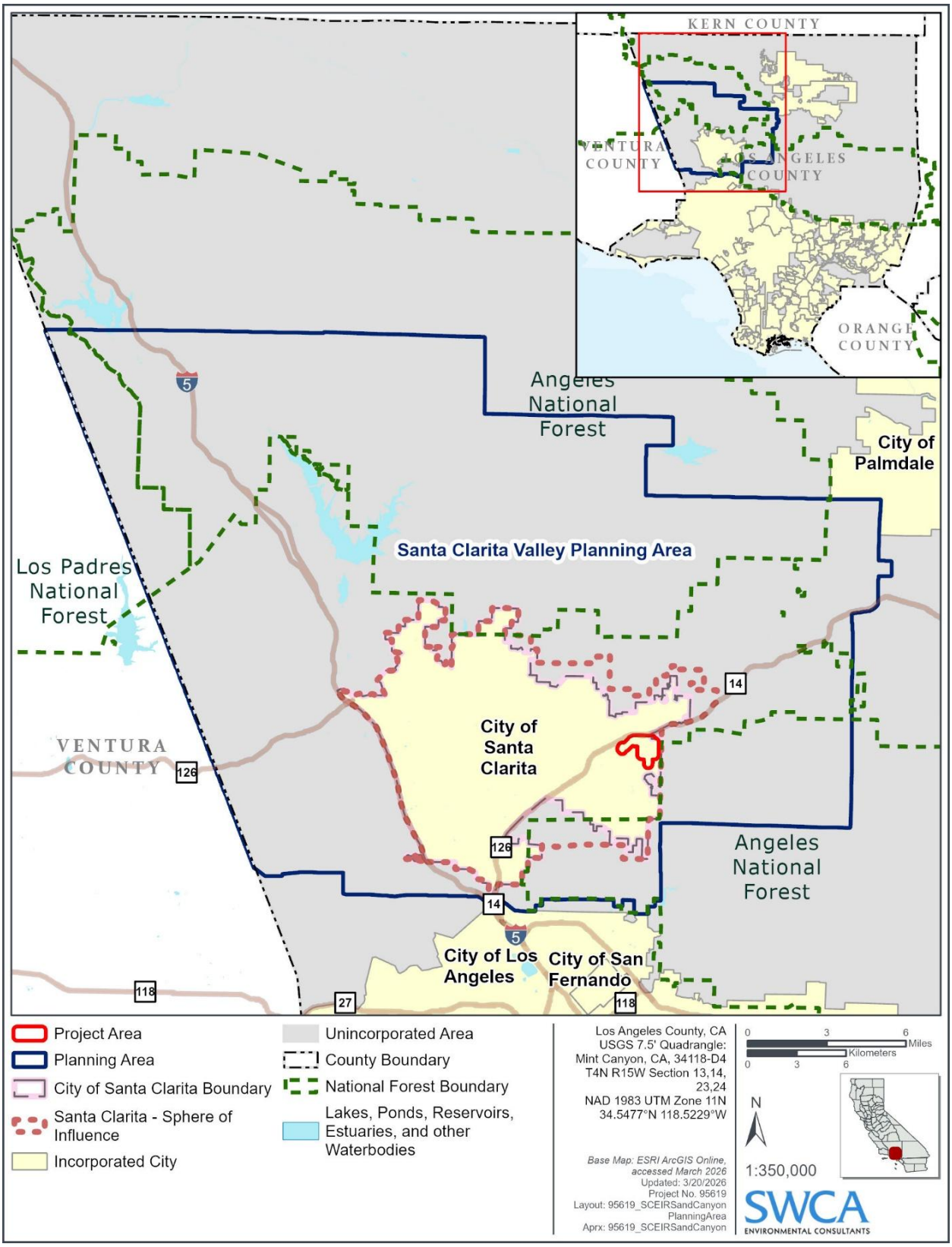


Figure 3-1. Project Location.

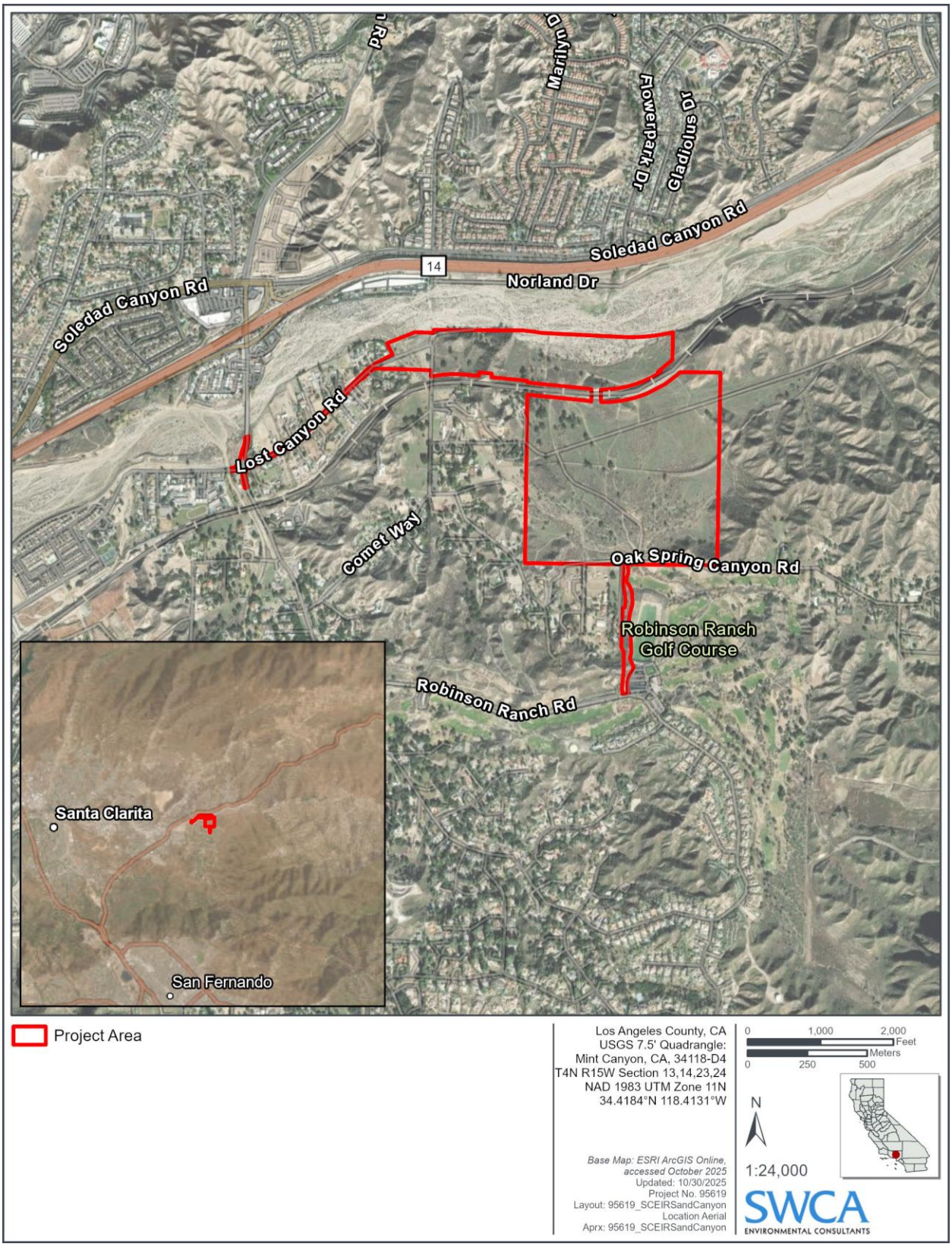


Figure 3-2. Project Area Aerial Map.

The project site is within the Sand Canyon–Santa Clara River subwatershed (Hydrologic Unit Code [HUC] 180701020107) of the Headwaters of Santa Clara River watershed (HUC 1807010201). The Headwaters of Santa Clara River watershed comprises approximately 239 square miles (152,907 acres). This watershed originates in Soledad Canyon and the many smaller canyons of the adjacent Sierra Pelona and San Gabriel Mountains, with these areas ultimately draining into the reaches of the Santa Clara River that flow through Soledad Canyon. The Sand Canyon–Santa Clara River subwatershed is the westernmost and farthest downstream unit of this watershed (Dudek 2026; EIR Appendix C). The project site occurs within the eastern portion of the Santa Clara subbasin (HUC 18070102) (Dudek 2026). The Santa Clara subbasin comprises approximately 1,626 square miles and spans across northeastern Los Angeles County and much of northern Ventura County. The primary geographic and surface hydrologic feature of the watershed is the Santa Clara River, which flows west for approximately 50 miles until it reaches the Pacific Ocean near the City of Ventura. As an intermittent perennial watercourse, the Santa Clara River exhibits both intermittent and perennial flows along various reaches.

The project site is located within the City's Significant Ecological Area (SEA) Overlay Zone, which includes potential biological resources, including oak trees, as identified in Santa Clarita Municipal Code (SCMC) § 17.38.080 (SEA—Significant Ecological Area Overlay Zone). The SEA Overlay Zone was established in an effort to achieve the City's objective to preserve the SEA within the City limits for the public health, safety and welfare for the long-term benefit of the community, and maintenance of the unique visual characteristics, resources, and ridgeline integrity. The southern portion of the project area, where the proposed J Street would be constructed through the Sand Canyon Country Club property, is located within the City's Planned Development Overlay Zone. SCMC § 17.38.060 (PD—Planned Development Overlay Zone) establishes an overlay zone regulation that is intended to provide additional discretion for previously vacant or underutilized parcels, as identified on the City's zoning map.

3.1.3 Existing Project Site Characteristics

The project site consists of approximately 193.8 acres of vacant land in the northeastern portion of the City and encompasses nine parcels (Assessor's Parcel Numbers [APNs] 2840-001-118 and 2840-015-025, -031, -032, -033, -034, -035, -045, and -047). The project site is intersected by the Los Angeles County Metropolitan Transit Authority (Metro) railroad, which runs east–west and divides the project site laterally into two distinct sections. Direct access to the project site would be provided by a newly constructed extension of Lost Canyon Road from the north and a connection via J Street through the Sand Canyon Country Club property to Robinson Ranch Road to the south.

The topography of the project site is predominantly level, with sloped areas along the perimeter and at the northwestern portion of the project site. The current landscape is characterized by vegetation consistent with upland scrub, chaparral, and woodland communities, as well as riparian and semi-natural communities supported by the coarse-grained soils in the area.

The project site is located at the mouth of Oak Spring Canyon Creek, which drains a relatively large area of the western end of the San Gabriel Mountains (LGC Valley, Inc. [LCG] 2024; EIR Appendix F). The geologic units anticipated at the project site, from youngest to oldest, include artificial fill, floodplain deposits, recent alluvium, terrace deposits (elevated floodplain deposits), and bedrock assigned to the Mint Canyon Formation. Groundwater was encountered on-site at depths ranging from 25 to 38 feet below the existing grades, and surface water was observed in the Oak Spring stream channel in the southwest corner of the project site at Oak Spring Canyon Road. The surface water is seasonal and intermittent, but due to the relatively flat nature of the project site, overland flow could occur anywhere on the project site during periods of heavy rainfall (LGC 2024). According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 06037C0845G (effective date

6/2/2021), the northern, southwestern, and eastern portions of the project site are in designated flood hazard zones (FEMA 2025).

The project site occurs within the eastern portion of the Santa Clara subbasin (HUC 18070102) and the Sand Canyon–Santa Clara River subwatershed (HUC 180701020107) of the Headwaters of Santa Clara River watershed (HUC 1807010201). The Santa Clara River traverses the northernmost portion of the project site. Oak Spring Canyon Creek, a drainage located in the southern and western extent of the review area, is a direct tributary to the Santa Clara River (Dudek 2026). Oak Spring Canyon Creek traverses the southwestern portion of the project site in a generally northwesterly direction, entering the project site from the off-site golf course through culverts under Oak Spring Canyon Road and exiting directly west of the project site through an open, natural channel that drains directly into the Santa Clara River (Dudek 2026).

3.1.4 Surrounding Land Uses

The project site is surrounded by a variety of non-urban uses, residential buildings, open space areas, and undeveloped land, and is bordered by the Santa Clara River to the north, existing single-family development to the west, Sand Canyon County Club to the south, and undeveloped land to the east. Unincorporated land owned by the County is located east of the project site, and the Angeles National Forest is located 0.25 mile east of the project site.

Zoning designations in the vicinity of the project site include Non-Urban 5 (NU5) and Urban Residential (UR1) to the west, UR1 to the east, and Open Space (OS) to the north and southeast. The Metro railroad, which intersects the site east–west, is zoned as Public/Institutional (PI).

3.2 CUMULATIVE CONTEXT

This section provides context for the cumulative analyses provided in the individual environmental issue area sections of Chapter 4, *Environmental Impact Analysis*, of this EIR. This section outlines the California Environmental Quality Act (CEQA) requirements for cumulative analyses and the approach to analyzing the project's potential cumulative impacts, including defining the geographic scope of the cumulative study area and providing a list of related development projects considered as the cumulative development scenario for the project. A cumulative impact analysis for each environmental resource area can be found in the corresponding sections of Chapter 4 of this EIR.

3.2.1 CEQA Requirements for Cumulative Analyses

CEQA Guidelines § 15130 requires that an EIR discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable." "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines § 15355; see also California Public Resources Code § 21083(b)). "A cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (CEQA Guidelines § 15130(a)(1)). The definition of cumulatively considerable is provided in CEQA Guidelines § 15065(a)(3):

> Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

According to CEQA Guidelines § 15130(b):

> The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

Cumulative impacts are changes in the environment that result from the incremental impact of the development of the project and all other nearby "related" projects. For example, the traffic impacts of two projects in proximity may be insignificant when analyzed separately but could have a significant impact when the projects are analyzed together.

3.2.2 Cumulative Analysis Approaches Allowed by the State CEQA Guidelines

CEQA Guidelines § 15130 provides that the following two approaches can be used to adequately address cumulative impacts:

- **Regional Growth Projections Method:** A summary of projections contained in an adopted local, regional, or statewide plan or related planning document that describes or evaluates conditions contributing to the cumulative effect, or in a prior environmental document for such a plan which has been adopted or certified.
- **List Method:** A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.

The cumulative impact analysis for each environmental resource area can be found in the corresponding sections in Chapter 4, *Environmental Impact Analysis*, of this EIR. The cumulative analyses contained in Chapter 4 use both approaches noted above—the regional growth projections method and the list method. This is due to the localized and specific nature of the project, and also because the project site is in an area that has experienced and is anticipated to continue to experience some regional growth. Additionally, a combined approach is appropriate as some resource areas (such as air quality, transportation, and utilities) consider a more growth-based approach, while others (such as aesthetics, biological resources, and noise) necessitate a more list-based approach. This allows for a thorough, project-based cumulative analysis within the relevant geographic areas and timing of the project activities.

Each environmental resource area's cumulative impact analysis uses the same thresholds of significance used to determine project impacts. In addition, the cumulative impact threshold included in CEQA Guidelines Appendix G, § XXI, *Mandatory Findings of Significance*, was examined in this EIR.

In Chapter 4, the following three-step approach was used to analyze cumulative impacts:

1. First, if the project was determined to have no impact in a particular impact area, then the analysis states that the project would not have a cumulative contribution to impacts related to that threshold.
2. Second, if the project could result in less-than-significant or significant impacts, then the next step was to determine whether the combined effects from the project and other projects would be cumulatively significant. This was done by considering the project's incremental impact to the estimated anticipated impacts of other probable future projects and/or reasonably foreseeable development.

3. Third, the project's incremental contribution, if any, was evaluated to determine if the combined significant cumulative impact would be cumulatively considerable, and thus significant as required by CEQA Guidelines § 15130(a).

It should be noted that CEQA Guidelines § 15064(h)(4) states that "[t]he mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are cumulatively considerable." Therefore, it is not necessarily true that, even where cumulative impacts of other projects are significant, the Lead Agency must deem any level of incremental contribution to be cumulatively considerable. If the project's individual impact is less than significant, however, its contribution to a significant cumulative impact could nevertheless be deemed cumulatively considerable depending on the nature of the impact and the existing environmental setting. If, for example, a project is located in an air basin determined to be in extreme or severe nonattainment for a particular criteria pollutant, a project's relatively small contribution of the same pollutant could be found to be cumulatively considerable. Thus, depending on the circumstances, an impact that is less than significant when considered individually may still be cumulatively considerable in light of the impact caused by all projects considered in the analysis.

3.2.2.1 Geographic Scope

The geographic area affected by the project and its potential to contribute to cumulative impacts vary depending on the environmental resource or topic under consideration. Generally, the geographic areas associated with the environmental effects of the project, as described in Chapter 4, *Environmental Impact Analysis*, define the boundaries of the area used for compiling the list of past, present, and reasonably foreseeable future related projects considered in the cumulative impact analysis. However, the unique cumulative context and appropriate geographic scope of each individual environmental resource or topic are considered for the analysis. For instance, the air quality analysis includes consideration of regional air emissions (e.g., reactive organic gases/nitrogen oxides, particulate matter); therefore, the geographic scope is the entire air basin. Conversely, in the case of visual impacts, given the localized impact area of concern, a smaller, more localized area surrounding the immediate project site is appropriate for consideration.

Table 3-1 presents the geographic areas included within this analysis for purposes of determining whether the project's contribution to a particular impact would be cumulatively considerable and therefore significant. An explanation of the geographic scope selected for each resource is also briefly included in Chapter 4 under the impact analysis.

Table 3-1. Geographic Scope of Cumulative Impact Analysis

Environmental Resource Area	Geographic Scope
Aesthetics	Project site and designated viewpoints*
Agriculture Resources	Project area
Air Quality	South Coast Air Basin
Biological Resources	Project area, including an approximate 1,000-foot radius around the project area, and areas that flow into the Santa Clara River Watershed
Cultural Resources	Soledad Canyon Area within the Santa Clarita Valley
Energy	City of Santa Clarita and Los Angeles County
Geology and Soils	Project area and an approximate 500-foot radius around the project area
Greenhouse Gas Emissions	Global
Hazards and Hazardous Materials	Project area

Environmental Resource Area	Geographic Scope
Hydrology and Water Quality	Project site and the immediately adjacent area that flows into the Santa Clara River Watershed
Land Use and Planning	City of Santa Clarita jurisdictional boundaries
Mineral Resources	City of Santa Clarita Planning Area
Noise	Project area and immediate adjacent area**
Population and Housing	Southern California Association of Governments regional area
Public Services	City of Santa Clarita utility and public service provider district boundaries, as identified in Sections 4.15, *Public Services*, and 4.19, *Utilities and Service Systems*
Recreation	Project area and a two-mile radius around the project area
Transportation	Project area and an approximate 0.5-mile radius around the project area
Tribal Cultural Resources	Soledad Canyon Area within the Santa Clarita Valley
Utilities and Service Systems	City of Santa Clarita utility and public service provider district boundaries, as identified in Sections 4.15, *Public Services*, and 4.19, *Utilities and Service Systems*
Wildfire	Project area and the following approximate boundaries: SR-14 to the north, Placerita Canyon Road to the south, Rolling Hills Avenue to the west, and Oak Springs Canyon Road to the east

* Designated viewpoints along Lost Canyon Road, SR-14, Soledad Canyon Road, and Oak Spring Canyon Road as identified in the *Visual Resources Report for Belcaro at Sand Canyon Project* (Dudek 2026).

** Long-term noise measurements were taken at the northeast corner of the Oak Spring Canyon Road and trail to Whitewater Canyon Road intersection. A second long-term noise measurement was taken at the northeast corner of the Holt Avenue and Whitewater Canyon Road intersection.

3.2.2.2 Temporal Scope

This cumulative impact analysis considers other projects that have been recently completed, are currently under construction, or are reasonably foreseeable (e.g., for which an application has been submitted, or an agency has proposed). Both short- and long-term cumulative impacts of the project, in conjunction with other cumulative projects in the area, are evaluated. The schedule and timing of the project and other cumulative projects, however, are relevant to the consideration of cumulative impacts, since some of the activities associated with the project are temporary. The cumulative impact analysis, therefore, pays particular attention to any cumulative projects with implementation schedules that could overlap with the proposed activities scheduled for this project.

3.2.3 List of Related Projects in the Project Vicinity

The project site is in the City of Santa Clarita. Consequently, nearby related projects in the City are a primary contributor to the list of related projects in the project vicinity.

A summary of the projects identified within the general vicinity of the project site is provided in Table 3-2 and shown in Figure 3-3. This is not intended to be an exhaustive list of projects in the region, but represents those projects in the vicinity of the project site that may have some related environmental impact to the project and are: 1) currently under construction or implementation or beginning construction or implementation, 2) pending construction with approved entitlements, 3) proposed and under environmental review, or 4) reasonably foreseeable (e.g., projects for which an application has been submitted and reasonably foreseeable public projects).

Table 3-2. Cumulative Development Scenario Project List

Figure 3-3 Map Key	Name	Location	Project Type	Description	Project Status*
Santa Clarita					
1	Sand Canyon Resort	Sand Canyon Country Club	Hotel	Four-story, 283-room hotel with amenities; 12 suites in villas; function building, spa building, kids building, and pools.	Under Planning Division review
2	Sand Canyon Village	Northeast corner of Sand Canyon Road and Soledad Canyon Road	Mixed-Use	40,000 square feet (SF) of commercial space, 118,000-SF assisted living facility, 580 units (312 apartments, 149 duplexes, and 119 single-family)	Under construction
3	Vista Canyon Specific Plan	North of Lost Canyon Road between Fair Oaks Avenue and Sand Canyon Road	Mixed-Use	1,100 units (480 apartments and 245 detached condominiums built so far); 646,000 SF of office space, 164,000 SF of commercial space, and 200-room hotel (140,000 SF); includes new Metrolink station, bus transfer station, and public and private park space.	Under construction (partially built)
4	Sun Ridge Specific Plan	Generally undeveloped land, roughly bounded by Railroad Avenue/Bouquet Canyon Road to the west, Soledad Canyon Road to the north, Golden Valley Road to the east, and the Circle J Ranch neighborhood to the south	Mixed-Use	Proposed specific plan covering 1,209 acres; would allow development of up to 5,750 residential units, 284,000 SF of commercial development, and 2,676,000 SF of business park/commercial development, as well as 77 acres of roadways, 302 acres of open space, and 12 miles of trails	Under Planning Division review
5	Park Vista	Southeast corner of Golden Valley Road and Sierra Highway	Residential	General Plan Amendment/Zone Change to permit 456 units (42 single-family homes, 78 townhomes, and 336 multifamily units)	Under Planning Division review
6	Princessa Crossroads	Princessa Crossroads	Mixed-Use	Specific plan allowing up to 300 multifamily units and 1,500,000 SF of business park.	Under Planning Division review
7	Metro Walk	East of Lost Canyon Road, south of Harriman Drive, and northwest of railroad tracks (APN 2840034043 and others nearby)	Residential	498 multifamily residential units	Under construction
8	River Walk Mixed Use Project	18228-18300 Soledad Canyon Road	Mixed-Use	154 multifamily units and 8,500 SF	Entitled
9	Warm Springs Subdivision	APN 2848-005-027	Residential	Three single-family lots	Under Planning Division review

Source: City of Santa Clarita, December 23, 2025.

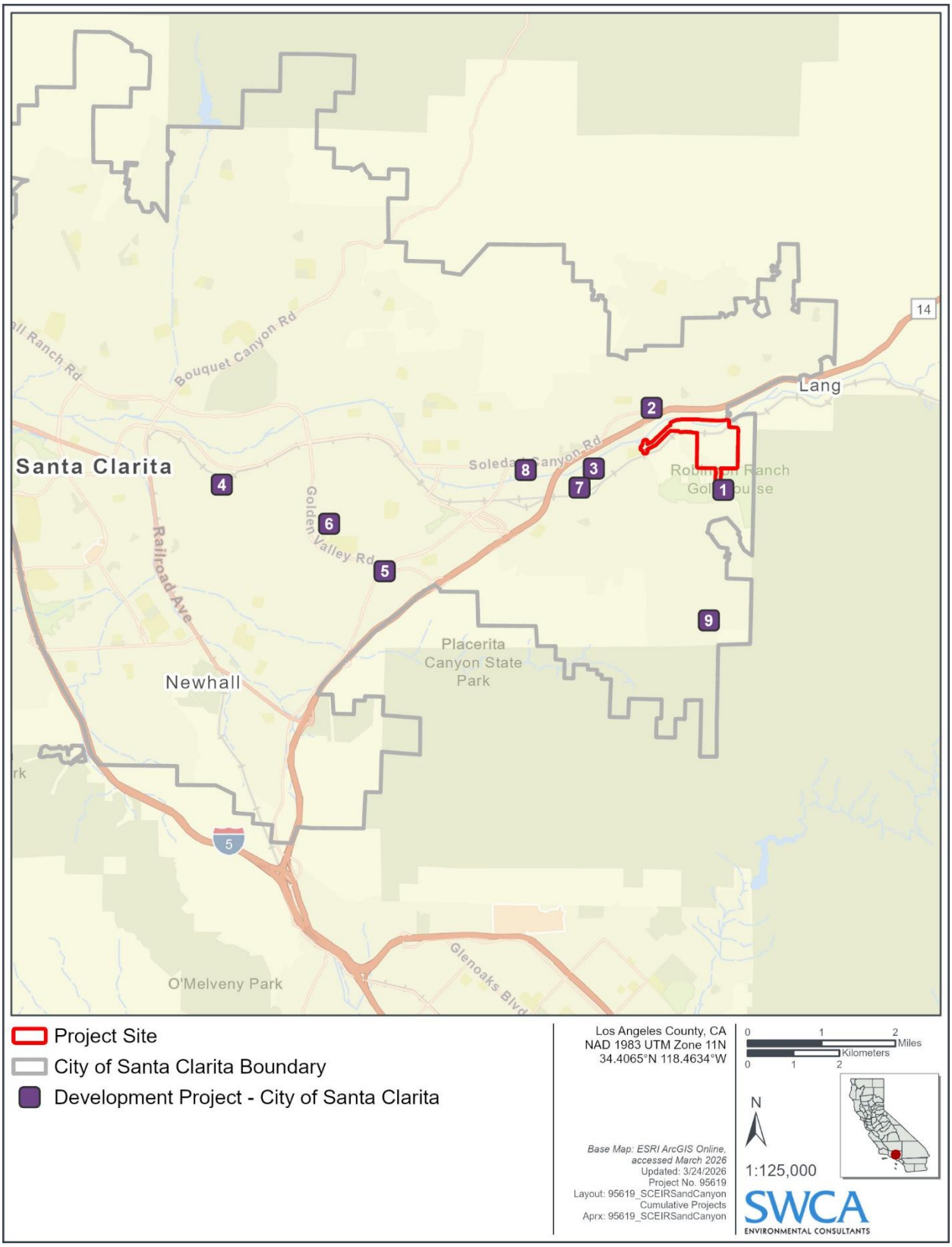


Figure 3-3. Cumulative Development Scenario Project Locations.

CHAPTER 4. ENVIRONMENTAL IMPACT ANALYSIS

This chapter of the Environmental Impact Report (EIR) evaluates the potential environmental effects that would result from the construction and operation of the proposed Belcaro at Sand Canyon Project (project) and identifies mitigation measures for impacts found to be potentially significant. Table 4-1 provides a summary of the results of the analysis.

Table 4-1. Summary of Environmental Impacts Analysis

Environmental Resource Area	Significant and Unavoidable Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
Aesthetics			X	
Agriculture Resources				X
Air Quality		X		
Biological Resources		X		
Cultural Resources		X		
Energy			X	
Geology and Soils		X		
Greenhouse Gas Emissions		X		
Hazards and Hazardous Materials			X	
Hydrology and Water Quality			X	
Land Use and Planning				X
Mineral Resources			X	
Noise and Vibration		X		
Population and Housing			X	
Public Services			X	
Recreation			X	
Transportation			X	
Tribal Cultural Resources		X		
Utilities and Service Systems			X	
Wildfire			X*	

* The project includes Project Design Features, which would be implemented to reduce impacts to a less-than-significant level. The Project Design Features would be included in the Mitigation Monitoring and Reporting Program, should the project move forward to project approval.

Each environmental resource area discussed in Chapter 4 has been divided into subsections, as follows:

Existing Conditions: The description of the physical environmental conditions in the vicinity of the project site, as they exist at the time of the established baseline physical conditions.

Regulatory Setting: The regulations in effect at the time the Notice of Preparation was published. These are the applicable regulations governing each environmental resource area. This is not an exhaustive analysis of the regulations, but rather information to assist the reader in understanding the potential impacts of the project from a regulatory perspective.

Thresholds of Significance: The thresholds used to evaluate each environmental resource area based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

Impact Assessment Methodology: Methods used to determine the impacts associated with the project, such as measurements or field investigative processes.

Project-Specific Impacts and Mitigation Measures: The statement of the level of significance of potential environmental effects of the project. These include the significant environmental effects of the project, as further defined below. The impacts are identified and then followed by the mitigation measures that can minimize significant impacts; mitigation measures must be enforceable and feasible. In addition, there must be an essential nexus between the mitigation measure and a legitimate governmental interest, and the mitigation measure also must be "roughly proportional" to the impacts of the project.

Cumulative Impact: The cumulative effects of the project when the project's incremental effect is considered in combination with other closely related past, present, and reasonably foreseeable probable future projects.

All impacts in this EIR, following the application of any recommended mitigation measures, have been classified according to the following criteria (note: CEQA does not recognize a beneficial effect as an impact):

A *significant and unavoidable impact* would cause a substantial adverse effect on the environment that meets or exceeds the applicable significance criteria thresholds for a particular resource, and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level. There are no significant and unavoidable impacts identified in this EIR.

A *less-than-significant impact with mitigation* is an adverse impact that would cause a substantial adverse effect that meets or exceeds the applicable significance criteria thresholds for a particular resource but can be reduced to a less-than-significant level through the successful implementation of identified mitigation measures.

A *less-than-significant impact* or a conclusion of *no impact* means the effect does not meet or exceed the applicable significance criteria thresholds for a particular resource. No mitigation measures are required for less-than-significant impacts or issue areas where no impact would occur; only compliance with standard regulatory conditions would be required.

The term "significance" is used throughout the EIR to characterize the magnitude of the projected impact. For this EIR, a significant impact is a substantial or potentially substantial change to resources in the project site or the area adjacent to the project site. In the discussions of each issue area, thresholds of significance are identified to distinguish between significant impacts and impacts that would not rise to the level of significance.

Where feasible, measures have been identified to reduce project impacts to less-than-significant levels. CEQA states that public agencies should not approve projects as proposed if there are feasible mitigation measures available that would substantially lessen the environmental effects of such projects (Public Resources Code Section 21002).

4.1 AESTHETICS

This section of the EIR describes the existing conditions and regulatory setting for aesthetics and visual resources as it pertains to the project, evaluates potential environmental impacts to aesthetics and visual resources that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from *Visual Resources Report: Belcaro at Sand Canyon Project* (Visual Resources Report) (Dudek 2025; EIR Appendix G).

4.1.1 Existing Conditions

4.1.1.1 Visual Characteristics of the Surrounding Area

Surrounded by mountains, the City of Santa Clarita is situated in a valley with elevations ranging from 1,200 to 1,400 feet above sea level. The area surrounding the project generally has a rural/residential visual character, with open space and residential areas making up much of the land use. Several residential and recreational developments, including a golf course south of the project site, have been constructed in recent years. Increased development in the surrounding area has impacted the rural appearance of the region. Although the region is becoming somewhat more urbanized, the area still maintains primarily a rural and vegetated visual character through the open space, trails, and oak trees. Figure 4.1-1 provides a key map of the photograph locations, and Figures 4.1-2 through 4.1-11 provide an overview of the region's visual character.

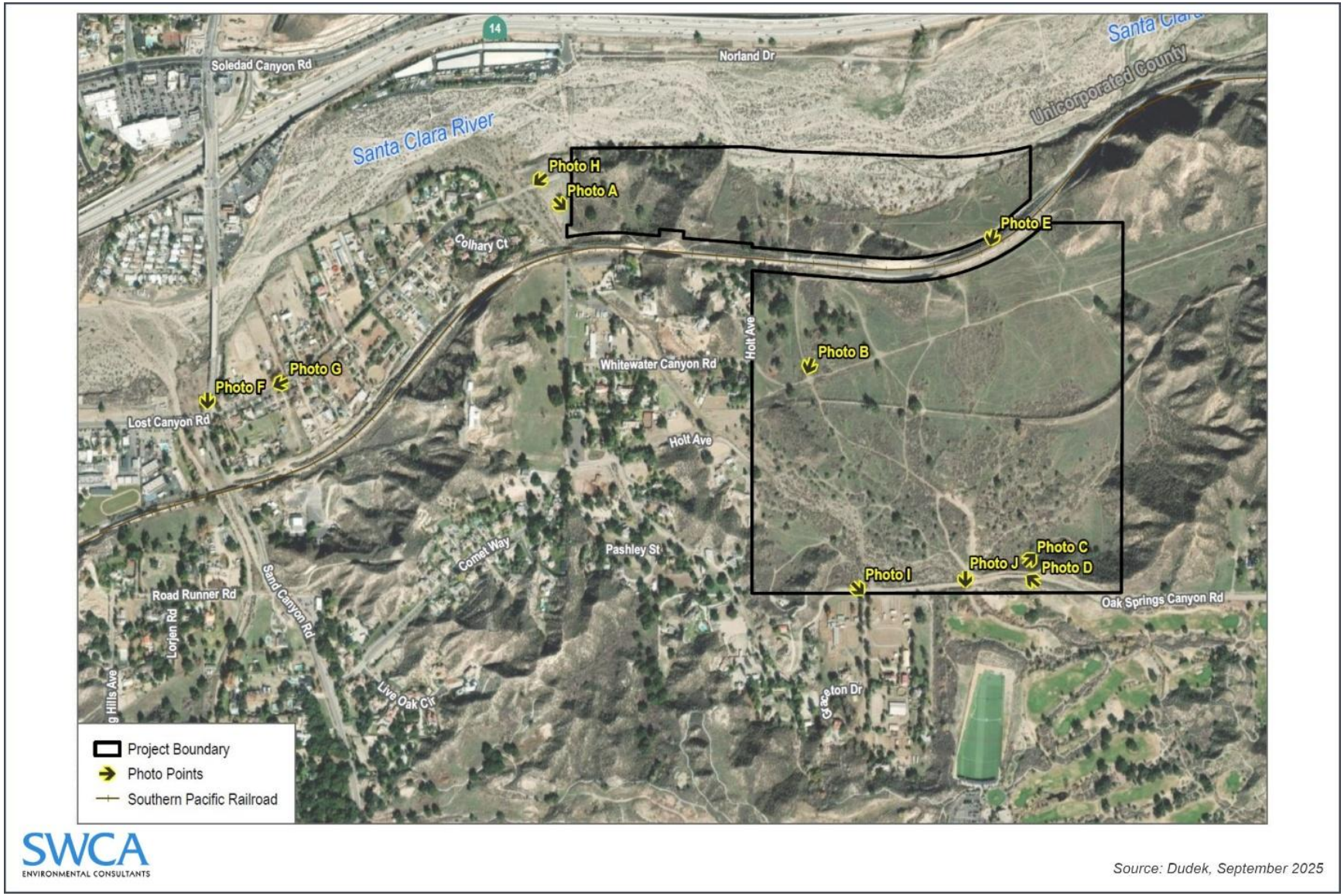


Figure 4.1-1. Surrounding Area Existing Conditions Key Map.



Figure 4.1-2. North of Southern Pacific Railroad; View Facing Southeast (Photo A).



Figure 4.1-3. East of Holt Avenue; View Facing Southwest (Photo B).



Figure 4.1-4. North of Oak Spring Canyon Road; View Facing Northeast (Photo C).



Figure 4.1-5. Along Oak Spring Canyon Road; View Facing Northwest (Photo D).



Figure 4.1-6. Along Southern Pacific Railroad; View Facing Southwest (Photo E).



Figure 4.1-7. Intersection of Lost Canyon Road and Sand Canyon Road; View Facing South (Photo F).



Figure 4.1-8. Lost Canyon Road; View Facing Southwest (Photo G).



Figure 4.1-9. Lost Canyon Road at Creek Crossing; View Facing Southwest (Photo H).



Figure 4.1-10. Oak Spring Canyon Road; View Facing Southeast (Photo I).



Figure 4.1-11. Oak Spring Canyon Road North of Sand Canyon Country Club; View Facing South (Photo J).

4.1.1.2 Visual Characteristics of the Project Site

The approximately 193.8-acre project site is located in the easternmost portion of the City. The project site is bordered by the Santa Clara River to the north (and State Route [SR-] 14 farther to the north), Sand Canyon Country Club to the south, existing single-family residential development to the west, and undeveloped, mountainous terrain to the east.

As illustrated in the conceptual site plan in Chapter 2, *Project Description* (Figure 2-2), the project site is separated into two development areas by the Southern Pacific Railroad, which runs in an east–west direction, south of the Santa Clara River. The northern portion is partially within the Santa Clara River floodplain and has hilly to flat terrain covered by scrub and scattered oak trees. The southern portion is primarily covered by scrub with scattered coast live oak; a northwest–southeast wash is in the southwestern corner. Unpaved portions of Oak Spring Canyon Road also cross the southern portion of the project area.

The project site's topography is mostly flat but gradually slopes in the areas surrounding the Santa Clara River and at the eastern and southwestern portions of the project boundary. The project site is located on vacant land; however, the northern development area supports several distribution poles currently in service. Representative photographs were taken of the project site. Figure 4.1-12 provides a key map of the photograph locations, and Figures 4.1-13 through 4.1-18 display the existing site conditions of the project site, including vegetation and terrain.



Figure 4.1-12. Project Site Existing Conditions Key Map.



Figure 4.1-13. Lost Canyon Road near Oak Spring Canyon Road; View Facing East (View 1).



Figure 4.1-14. Eastbound SR-14; View Facing Southeast (View 2).

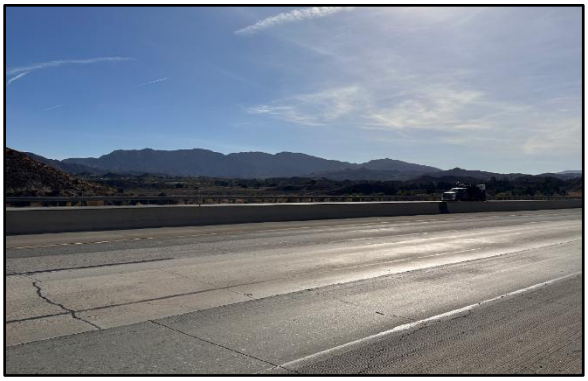


Figure 4.1-15. Westbound SR-14; View Facing Southwest (View 3).



Figure 4.1-16. Soledad Canyon Road; View Facing Southwest (View 4).



Figure 4.1-17. Eastbound Oak Spring Canyon Road; View Facing Northeast (View 5).



Figure 4.1-18. Eastbound Oak Spring Canyon Road; View Facing Northeast (View 6).

4.1.1.3 Designated Scenic Resources

The *City of Santa Clarita General Plan Conservation and Open Space Element* identifies the following as scenic resources: natural open spaces, topographic formations, and landscapes that contribute to a high level of visual quality (City of Santa Clarita 2011a). Pursuant to CEQA Appendix G Guidelines, scenic resources include trees, rock outcroppings, and historic buildings and may also include locally recognized scenic resources, including oak trees, vineyards, and rolling hills. Scenic resources near the project site include Sand Canyon, the Santa Clara River, hilly and mountainous terrain to the north, east, and south of the City limits, and existing on-site oak trees.

4.1.1.4 Designated Vistas and Views

Scenic vistas are public vantage points offering views of primarily natural settings containing recognized scenic features or landscapes of special importance (Dudek 2025). Due to the presence of development in the surrounding area and intervening topography, no formal scenic vistas occur within the project site or the surrounding area. However, the City has identified a significant ridgeline that intersects the project's southeasternmost boundary (City of Santa Clarita 2011a).

Public views are those that can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. Views can be defined as focal views (i.e., views of a particular object, scene, setting, or feature of visual interest) and panoramic views (i.e., views of a large geographic area for which a view may be wide and extend into the distance). Within the project vicinity, panoramic views with moderate to high visual quality are available to viewer groups in the area. These scenic viewpoints include hills, mountains, geological features, valleys and wash terrain, dense oak trees, and more. Views of the project site from Soledad Canyon Road are limited by intervening terrain, street trees, and sound walls. Views of the southern portion of the project site are available from the elevated vantage point along Oak Spring Canyon Road, but these views are slightly limited by development to the north of SR-14 and alterations to hilly terrain to accommodate proposed development to the northwest.

Views from most public street-level locations at the project site are focal views and primarily available to viewers at adjacent locations (i.e., pedestrians and motorists along Lost Canyon Road, SR-14, and Soledad Canyon Road). In general, surrounding views consist of rural residential areas that include single-family homes, equestrian uses, open space areas, the Southern Pacific Railroad, and the Santa Clara River.

4.1.1.5 Scenic Highways

The California Scenic Highway Program identifies State- and County of Los Angeles (County-) designated scenic highways; specifically, California Streets and Highways Code §§ 260 through 263 provide the statutory basis for the State Scenic Highway System. These sections declare the Legislature's intent to preserve and enhance scenic highway corridors and direct the State and local jurisdictions to consider visual quality in highway planning and adjacent land use regulation. They also establish the State Scenic Highway System and identify the highway routes that are eligible for or included in this system, thereby supporting CEQA analyses that recognize scenic resources along designated or eligible segments. There are no State or locally designated scenic highways near the project site (California Department of Transportation [Caltrans] 2018; City of Santa Clarita 2011a). The nearest eligible State Scenic Highway is Interstate (I-) 5, from approximately I-210 (near Tunnel Station) to SR-126 (near Castaic). This portion of I-5 is approximately 8.2 miles away from the project site and is not an officially designated State Scenic Highway. The nearest officially designated State Scenic Highway is SR-2 in the San Gabriel Mountains, which is approximately 16 miles southeast of the project site. In summary, the project site is not within the viewshed of a State- or County-designated scenic highway due to distance and the buildout

nature of the area surrounding the project site. Based on a review of the applicable plans and regulatory guidance, no scenic resources within a State Scenic Highway would be visible from the project site (City of Santa Clarita 2011a; County of Los Angeles 2015).

4.1.1.6 Light and Glare

The two primary light sources include light emitted from the interior of buildings that passes through windows and light that comes from exterior sources, such as street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting. These light sources can cause a nuisance to nearby residential areas, diminish nighttime views of the sky, and potentially disturb wildlife in their natural habitats. Perceived glare is the unwanted feeling by a person looking directly at a light source, whereas light spill is the presence of unwanted light on properties adjacent to the illuminated property.

The project vicinity is characterized by low intensities of illumination. The project site does not contain any sources producing light and glare impacts, but surrounding uses, such as roadways and residential buildings, produce light and glare impacts. Artificial lighting in the project vicinity includes street lighting along Soledad Canyon Road and interior and exterior lighting of residential buildings. Light emitted from the interior and exterior of residential buildings along Lost Canyon Road and Oak Spring Canyon Road impacts nighttime views, but these impacts are generally considered insubstantial because residential buildings emit low-intensity illumination that is confined to the immediate area. Light is also emitted from the headlights of vehicles traveling along Oak Spring Canyon Road, Lost Canyon Road, Sand Canyon Road, and SR-14; however, headlights are not a substantial source of light because of the distance between these roads and the project site. Overall, the project vicinity contains various sources of ambient illumination, including street lighting, light from nearby residential buildings, and vehicle headlights from adjacent roadways.

4.1.2 Regulatory Setting

4.1.2.1 Federal

No Federal regulations related to aesthetics are applicable to the project.

4.1.2.2 State

CALIFORNIA SCENIC HIGHWAY PROGRAM

The California Scenic Highway Program, established in 1963, aims to preserve and protect scenic highway corridors from changes that could diminish the visual quality of areas adjacent to highways. Scenic highway designation is determined by the extent of natural landscape visible by motorists, the overall scenic quality of the landscape, and the degree to which development intrudes upon the motorist's enjoyment of the view. I-5, approximately 8.2 miles southwest of the project site near Tunnel Station, is an eligible State Scenic Highway. The nearest officially designated State Scenic Highway, SR-2, is located approximately 16 miles southeast of the project site. The project site, however, is not within the viewshed of I-5, SR-2, or any other eligible or designated State Scenic Highway (Caltrans 2018).

NIGHTTIME SKY, CALIFORNIA CODE OF REGULATIONS TITLE 24, OUTDOOR LIGHTING STANDARDS

Title 24 of the California Code of Regulations establishes standards for outdoor lighting in both residential and nonresidential settings. The purpose of these regulations is to improve outdoor lighting quality and to address the adverse effects of light pollution, light trespass, and glare. The standards

control several aspects of outdoor lighting, including limits on power usage and brightness, requirements for shielding, and the incorporation of sensor controls to manage lighting operation.

4.1.2.3 Local

SANTA CLARITA COMMUNITY CHARACTER AND DESIGN GUIDELINES

The *Santa Clarita Community Character and Design Guidelines* (City of Santa Clarita 2009) were established to guide the design of new residential, commercial, mixed-use, and industrial developments, as well as the renovation and redevelopment of existing properties within the City. These guidelines are designed to promote development that is compatible in terms of size, scale, and visual appearance with the surrounding neighborhoods, while also encouraging pedestrian-friendly design to enhance the overall pedestrian environment. The guidelines delineate the unique characteristics of individual communities within Santa Clarita, recommend suitable building materials, and identify key design considerations for development. City staff use these guidelines to assist applicants with various aspects of project planning, such as site layout, building placement, massing, articulation, and architectural style. The Planning Commission and City Council reference the guidelines when reviewing development proposals to ensure high-quality design outcomes. The project site is situated within the Sand Canyon area, which is a subcommunity of the Canyon Country community. The Sand Canyon area is characterized as rural, featuring significant stands of oak trees and distinguished by large, upscale single-family homes and lots (City of Santa Clarita 2009).

SANTA CLARITA MUNICIPAL CODE

The following sections of the Santa Clarita Municipal Code (SCMC) (City of Santa Clarita 2025) are applicable to the project.

Sections 17.51.050 – Outdoor Lighting Standards and 11.44.080 – Special Noise Sources—Construction and Building

SCMC § 17.51.050 (Outdoor Lighting Standards) establishes requirements for outdoor lighting intended to protect the quality of the night sky and limit the impact of artificial light on surrounding areas. The regulations require that outdoor lighting be designed with shielding to ensure light is directed downward, is of a cut-off design, and is directed away from neighboring properties so as not to disrupt nearby land uses otherwise affect neighboring properties with glare or excessive brightness. SCMC § 11.44.080 (Special Noise Sources—Construction and Building) restricts the times of day when construction may occur from 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m., Saturday.

In addition, SCMC § 17.51.050 (D)(1)(d) requires that all applications for new buildings include a lighting plan that identifies the location, fixture type, fixture height, and photometric information of all outdoor lighting. Information about shut-off timers and hours of operation for outdoor lighting would also be included in the lighting plans.

Section 17.51.040 – Oak Tree Preservation

SCMC § 17.51.040 (Oak Tree Preservation) recognizes the role that native oak trees play in enhancing the natural beauty and character of the Santa Clarita Valley. The oak tree preservation regulations are intended to protect the historical, environmental, and aesthetic value these trees provide to the community. According to the SCMC, oak trees contribute to the visual appeal of the landscape, increase property values, and help maintain the character of local neighborhoods. To safeguard these resources, the City requires an oak tree permit for any activity that may involve cutting, pruning, removal, relocation, or any action that could harm or encroach upon the protected zone of an oak tree.

Section 17.51.030 – Landscaping and Irrigation Standards

SCMC § 17.51.030 (Landscaping and Irrigation Standards) sets forth landscaping requirements for new development projects, with the goal of improving visual appeal and promoting the conservation of landmark, native, and specimen trees. These standards address the design, installation, and ongoing maintenance of landscaped areas, and specify criteria for the quality, quantity, and functionality of landscaping and screening elements. By establishing these guidelines, the City aims to ensure that landscaping contributes both aesthetically and environmentally to new developments.

Section 17.39.030 – Sand Canyon Special Standards District

SCMC § 17.39.030 (Sand Canyon Special Standards District) outlines special requirements for development in the Sand Canyon area to protect its rural and equestrian character. These standards allow residents to keep up to two horses or similar animals on parcels of at least 5,000 square feet. New projects must provide riding and hiking trails with rustic fencing, maintain trail access at river crossings, and avoid using concrete to improve river bottoms. Streetlights are limited to intersections, and utilities must be installed underground. Larger residential developments must connect to public sewer systems. Urban features like curbs, gutters, and sidewalks are not required, but emergency access must be ensured. Drainage systems must prevent erosion, and while street trees are not required, planting oaks and other mature trees is encouraged. Additional rules cover gated communities, dumpster screening, fencing, and placement of structures near roadways. The project site is within Sand Canyon, an area known for its spacious lots and equestrian-focused homes.

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Land Use Element* establishes goals, policies, and programs created to address development issues within the Santa Clarita Valley through land use planning strategies and provides a framework for addressing future growth within the community (City of Santa Clarita 2011b). The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011a). Table 4.1-1 provides goals and policies within the General Plan that are relevant to the project.

Table 4.1-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Land Use Element	
Policy LU 1.1.4	Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.
Objective LU 1.2	Maintain the distinctive community character of villages and neighborhoods throughout the planning area by establishing uses, densities, and design guidelines appropriate to the particular needs and goals of each area, including but not limited to the following:
Policy LU 1.2.5	In Sand Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; provide additional recreational trail links; minimize impacts to the Santa Clara River from incompatible development; and maintain community character in accordance with the City's Sand Canyon Special Standards District.
Objective LU 2.2	Protect significant community resources from encroachment by incompatible uses, where feasible and appropriate.

Goal/Objective/ Policy	Description
Objective LU 6.1	Maintain the natural beauty of the Santa Clarita Valley's hillsides, significant ridgelines, canyons, oak woodlands, rivers, and streams.
Conservation and Open Space Element	
Goal CO 6	Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values.
Objective CO 6.2	Protect the scenic character of view corridors.
Objective CO 6.2.1	Where feasible, encourage development proposals to have varied building heights to maintain view corridor sight lines.
Objective CO 6.3	Protect the scenic character of major water bodies.
Policy CO 6.3.2	Protect the banks of the Santa Clara River and its major tributaries through open space designations and property acquisitions, where feasible, to protect and enhance the scenic character of the river valley.
Objective CO 6.4	Protect the scenic character of oak woodlands, coastal sage, and other habitats unique to the Santa Clarita Valley.
Policy CO 6.4.2	Through the development review process, ensure that new development preserves scenic habitat areas to the extent feasible.
Policy CO 6.5.1	In approving new development projects, consider scenic views at major entry points to the Santa Clarita Valley, including gateways located at the Newhall Pass and along Lake Hughes Road, Route 126, Bouquet Canyon Road, Sierra Highway, State Route 14, and other locations as deemed appropriate by the reviewing authority.
Policy CO 6.6.1	Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.
Policy CO 8.2.4	Establish maximum lighting levels for public facilities, and encourage reduction of lighting levels to the level needed for security purposes after business hours, in addition to use of downward directed lighting and use of low-reflective paving surfaces.

4.1.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to aesthetics if the project would:

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

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.

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

Each of these thresholds is discussed under Section 4.1.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.1.4 Impact Assessment Methodology

The evaluation of aesthetics and aesthetic impacts is inherently subjective by nature. It requires the application of a process that objectively identifies the visual features of the environment and their importance. Aesthetic description involves identifying existing visual character, including visual resources and scenic vistas unique to the project site and the surrounding area. Visual resources are determined by identifying landforms (e.g., topography and graded areas), views (e.g., scenic resources such as natural features or urban characteristics), viewpoints/locations, and existing light and glare (e.g., nighttime illumination).

Changes to aesthetic resources due to implementation of the project are identified and evaluated based on the proposed modifications as described in Chapter 2, *Project Description*, as they relate to the existing setting and the viewer's sensitivity. Individuals in the surrounding residential buildings, as well as motorists, cyclists, and pedestrians traveling along Oak Spring Canyon Road, Lost Canyon Road, Sand Canyon Road, Soledad Canyon Road, and SR-14, would be considered visual receptors of the project site.

This aesthetics analysis considers the physical and visual changes to the project site as well as modifications to natural features, such as trees and landscaping, and introduced features, such as structures and lighting. The analysis in Section 4.1.5, *Project-Specific Impacts and Mitigation Measures*, considers the project's consistency with plans and regulations that address issues related to scenic views, scenic highways, visual character, and light and glare.

4.1.5 Project-Specific Impacts and Mitigation Measures

a) Would the project have a substantial adverse effect on a scenic vista?

The project site is visible from SR-14 and surrounding roadways, including Oak Spring Canyon Road, Lost Canyon Road, and Soledad Canyon Road. Scenic vistas are considered formally designated public vantage points offering views of primarily natural settings containing recognized scenic features or landscapes of special importance (Dudek 2025). There are no formally designated scenic vistas in the vicinity of the project area. Therefore, construction of the project would not result in impacts to scenic vistas. Additionally, the existing project site itself would not be considered a scenic vista due to the presence of preexisting development in the surrounding area and intervening topography.

A small portion of a City-designated significant ridgeline occurs in the southeastern corner of the project site, but no formally designated scenic viewsheds, vistas, or features are within or adjacent to the project site (City of Santa Clarita 2011a; County of Los Angeles 2015). The project includes a request for several waivers from development standards of the SCMC, including a reduction in vertical setback from the identified significant ridgeline located in the southeast corner of the project site. The City-identified significant ridgeline in the southeast corner of the project site is not particularly distinct and may be overlooked due to the larger scale and prominence of the nearby mountains in the background of the view. Although the proposed development lies within the ridgeline's protected zone, it is concentrated on the project site's flat areas, and grading would terminate at the base of the ridgeline so that the landform itself is not graded or substantially altered. The southeast corner of the project site (including the City-identified significant ridgeline) would be preserved and no changes to the topography of the ridgeline would occur due to development of the project. Additionally, the ridgeline would remain visible above the roofline of proposed homes, and overall effects to the scenic qualities of visible ridgelines would not be significant (Dudek 2025).

CONSTRUCTION

During construction of the project, the visual appearance of the project site from surrounding areas would be temporarily altered, but construction activities would not substantially block or interrupt views of scenic vistas, as there are no formally designated scenic vistas in the vicinity of the project area. Grading, staging equipment, materials, construction equipment, and vehicles would be visible during the construction phase from viewpoints adjacent to the project site, including Lost Canyon Road and Oak Spring Canyon Road, and private residences east of Oak Spring Canyon Road. Private residences along SR-14 may have views of construction activities, but less so due to their greater distance from the project site. Although construction activities at the project site would be visible from surrounding viewpoints, construction would not block the view of any designated scenic vista because the project site generally encompasses lower elevation slopes and ridgeline sections as opposed to visually prominent peaks and mountains in the vicinity of the project area, and no formally designated scenic vistas occur in the vicinity of the project area. Therefore, impacts to scenic vistas during project construction would be *less than significant*, and mitigation is not necessary.

OPERATION

The project would develop a gated senior community consisting of single-family homes, a recreation center, and private trails, and would make off-site improvements to infrastructure, roads, and public trails.

Operation of the project would result in impacts to the foreground and middle ground of views from public roads in the surrounding area. Views of scenic resources, including the Santa Clara River, hills, and mountains, would mostly be unimpaired. As presented in the visual simulations in Figures 4.1-19 through 4.1-24, the project would result in partial blockages of surrounding hills and mountains at Viewpoints 2, 3, 4, and 5 (see Figures 4.1-20 through 4.1-23). A key map of the viewpoint locations is provided above in Figure 4.1-12. However, the proposed homes would be located at lower elevations as compared to the surrounding terrain, so blockages to the significant ridgeline from SR-14 and Soledad Canyon Road would not occur. Although SR-14 supports the largest population of viewers who would be able to see alterations to the landscape associated with the project, the proposed single-family homes would be limited to two stories and would be built on flat to moderate terrain, which would limit the visual massing and significant blockage of views to prominent terrain in the local landscape. Therefore, impacts to scenic vistas during project operation would be *less than significant*, and mitigation is not necessary.

Impact AES-1
The project would not have a substantial adverse effect on a scenic vista.
Mitigation Measures
Mitigation is not necessary. Impact AES-1 would be less than significant.



Figure 4.1-19. Viewpoint 1: Lost Canyon Road near Oak Spring Canyon Road; View Facing East (Visual Simulation).

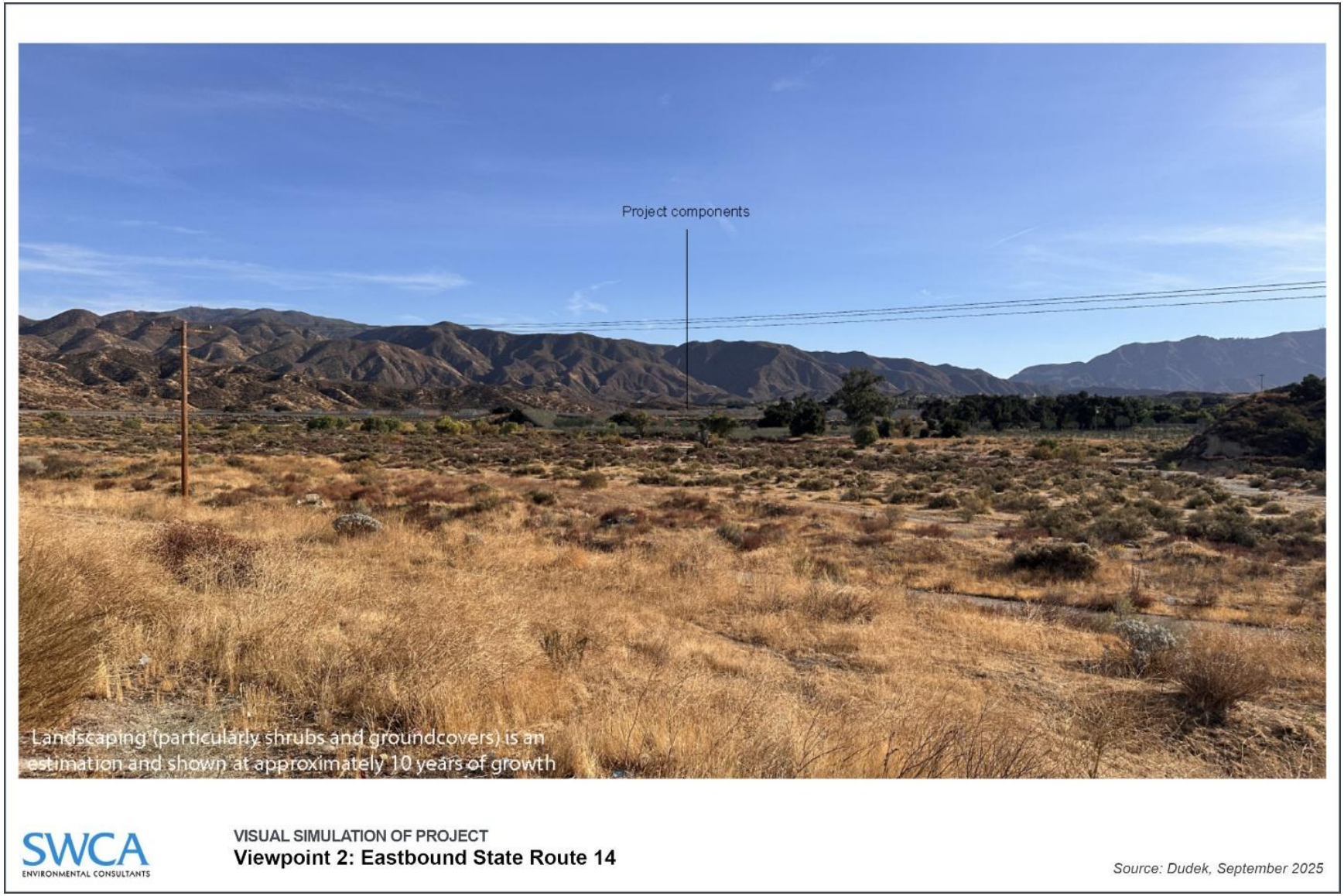


Figure 4.1-20. Viewpoint 2: Eastbound SR-14; View Facing Southeast (Visual Simulation).



Figure 4.1-21. Viewpoint 3: Westbound SR-14; View Facing Southwest (Visual Simulation).



Figure 4.1-22. Viewpoint 4: Soledad Canyon Road; View Facing Southwest (Visual Simulation).



Figure 4.1-23. Viewpoint 5: Eastbound Oak Spring Canyon Road; View Facing Northeast (Visual Simulation).



Figure 4.1-24. Viewpoint 6: Westbound Oak Spring Canyon Road; View Facing Northeast (Visual Simulation).

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As described in Section 4.1.1.4, *Designated Vistas and Views*, no State-designated scenic highways are adjacent to or within the vicinity of the project site. The closest officially designated State Scenic Highway is SR-2 in the San Gabriel Mountains, approximately 16 miles southeast of the project site. The closest eligible State Scenic Highway is I-5 (from approximately I-210 near Tunnel Station to SR-126 near Castaic), approximately 8.2 miles from the project site. Furthermore, there are no locally designated scenic highways within the project vicinity. Given that no designated scenic resources within a State Scenic Highway would be visible from the project site, the project would not substantially damage scenic resources within a State Scenic Highway; therefore, there would be *no impact*.

Impact AES-2
The project would not substantially damage scenic resources within a State Scenic Highway.
Mitigation Measures
Mitigation is not necessary. No impact would result.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings, or in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is in an urbanized area within the City of Santa Clarita. The policies and regulations governing scenic quality that apply to the project are the *City of Santa Clarita General Plan Conservation and Open Space Element* and *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011a, 2011b), the *Santa Clarita Community Character and Design Guidelines* (City of Santa Clarita 2009), and SCMC § 17.39.030 (Sand Canyon Special Standards District). Except for oak tree regulations, the discussion of zoning and other regulations governing scenic quality is presented mainly as an analysis of policy consistency with the aforementioned policies and regulations, since most of these policies are not directly relevant to the project's construction activities.

The project would result in the construction and operation of 341 single-family homes, a 3.1-acre recreation center, and 2.6 miles of public trails, roads, and other public services and amenities across approximately 193.8 acres. Because the existing project site is vacant, the project would dramatically alter its visual character. As displayed above in the visual simulations prepared for the project (Figures 4.1-19 through 4.1-24), the severity of impacts to scenic quality would vary depending on distance from the project site and elevation from viewpoints relative to the project site. Proposed land uses that would soften the overall visual presence of the project site and create visually appealing buffers between the proposed development and surrounding residences include areas retained as open space, new public streets, landscaping, and utility improvements. The proposed driveways, internal roads, and utility improvements would generally be concealed from public view by the single-family homes that would be constructed around the project perimeter.

The existing visual character of the project site and surrounding areas would change as a result of the project, which proposes to develop approximately 86 acres of vacant land with primarily residential uses. Despite these visual alterations, the proposed single-family homes would be compatible in scale with existing rural residential homes to the east and south of the project site, as well as newer residential neighborhoods approximately 0.35 mile south of the project site. Although the proposed residential development has a higher density than residential development to the west along Lost Canyon Road and to the south along Oak Spring Canyon Road, improvements to landscaping and open space would act as a visual buffer and provide a transition from the existing residential development in the surrounding area to the proposed higher-density project site. Additionally, because the project includes an age-restricted housing development, the project applicant is eligible for a density bonus of 20% of the number of senior units. As such, the project's density would also be compatible in density with the residential development approximately 0.25 mile north of the northern project boundary.

Table 4.1-2 presents a consistency analysis of the project and local scenic quality regulations. This analysis is included for informational purposes and does not substitute for consistency determinations for the project made by the City. As presented in the analysis above and in Table 4.1-2, the project would be consistent with local scenic quality regulations. Therefore, impacts to applicable zoning and other regulations governing scenic quality would be *less than significant*, and mitigation is not necessary.

Table 4.1-2. Consistency of the Project with Applicable Regulations Related to Scenic Quality

Objective/Policy	Objective/Policy Description	Project Consistency Analysis
City of Santa Clarita General Plan		
Conservation and Open Space Element		
Goal CO 6	Preservation of scenic features that keep the Santa Clarita Valley beautiful and enhance quality of life, community identity, and property values.	**Consistent.** The project would alter the vacant nature of the project site, but the scenic hillsides, ridges, and characteristics of Santa Clarita would remain visible from public vantage points. Although the proposed development lies within the ridgeline's protected zone, development would be concentrated on the project site's flat areas, and grading would terminate at the base of the ridgeline so that the landform itself is not graded or substantially altered. The southeast corner of the project site (including the City-identified significant ridgeline) would be preserved as open space and no changes to the topography of the ridgeline would occur due to development of the project.
Objective CO 6.2	Protect the scenic character of view corridors.	
Objective CO 6.3	Protect the scenic character of major water bodies.	
Policy CO 6.2.1	Where feasible, encourage development proposals to have varied building heights to maintain view corridor sight lines.	**Consistent.** The project would result in construction of both one-story and two-story dwelling units. Additionally, the project site is at a lower elevation than local roads and vantage points in the surrounding area, which would assist in maintaining view corridor sight lines.
Policy 6.3.2	Protect the banks of the Santa Clara River and its major tributaries through open space designations and property acquisitions, where feasible, to protect and enhance the scenic character of the river valley.	**Consistent.** The northern portion of the project site closest to the Santa Clara River would remain undeveloped as Open Space. The off-site improvements would also be in the northern portion of the project site, but would be set back from the banks of the Santa Clara River and would not diminish the scenic character of the project area.

Objective/Policy	Objective/Policy Description	Project Consistency Analysis
Objective CO 6.4	Protect the scenic character of oak woodlands, coastal sage, and other habitats unique to the Santa Clarita Valley.	**Consistent.** Although development of the project would require the removal of oak trees and coastal sage scrub vegetation, the majority of the project site would be designated as Open Space, which would aid in maintaining unique habitats within the project site. The implementation of mitigation measures pertaining to the creation and management of an on-site conservation area, a habitat mitigation and monitoring plan, and the replacement and preservation of most of the on-site oak trees would address and minimize unavoidable impacts to sensitive vegetation communities that compose the scenic character of the project site.
Policy CO 6.4.2	Through the development review process, ensure that new development preserves scenic habitat areas to the extent feasible.	
Policy CO 6.5.1	In approving new development projects, consider scenic views at major entry points to the Santa Clarita Valley, including gateways located at the Newhall Pass and along Lake Hughes Road, Route 126, Bouquet Canyon Road, Sierra Highway, State Route 14, and other locations as deemed appropriate by the reviewing authority.	**Consistent.** Project impacts to scenic views would be minimal due to the distance between SR-14 and the proposed residential development, the scale of the proposed two-story homes, the color of the residential rooftops, and the continued prominence and presence of natural terrain. Although the project would alter existing hillside terrain, the landscape of the Santa Clara River, and local and regional hillsides and mountains would remain mostly intact after project development.
Policy 6.6.1	Enhance views of the night sky by reducing light pollution through use of light screens, downward directed lights, minimized reflective paving surfaces, and reduced lighting levels, as deemed appropriate by the reviewing authority.	**Consistent.** The project would increase use of the vacant property and require the installation of lighting sources to illuminate residential buildings and roads. Lighting installed on the project site would be required to comply with SCMC § 17.51.050(D) (Outdoor Lighting Standards), which requires that (1) all light sources be directed downward and shielded such that the lighting sources are not visible from a public right-of-way and (2) all lighting sources not illuminate other (i.e., off-site) properties. The project would also be consistent with SCMC § 17.39.030 (Sand Canyon Special Standards District), which states that streetlights, in accordance with City standards, shall be installed only at road-to-road intersections.
Policy CO 8.2.4	Establish maximum lighting levels for public facilities, and encourage reduction of lighting levels to the level needed for security purposes after business hours, in addition to use of downward-directed lighting and use of low-reflective paving surfaces.	
Land Use Element		
Policy LU 1.1.4	Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.	**Consistent.** Refer to the consistency analysis presented above for Goal CO 6, Objectives CO 6.2 through CO 6.4, and Policy CO 6.4.2 describing the project's potential impacts to visual and scenic character, the preservation of open space on the project site, and the mitigation of impacts to sensitive vegetation communities through on- and off-site conservation.
Objective LU 2.2	Protect significant community resources from encroachment by incompatible uses, where feasible and appropriate.	
Objective LU 6.1	Maintain the natural beauty of the Santa Clarita Valley's hillsides, significant ridgelines, canyons, oak woodlands, rivers, and streams.	

Objective/Policy	Objective/Policy Description	Project Consistency Analysis
Objective LU 1.2	Maintain the distinctive community character of villages and neighborhoods throughout the planning area by establishing uses, densities, and design guidelines appropriate to the particular needs and goals of each area, including but not limited to the following:	**Consistent.** Although the project would alter the existing visual character of the project site and surrounding area by developing vacant land with primarily residential uses, the proposed single-family homes would be compatible in scale with surrounding residential developments to the east and south of the project site. Open space areas would also act as a buffer between the proposed residential development and lower-density residential development to the west.
Policy LU 1.2.5	In Sand Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; provide additional recreational trail links; minimize impacts to the Santa Clara River from incompatible development; and maintain community character in accordance with the City's Sand Canyon Special Standards District.	
Santa Clarita Community Character and Design Guidelines		
	The intent of the City's Canyon Country guidelines is to retain and encourage architectural variety, promote quality development, and ensure that both existing and new development: • are compatible in size, scale, and appearance with the character of Santa Clarita; • are attractive and an asset to the community; • preserve and enhance natural features of the site; • incorporate quality architecture, community character features, multiple building forms, desirable • building details, and other elements that display excellence in design; • provide pedestrian-oriented design to enrich the pedestrian experience; • include pedestrian friendly amenities, such as pedestrian connections, plazas, seating, bike racks, • fountains, and other similar features, for the enjoyment of the community and visitors; • promote the use of high quality materials; • promote well-landscaped parking lots with efficient pedestrian and vehicular circulation; and • provide suggestions for ways to improve the environmental performance of projects through the strategic incorporation of green building components.	**Consistent.** The project involves developing age-restricted homes, both one-story and two-story, ranging from about 1,531 to 3,782 square feet. Homes would be built in three styles: Spanish Hacienda, Adobe Ranch, and Agrarian Farmhouse. The design follows local trends, such as incorporation of architectural design features consistent with the community of Canyon Country, and includes a comprehensive landscaping plan with a variety of plants, as well as access points from both the north and south. There would be nine different floor plans across the three architectural styles to create a visually appealing and well-designed neighborhood. The development would support pedestrian activity through trails, street trees, street furniture, and possibly bike racks at the recreation center. Although the project would require removal of some oak trees and coastal sage scrub, about 107 acres of the 193.8-acre project site would be preserved as open space to help protect unique habitats. Sensitive vegetation along the Santa Clara River Wash would be preserved, and the southwest corner of the project site would avoid disturbance to sensitive plant communities, though some impacts would occur in the central and southeastern areas. The project would also include planting approximately 910 new trees, including native oaks and other species such as maidenhair tree, crape myrtle, bay laurel, fruitless olive, and Chinese pistache trees. To support preservation efforts, a detailed Arborist Report has been prepared (EIR Appendix C), outlining the impact on individual trees and recommending protective and mitigation measures.

Objective/Policy	Objective/Policy Description	Project Consistency Analysis
Santa Clarita Municipal Code		
Chapter 17.39 – Special Standards Districts § 17.39.030 – Sand Canyon Special Standards District	2. Any new development shall adhere to the following standards or provide the following amenities: a. Trails i. Riding and hiking trails shall be provided as depicted on the latest Sand Canyon Backbone Trails exhibit on file with Parks, Recreation and Community Services to the satisfaction of the Director of Parks, Recreation and Community Services; ii. Trails shall be fenced to the satisfaction of the Director of Parks, Recreation and Community Services, with fences of a rustic wood appearance; iv. There shall be no obstruction including, but not limited to, on-street parking, landscaping, trash receptacles, or other similar structures within a designated trail; d. Street lights, in accordance with City standards, shall be installed only at road-to-road intersections; f. Street paving, curbs, gutters and sidewalks shall not be required of new development. Minimum City standards for all weather access shall be provided. An engineering analysis shall be required to determine how all weather access will be provided for emergency vehicles. Surface material may consist of graded dirt, gravel or asphaltic concrete to achieve the required standards; h. Street trees shall not be required; however, the planting of oaks and other mature trees shall be encouraged; m. Fences. Non-view-obscuring fences, not to exceed five (5) feet in height, shall be permitted to be located within the twenty (20) foot front yard setback. Where a non-view-obscuring fence is constructed within the twenty (20) foot front yard setback, and is five (5) feet in height, the applicant shall be required to landscape the frontage of their property along the property line that abuts the adjacent right-of-way. View-obscuring walls or fences that are higher than three (3) feet six (6) inches shall not be permitted to be located within the twenty (20) foot front yard setback;	**Consistent.** The project will feature an on-site trail network, including a new 0.58-mile, 8-foot-wide decomposed granite trail along Lost Canyon Road, extending west to Oak Spring Canyon Road. There will also be connections to existing Oak Spring Canyon trails near the project site's southern edge. Trails along Lost Canyon Road and Oak Spring Canyon Road will be fenced to meet City requirements and kept clear of obstructions. Street lighting will be limited to intersections, following City standards. Utility and roadway improvements, as well as site access, are detailed in Sections 1.3.6 and 1.3.7.1 of the Visual Resources Report (Dudek 2025; EIR Appendix G). Landscaping plans include planting street trees and a total of approximately 910 trees throughout the project site. No fences are planned within the front yard setbacks of residential lots.

Impact AES-3
The project would not conflict with applicable zoning and other regulations governing scenic quality.
Mitigation Measures
Mitigation is not necessary. Impact AES-3 would be less than significant.

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Existing sources of lighting on and around the project site include streetlights, vehicle headlights, and interior and exterior lighting from nearby residences. Implementation of the project would result in the construction of single-family homes, recreational facilities, and roads that collectively would introduce new sources of lighting on-site that would be visible from adjacent off-site locations. Impacts associated with project implementation are discussed for the construction and operation of the project.

CONSTRUCTION

Short-term light impacts during the construction phase are likely to be limited to nighttime security lighting. Consistent with SCMC § 11.44.080 (Special Noise Sources—Construction and Building), construction of the project is limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m., Saturday. Nighttime construction, defined as construction between 9:00 p.m. and 7:00 a.m., is not proposed or permitted. However, nighttime lighting may be used during the permitted hours of construction for visibility in the dark. As a result, nighttime lighting during construction may pose short-term impacts to nearby rural residences. All lighting installed on the project site would comply with SCMC § 17.51.050(D) (Outdoor Lighting Standards), which requires (1) all light sources to be directed downward and shielded such that the lighting sources are not visible from the public right-of-way and (2) all lighting sources not illuminate other (i.e., off-site) properties. Consequently, temporary lighting during construction would be shielded and directed downward onto the construction site, and the appropriate measures would be taken to minimize the potential for light spill onto nearby rural residences and open space (Dudek 2025). Additionally, existing open space on the project site, the Metro rail corridor, and SR-14 would act as buffers between construction activities and surrounding residential areas to the west, north, and southwest.

Glare is defined as an unwanted and potentially objectionable sensation, as observed by a person as they look directly into the light source of a luminaire (Dudek 2025). It is not anticipated that construction activities would create substantial sources of glare that could impact day or nighttime views and visibility. The use of bright light sources during temporary construction is not anticipated; however, any lighting used during construction of the project would be temporary and would be consistent with SCMC § 17.51.050(D), which requires that outdoor lighting not illuminate other properties and shall be directed downward to prevent off-site glare. Accordingly, shielding techniques and dim lighting would reduce light spill on off-site locations. Additionally, temporary construction of the project would not require equipment, vehicles, or other materials that could directly or indirectly generate a substantial amount of prolonged glare, adversely affecting day or nighttime views. Therefore, construction impacts to light and glare would *be less than significant*, and mitigation is not necessary.

OPERATION

Once constructed, the proposed project would increase the use of the currently vacant site. Lighting installed within the project site would include interior residential lighting and exterior lighting at individual homes for security and general illumination purposes, along internal roadways, at recreational facilities, at the recreation center (including within surface parking areas), and at project entry signage. Lighting of the project site would not result in a significant light and glare impact to existing rural residences to the west and southwest of the project site. The proposed trail around the perimeter of the project site and existing vegetation would act as buffers to the proposed residences. The proposed residences would also act as a buffer from lighting sources surrounding the recreation center. Although a conceptual lighting plan has not been developed yet for the project, all lighting installed on the project site

would comply with SCMC § 17.51.050 (Outdoor Lighting Standards), which requires that (1) all light sources be directed downward and shielded such that the lighting sources are not visible from a public right-of-way and (2) all lighting sources not illuminate other (i.e., off-site) properties. Limiting off-site light trespass, requiring shielding, and directing light sources downward would effectively prevent off-site glare. Therefore, operation impacts to light and glare would be *less than significant*, and mitigation is not necessary.

Impact AES-4
The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
Mitigation Measures
Mitigation is not necessary. Impact AES-4 would be less than significant.

4.1.6 Cumulative Impacts

The geographic scope of the cumulative impact analysis for aesthetics is within the boundary of the project site and all land uses and roadways immediately surrounding the boundary of the areas that would be affected by the project. Cumulative impacts on aesthetics are generally localized; that is, aesthetic changes at a site would not generally impact aesthetics at another site if the sites were not visually connected in some fashion. There are no designated scenic vistas or scenic highways in the vicinity of the project site. The aesthetic environment surrounding the project site is dominated by views of nearby residential and open space uses.

No significant aesthetic impacts have been identified for the project; however, cumulative development in the area could contribute to a gradual intensification of developed land uses. Cumulatively, the areas surrounding the project site are predominantly developed, and new individual development proposals would be required to conform with applicable City goals, policies, and regulations, including but not limited to the *City of Santa Clarita General Plan Conservation and Open Space Element* and *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011b, 2011a), the *Santa Clarita Community Character and Design Guidelines* (City of Santa Clarita 2009), and SCMC § 17.39.030 (Sand Canyon Special Standards District). The project would not result in a considerable new contribution to any cumulatively significant impacts related to aesthetics; therefore, impacts related to the project would not be cumulatively considerable.

Impact AES-5 (Cumulative Impacts)
The project would not contribute to any cumulative impacts related to aesthetics.
Mitigation Measures
Mitigation is not necessary. Impact AES-5 would be less than significant.

4.2 AGRICULTURE RESOURCES

This section evaluates the project's potential to impact agricultural resources within and adjacent to the project site. Potential impacts that are discussed include conversion of Prime Farmland to non-agricultural uses through direct conversion or other indirect impacts.

In addition to agricultural resources, the Environmental Checklist form contained in Appendix G to the CEQA Guidelines identifies Forestry Resources as an environmental topic to consider within an EIR. The Environmental Checklist form groups the topic of Forestry Resources with Agriculture Resources. However, the project site is not designated or zoned as forest or timberland use, and the project site does not contain more than 10% native tree cover. Accordingly, development of the project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. Because the project site does not contain forestry resources, this topic is not addressed further in this EIR.

4.2.1 Existing Conditions

4.2.1.1 Agricultural Classifications Applicable to the Project Area

NATURAL RESOURCES CONSERVATION SERVICE CAPABILITY CLASSES

Agricultural resources of significance to the land use planning process are those that have been classified by the California Department of Conservation (CDOC) as important to the State or local agricultural economy. Agricultural lands are classified by soil type, slope, and potential for flooding and erosion hazards, with the best soils for agriculture being deep, generally well-drained, and easily worked. The most arable land is identified as Class I and Class II, which are generally considered prime farmland, by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), and less suitable soils for agriculture are identified as Class III to Class VIII, as described in detail below:

- **Class I.** These soils have few limitations that restrict their use and are typically used for vegetables, seed crops, orchards, and other irrigated specialty crops and irrigated field crops.
- **Class II.** These soils have minor to moderate limitations that reduce the choice of plants or require moderate conservation practices. Uses are very similar to those found on Class I soils.
- **Class III and Class IV.** These soils have moderate to severe limitations that reduce the choice of plants, or that require special conservation practices, or both. In some situations, the Class III soils may be used for some of the crop types that are typically found on Class I and Class II soils, but are more typically used for specialty crops, forage lands, mixed croplands, and dryland field crops. Irrigated Class IV soils are commonly used for vineyards.
- **Class V.** These soils are not likely to erode but have other limitations, impractical to remove, that limit their use.
- **Class VI.** These soils have severe limitations that make them generally unsuitable for cultivation, and they have commonly been used for rangeland and dryland grain production.
- **Class VII.** These soils have very severe limitations that make them unsuitable for cultivation, and these lands are primarily used as rangelands for grazing.
- **Class VIII.** These soils and landforms have limitations that nearly preclude their use for commercial crop production; however, some grazing occurs on these lands.

NATURAL RESOURCES CONSERVATION SERVICE SOIL TAXONOMY

The NRCS utilizes soil taxonomy to further systematically classify soils. Soils are organized into 12 primary orders (e.g., Alfisols, Oxisols), which are subsequently subdivided into hierarchical categories, including suborders (based on soil moisture and temperature), great groups (based on the presence and sequence of soil horizons), and families (based on physical and chemical properties), with the soil series representing the most specific classification level. Soil series are the lowest category of the national soil classification system and, therefore, the most homogenous classes of the taxonomy system. A soil series consists of soils within a family that have similar color, structure, texture, and composition, among other characteristics. The NRCS has developed a national collection of Official Soil Series Descriptions containing more than 20,000 descriptions, which serves as a standard for identifying and classifying soils, in addition to the Web Soil Survey, which provides soil data and maps for over 95% of counties in the nation (NRCS 2025). The soil series system relies on quantifiable physical and chemical soil properties, applying defined criteria to distinguish between soil types.

FARMLAND MAPPING AND MONITORING PROGRAM

The CDOC Division of Land Resource Protection developed the Farmland Mapping and Monitoring Program (FMMP) to identify farmland designations throughout the State to assist in analyzing potential impacts to agricultural land. Land designations include the following categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban and Built-up Land, and Other Land, defined below (CDOC 2025):

- **Prime Farmland.** Farmland with the best combination of physical and chemical features, able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance.** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland.** Farmland of lesser-quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Farmland of Local Importance.** Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, the University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.
- **Urban and Built-up Land.** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
- **Other Land.** Land not included in any other mapping category. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock

grazing; confined livestock, poultry, or aquaculture facilities; strip mines or borrow pits; and waterbodies smaller than 40 acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

4.2.1.2 Regional Setting

The City's Planning Area includes its incorporated boundaries and adopted Sphere of Influence (SOI), while the County's Planning Area includes unincorporated land outside the City's boundaries and its adopted SOI. Collectively, the City and County Planning Areas are referred to as the One Valley One Vision (OVOV) Planning Area, which includes approximately 250 square miles. Additionally, the U.S. Forest Service Area encompasses approximately 235 square miles. The entire Santa Clarita Valley Planning Area, defined as the combined OVOV Planning Area and U.S. Forest Service Area, encompasses over 480 square miles. The planning area contains approximately 1,994.5 acres of land designated on the State's Farmland Map, of which approximately 150 acres are within the City (Santa Clarita 2012). Farmland acreage is shown in Table 4.2-1.

Table 4.2-1. Farmland Acreage in the Planning Area

State Farmland Designation	Acres in County	Acres in City	Total Acres in Planning Area
Prime Farmland	1,172.36	128.70	1,301.06
Farmland of Statewide Importance	178.25	0	178.25
Unique Farmland	364.11	2.45	366.56
Farmland of Local Importance	130.17	18.42	148.59
Total acreage	**1,844.98**	**149.46**	**1,994.44**

Source: Santa Clarita (2012)

Designated farmland within the planning area occurs in various, scattered locations. Farmlands within the planning area are generally found on alluvial soils adjacent to the Santa Clara River, Castaic Creek, San Francisquito Canyon, and Bouquet Canyon. The largest areas of farmland are located along the Santa Clara River in the western portion of the planning area, north and south of SR-126 in the Newhall Ranch development area. The designated farmlands extending along the east side of I-5 along Castaic Creek, along San Francisquito Canyon, and near the intersection of Bouquet Canyon Road and Vasquez Canyon Road are generally smaller in scale; some are used for horse ranches, non-irrigated cropland, improved pasture lands, and vineyards. The largest category of designated farmland in the planning area is Grazing Land, which includes over 61,000 acres within the planning area.

4.2.1.3 Project Site Setting

The 193.8-acre project site, which includes the residential development area and associated infrastructure improvements, is in the western portion of the City. Approximately 106 acres of the residential development area have a land use and zoning designation of Urban Residential 1 (UR1), and the remaining 87 acres are designated as Non-Urban 5 (NU5). The associated infrastructure improvements would be located within an area zoned as NU5 to the west of the residential development area, an area zoned as Open Space (OS) to the south of the residential development area, and within public rights-of-way (ROWs) throughout the project site, which have no zoning designations. The surrounding land uses and zoning directly adjacent to the project site consist of OS to the north, NU5 to the east, NU5 and OS to the south, and UR1 to the east.

The *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011) details that the NU5 designation provides for the maintenance and expansion of rural communities in the planning area that are distinguished by large lot sizes (generally one acre or greater), agricultural and equestrian uses, and the absence of urban services. Uses in the NU5 designation could include single-family homes at a maximum density of one dwelling unit per one acre, agriculture, equestrian uses, private recreation, and public and institutional facilities serving the local area. Specific allowable uses and development standards shall be determined by the underlying zoning designation.

SOIL SETTING

The western portion of the planning area contains soils categorized as Class I and Class II; the remainder contains soils less suitable for agriculture, ranging from Class III to Class VIII. According to the NRCS Web Soil Survey, the project site is underlain by seven soil types, which are described in detail below based on their physical and chemical properties (NRCS 2025):

- **(HcC) Hanford sandy loam, 2 to 9 percent slopes.** This well-drained soil has a low runoff class and a soil profile that consists of sandy loam and fine sandy loam. The NRCS considers this soil Prime Farmland if irrigated.
- **(HcA) Hanford sandy loam, 0 to 2 percent slopes.** This well-drained soil has a very low runoff class and a soil profile that consists of sandy loam, fine sandy loam, and gravelly loamy coarse sand. The NRCS considers this soil Prime Farmland if irrigated.
- **(OcC) Oak Glen gravelly sandy loam, 2 to 9 percent slopes.** This well-drained soil has a low runoff class and a soil profile that consists of gravelly sandy loam and gravelly fine sandy loam. The NRCS considers this soil Prime Farmland if irrigated.
- **(ObA) Oak Glen sandy loam, 0 to 2 percent slopes.** This well-drained soil has a very low runoff class and a soil profile that consists of sandy loam and fine sandy loam. The NRCS considers this soil Prime Farmland if irrigated.
- **(MgB) Metz loamy sand, 0 to 2 percent slopes.** This somewhat excessively drained soil has a low runoff class and a soil profile that consists of loam and stratified sand to loamy sand. The NRCS considers this soil Prime Farmland if irrigated.
- **(ScF2) Saugus loam, 30 to 50 percent slopes, eroded.** This well-drained soil has a high runoff class and a soil profile that consists of loam and stratified sand to loamy sand. This soil is not considered Prime Farmland by the NRCS.
- **(Sa) Sandy alluvial sand.** This excessively drained soil has a very low runoff class and a soil profile that consists of sand, stratified sand to loam, and stratified gravelly sand to gravelly loam. This soil is not considered Prime Farmland by the NRCS.

FARMLAND SETTING

According to the FMMP, the project site is designated as Other Land (CDOC 2022).

4.2.2 Regulatory Setting

4.2.2.1 Federal

FARMLAND PROTECTION POLICY ACT

The Farmland Protection Policy Act (FPPA) of 1981 is governed by the NRCS and is intended to minimize the impact of Federal programs on the permanent conversion of farmland to non-agricultural land uses. The policy assures that, to the extent feasible, Federal programs are administered to be compatible with State and local units of government, as well as private programs and policies to protect farmland. For the FPPA, farmland includes Prime Farmland, Unique Farmland, and Land of Statewide or Local Importance. Farmland subject to FPPA requirements does not have to be currently used for cropland; it can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.

AGRICULTURAL CONSERVATION EASEMENT PROGRAM

The NRCS created the Agricultural Conservation Easement Program to help landowners and other entities protect, restore, and enhance wetlands and/or working farms and ranches through conservation easements. The NRCS provides financial assistance for purchasing Agricultural Land Easements in order to protect and conserve agricultural land and help keep working farms in agriculture.

4.2.2.2 State

FARMLAND MAPPING AND MONITORING PROGRAM

The purpose of the FMMP, which is authorized by the CDOC Division of Land Resource Protection, is to produce maps and statistical data used for analyzing impacts on California's agricultural resources. Through this program, agricultural land is rated according to soil quality and irrigation status. Maps are updated every two years using a computer mapping system, aerial imagery, public review, and field reconnaissance. The designations of the FMMP classification system are described in Section 4.2.1.1.

WILLIAMSON ACT

The Williamson Act, also known as the Land Conservation Act of 1965, allows local governments to enter into contracts with private landowners in order to restrict specific parcels of land to agricultural or open space uses. In return, landowners receive property tax assessments that are much lower than normal because they are based on farming and open space uses rather than full market value. The CDOC assists all levels of government and landowners in the interpretation of the Williamson Act.

CALIFORNIA ASSEMBLY BILL 1492

The Laird Bill provides further clarification for development on land under a Williamson Act contract or other agricultural land conservation contract. Any commercial, industrial, or residential building that is unrelated to agricultural use and is constructed on a parcel subject to an agricultural land conservation contract that is not permitted by the contract or by local rules or ordinance is a material breach of contract. Following the breach of contract, the CDOC would be required to inform the local government and require the landowner to cease the operation(s) that caused the breach of contract. In some cases, financial reimbursement may be required.

4.2.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

Conservation and Open Space Element

The *City of Santa Clarita General Plan Conservation and Open Space Element* (City of Santa Clarita 2011) identifies goals and policies for the conservation, development, and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources within the City. The Conservation and Open Space Element identifies the following policy for the preservation of agricultural and forest land:

- **Policy CO 10.1.9:** Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other open space that provides natural carbon sequestration benefits.

Land Use Element

The *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011) is the City's long-term blueprint for development of property to meet the Santa Clarita Valley's future needs for new housing, retail, office, industrial, parks, open space, and other uses. The Land Use Element contains a Land Use Map and goals, policies, and programs designed to address the development issues facing the community through a variety of land use planning strategies, along with the type, intensity, quality, and location of future uses within the planning area. The City classifies agricultural land under the Non-Urban 1 (NU1), Non-Urban 2 (NU2), Non-Urban 3 (NU3), Non-Urban 4 (NU4), NU5, and OS land use designations.

4.2.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to agriculture resources if the project would:

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

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Each threshold is discussed under Section 4.2.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.2.4 Impact Assessment Methodology

For purposes of this analysis, relevant database information was reviewed to identify designated Farmland, including Prime Farmland, Unique Farmland, and Farmland of Statewide Importance within the project site and surrounding area. Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are protected under California Public Resources Code (PRC) § 21060.1; therefore, projects

that would result in the direct or indirect conversion of designated farmland under PRC § 21060.1 would have a significant impact on the environment.

4.2.5 Project-Specific Impacts and Mitigation Measures

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

The CDOC FMMP is responsible for producing maps for analyzing impacts on the State's agricultural resources. California's agricultural lands are rated based on soil quality and irrigation status. According to the FMMP, the project site is designated as Other Land, and the surrounding areas are designated as Other Land and Urban and Built-Up Land (CDOC 2022). Per PRC § 21060.1, projects that would result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance designated by the FMMP would be considered to have a significant impact on the environment. The project site does not contain any protected Farmland under PRC § 21060.1, and the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses; therefore, *no impact* would occur.

Impact AG-1
The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

The project site, which includes the residential development area and associated infrastructure improvements, is in the UR1, NU5, and OS land use and zoning designations. Although a portion of the project site is within the NU5 land use and zoning designation, which allows for agricultural use, the project site is not currently used for agricultural activity or operation, including, without limitation, the cultivation and tillage of the soil; dairying; the production, cultivation, growing, and raising of livestock, fur-bearing animals, fish, or poultry; and any practices performed by a farmer or on a farm as incident to or in conjunction with such farm operations, including preparation for market, delivery to storage or to market, or to carriers for transportation to market. Further, the project site is not subject to an active Williamson Act contract. The project site is not zoned or currently used for agricultural use or under a Williamson Act contract; therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and *no impact* would occur.

Impact AG-2
The project would not conflict with existing zoning for agricultural use or a Williamson Act contract.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

c) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

The City contains approximately 150 acres of farmland, primarily in the western portion of the City. Due to distance, implementation of the project would not be expected to produce dust or other emissions that could interfere with agricultural row crops in the western portion of the City. Further, the project would not result in substantial use of water resources in a manner that could reduce the availability of water for agricultural uses within the City. As discussed further in Section 4.19, *Utilities and Service Systems*, the project's water demand represents a negligible increase relative to the Santa Clarita Valley Water Agency's projected long-term service area demands and would not materially alter regional water supply planning assumptions. As a result, *no impact* to agricultural resources would occur.

Impact AG-3
The project would not result in other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

4.2.6 Cumulative Impacts

As discussed in Chapter 3, *Environmental Setting*, the cumulative impact analysis is based on the cumulative projects list contained in that chapter. Although the project would not result in the direct or indirect conversion of farmland, other past, present, or reasonably foreseeable future projects located on or near farmland have the potential to result in the direct and/or indirect conversion of farmland to non-agricultural uses. Because the project would have no impacts related to the conversion of on- or off-site agricultural land, the project would not result in a cumulatively considerable adverse effect on agricultural resources. Therefore, the project would not contribute to the cumulative loss of farmland, and impacts related to the project would not be cumulatively considerable.

Impact AG-4 (Cumulative Impacts)
The project would not contribute to the cumulative loss of farmland.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

4.3 AIR QUALITY

This section of the EIR describes the existing conditions and regulatory setting for air quality as it pertains to the project, evaluates potential environmental impacts to air quality that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; EIR Appendix H).

4.3.1 Existing Conditions

4.3.1.1 Geography

The City of Santa Clarita is located in the South Coast Air Basin (SCAB), an approximately 6,600-square-mile area that consists of a coastal plain with connecting broad valleys and low hills. It is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County. Its terrain and geographical location contribute to its distinctive climate.

4.3.1.2 Climate

The regional climate significantly influences the air quality in the SCAB. Factors influencing air quality include temperature, wind, humidity, precipitation, and the amount of sunshine. Within the SCAB, annual average temperatures, in degrees Fahrenheit (°F), generally range from the low to mid-60s. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F. The annual average relative humidity within the SCAB generally ranges from 71% along the coast to 59% inland. More than 90% of the SCAB rainfall occurs between November and April. Monthly and yearly rainfall totals are extremely variable within the SCAB. On average, annual rainfall varies from approximately nine inches in Riverside to 14 inches in downtown Los Angeles. The importance of wind to air pollution is considerable. The direction and speed of the wind determine the horizontal dispersion and transport of air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with traveling storms moving through the region from the northwest.

4.3.1.3 Temperature Inversions

Under normal meteorological conditions, atmospheric temperature decreases as altitude increases. An inversion occurs when the temperature of the atmosphere increases with altitude. Inversions can restrict the vertical mixing of air and pollutants, potentially increasing ground-level pollutant concentrations.

In the SCAB, two distinct temperature inversion types commonly occur—one in summer and one in winter. During the warmer summer months, high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. In the winter, when nights are longer and onshore air flow is weakest, nighttime drainage of cool air off the surrounding mountains, followed by the seaward drift of this pool of cool air, creates an inversion. In general, inversions in the SCAB are lower before sunrise than during the daylight hours. As the day progresses, the mixing height normally increases as the warming of the ground heats the surface air layer. Inversion layers frequently break up in the mid- to late afternoon on hot summer days and by mid-morning in winter.

4.3.1.4 Air Pollutants of Primary Concern

CRITERIA AIR POLLUTANTS

For the protection of public health and welfare, the Federal Clean Air Act (CAA) required that the U.S. Environmental Protection Agency (EPA) establish National Ambient Air Quality Standards (NAAQS) for "criteria" pollutants, so called because the EPA publishes criteria documents justifying the standards. These standards define the maximum amount of an air pollutant that can be present in ambient air. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. Primary standards are those established for the protection of human health; secondary standards are those established for the prevention of environmental and property damage. The CAA allows States to adopt additional or more health-protective standards; California has established the California Ambient Air Quality Standards (CAAQS). Table 4.3-1 lists the criteria air pollutants and the applicable CAAQS and NAAQS. The sections that follow discuss each of the criteria air pollutants of primary concern.

Table 4.3-1. National and California Ambient Air Quality Standards

			National Standards	
Pollutant	**Averaging Time**	**California Standards**	**Primary**	**Secondary**
Ozone (O_3)	1 hour	0.09 ppm (180 µg/m^3)	–	Same as primary
	8 hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	
Respirable particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	Same as primary
	Annual mean	20 µg/m^3	–	
Fine particulate matter ($PM_{2.5}$)	24 hour	–	35 µg/m^3	Same as primary
	Annual mean	12 µg/m^3	12.0 µg/m^3	15 µg/m^3
Carbon monoxide (CO)	1 hour	20 ppm (23 µg/m^3)	35 ppm (40 mg/m³)	–
	8 hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	–
Nitrogen dioxide (NO_2)	1 hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	–
	Annual mean	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as primary
Sulfur dioxide (SO_2)	1 hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	–
	3 hour	–	–	0.5 ppm (1,300 µg/m^3)
	24 hour	0.04 ppm (105 µg/m^3)	0.14 ppm	–
	Annual mean	–	0.030 ppm	–
Lead	30-day average	1.5 µg/m^3	–	–
	Calendar quarter	–	1.5 µg/m^3	Same as primary
	Rolling 3-month average	–	0.15 µg/m^3	Same as primary
Visibility-reducing particles	8 hour	10-mile visibility standard, extinction of 0.23 per kilometer	No National standards	
Sulfates	24 hour	25 µg/m^3		
Hydrogen sulfide (H_2S)	1 hour	0.03 ppm (42 µg/m^3)		
Vinyl chloride	24 hour	0.01 ppm (265 µg/m^3)		

Source: California Air Resources Board (2024a)

Notes: – = no standard; µg/m^3 = micrograms per cubic meter; ppb = parts per billion; ppm = parts per million

Ozone

Ozone (O_3) is a reactive gas consisting of three atoms of oxygen. In the stratosphere, O_3 exists naturally and shields Earth from harmful incoming ultraviolet radiation. However, in the troposphere, it is a secondary pollutant that forms when nitrogen oxides (NO_X) and volatile organic compounds (VOCs), also referred to as reactive organic gases (ROGs), react in the presence of sunlight. It is a major component of smog.

High concentrations of ground-level O_3 can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments. Ozone also damages natural ecosystems such as forests and foothill communities, agricultural crops, and some human-made materials, such as rubber, paint, and plastics.

Reactive Organic Gas

ROG is a reactive chemical gas composed of hydrocarbon compounds, some of which are toxic (such as the carcinogen benzene). It may contribute to the formation of smog by its involvement in atmospheric chemical reactions. No separate health standards exist for ROG as a group. Because some compounds that make up ROG are also toxic, ROG is often evaluated as part of a toxic risk assessment.

Volatile Organic Compounds

VOCs are hydrocarbon compounds that exist in the ambient air. They contribute to the formation of smog, are a major precursor to the formation of O_3, and may also be toxic. VOCs may also be odorous and are found in gasoline, alcohol, and some paints.

Oxides of Nitrogen

NO_X is a family of gaseous nitrogen compounds that result from fossil fuel combustion and are a precursor to the formation of O_3 and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that is toxic at high concentrations. On-road and off-road motor vehicles and fuel combustion are the major sources of this air pollutant.

Particulate Matter

Particulate matter, also known as particle pollution, is a complex mixture of extremely small particles and liquid droplets. It consists of several components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is causally linked to the potential for causing health problems. Particulate matter that is 10 micrometers in diameter or smaller (PM_{10}) is of concern because it generally passes through the throat and nose and enters the lungs, potentially affecting the heart and lungs and causing serious health effects. The EPA classifies particle pollution as one of the following based on particle size and where particles are deposited:

- Inhalable coarse particles, such as those found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter (PM_{10}). PM_{10} is deposited in the thoracic region of the lungs.
- Fine particles, such as those found in smoke and haze, are particulate matter that is 2.5 micrometers in diameter and smaller ($PM_{2.5}$). These particles can be directly emitted from sources such as forest fires or can form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.

- Ultrafine particles (UFP) are very small particles less than 0.1 micrometer in diameter largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, UFPs can have disproportionate health effects due to their high surface area, deep lung penetration, and transfer into the bloodstream.

All three types of particulate matter include primary pollutants (emitted directly to the atmosphere) as well as secondary pollutants (formed in the atmosphere by chemical reactions among precursors). Generally, UFP, $PM_{2.5}$, and PM_{10} are emitted by combustion sources such as vehicles, power generation, industrial processes, and wood burning; sources of PM_{10} also include roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust.

Numerous scientific studies have linked both long- and short-term particle pollution exposures to a variety of health problems. Long-term exposures (individuals who live many years in areas with high particle levels) have been associated with reduced lung function, chronic bronchitis, and even premature death. Short-term exposures to particles (hours or days) can aggravate lung disease, causing asthma attacks, acute (short-term) bronchitis, and possible increased susceptibility to respiratory infections. In people with heart disease, short-term exposures have been linked to heart attacks and arrhythmias. Healthy children and adults have not been reported to suffer serious effects from short-term exposures, although they may experience temporary minor irritation when particle levels are elevated.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike O_3). The main source of CO is on-road motor vehicles; other mobile sources, miscellaneous processes, and fuel combustion from stationary sources also contribute CO. Emissions from motor vehicles have been declining since 1985, despite increases in vehicle miles traveled (VMT), due to improved automotive emission controls and fleet turnover. Because CO problems are local rather than regional, the California Air Resources Board (CARB) and EPA designate urban areas as CO nonattainment areas instead of the entire SCAB, as with O_3 and PM_{10}.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a “rotten egg” smell formed primarily by the combustion of sulfur-containing fossil fuels. Like airborne NO_X, suspended sulfur oxide (SO_X) particles contribute to poor visibility and can combine with other pollutants to form $PM_{2.5}$. Use of low-sulfur fuel has minimized problems from this pollutant.

Lead

Lead (Pb) is a metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, so it essentially persists forever. The health effects of lead poisoning include loss of appetite, weakness, apathy, and miscarriage. Lead can also cause lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract. Automobile engines powered by leaded fuels were once a major source of airborne lead; however, the use of leaded fuel has been mostly phased out, resulting in dramatic decreases in ambient concentrations of lead.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. It is extremely hazardous in high concentrations, especially in enclosed spaces (800 parts per million [ppm] can cause death). The Occupational Safety and Health Administration (OSHA) regulates workplace exposure to H_2S.

Other Pollutants

The State of California has established air quality standards for some pollutants not addressed by Federal standards. CARB has established State standards for H_2S, sulfates, vinyl chloride, and visibility-reducing particles. Sulfates, vinyl chloride, and visibility-reducing particles are discussed below, including these pollutants' physical properties, health and other effects, sources, and the extent of the problems.

Sulfates

Sulfates (SO_4^{2-}) are the fully oxidized ionic form of sulfur, occurring in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

CARB's sulfates standard is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include decreased ventilator function, aggravation of asthmatic symptoms, and an increased risk of cardiopulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Visibility-Reducing Particles

Visibility-reducing particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Vinyl Chloride

Vinyl chloride (C_2H_3Cl) is a colorless gas that does not occur naturally. It is formed by the breakdown of other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene. Vinyl chloride is used to make polyvinyl chloride, a component of many plastic products such as pipes, wire and cable coatings, and packaging materials.

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, reactions to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may have sensitivities to other substances. In addition, people may react differently to the same odor—an odor such as that of a fast-food restaurant may be offensive to one person but may be perfectly acceptable to another. Importantly, an unfamiliar odor is more easily detected and more likely to cause complaints than a familiar one because of odor fatigue. This phenomenon causes a person to become desensitized to almost any odor, with recognition occurring only when the intensity changes.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience (e.g., a flowery or sweet 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, weakening the odor intensity to the point that the odor is difficult to detect or recognize. At some point during dilution, the odorant concentration of the odorant reaches a detection threshold; a concentration below this threshold is not detectable by the average human.

TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air but may pose a threat to public health even at very low concentrations due to their high toxicity. TACs differ from criteria pollutants in that there is no threshold level below which adverse health impacts are not expected to occur; therefore, acceptable levels of exposure cannot be determined. The CAA and California Clean Air Act (CCAA) do not address TACs through the NAAQS or CAAQS. Instead, the EPA and CARB regulate hazardous air pollutants (HAPs) and TACs, respectively, through statutes and regulations that require the use of the maximum or best available control technology to limit emissions. The EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the CAA and subsequent amendments; these are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated primarily through the Toxic Air Contaminant Identification and Control Act of 1983 (codified at Health and Safety Code §§ 39650–39675; also known as the Tanner Air Toxics Act) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (codified at Health and Safety Code §§ 44300–44394). The Tanner Air Toxics Act establishes a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. Existing sources of TACs that are subject to Assembly Bill (AB) 2588 are required to 1) prepare a toxic emissions inventory, 2) prepare a risk assessment if emissions are significant, 3) notify the public of significant risk levels, and 4) prepare and implement risk reduction measures.

Statewide, CARB may regulate emissions from motor vehicles, fuels, and consumer products. Diesel-exhaust particulate matter (diesel PM) is the primary TAC of concern for mobile sources; diesel PM emissions are estimated to account for about 70% of the total ambient TAC risk. Reduction of the public's exposure to diesel PM through cleaner diesel fuel and cleaner diesel engines and vehicles is one of CARB's highest priorities (CARB 2005).

At the local level, air districts have the authority over stationary or industrial sources. The South Coast Air Quality Management District (SCAQMD) has jurisdiction over the urban areas within the SCAB. All projects that require air quality permits from the SCAQMD are evaluated for TAC emissions. The SCAQMD limits emissions and public exposure to TACs through a number of programs, prioritizing TAC-emitting stationary sources based on the quantity and toxicity of TAC emissions and the proximity of the facilities to sensitive receptors. The SCAQMD requires a comprehensive health risk assessment (HRA) for facilities classified as significant risk, pursuant to AB 2588.

Asbestos

Asbestos is designated as a TAC by CARB. Naturally occurring asbestos (NOA) areas are identified based on the type of rock in the area. Asbestos-containing rocks in California are ultramafic, including serpentine, rocks. Based on a U.S. Geological Survey (USGS) map depicting potential areas of NOA, the project site would not be in or near an area identified as having a potential for NOA (Van Gosen and Clinkenbeard 2011).

4.3.1.5 Sensitive Receptors

Certain land uses are more susceptible to changes in air quality, largely due to the populations they serve and the activities conducted there. Individuals most vulnerable to air pollution include children, seniors, athletes, and those with cardiovascular or chronic respiratory conditions. Locations where these sensitive groups reside or spend significant time are referred to as sensitive receptors. Common sensitive receptor sites include schools, parks, playgrounds, daycare centers, nursing homes, hospitals, and residential neighborhoods (CARB 2005). The SCAQMD further defines sensitive receptors as residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993).

The nearest sensitive receptors to the project site are existing single-family homes, located approximately 10 feet (3 meters) west of the property boundary near Holt Avenue and Whitewater Canyon Road. CARB identifies several sources of air pollution that are particularly relevant when locating new sensitive receptors, including freeways, high-traffic roadways, distribution centers, rail yards, and major stationary sources (CARB 2005).

The project site is situated about 100 feet south of an active rail line, 1,800 feet south of State Route 14 (SR-14), 150 feet north of Oak Spring Canyon Road, 2,100 feet north of Robinson Ranch Road, and 4,200 feet east of Sand Canyon Road. The project will include the establishment of a new internal circulation network, with primary access from Lost Canyon Road and secondary access from Robinson Ranch Road. SR-14 experiences an average daily traffic volume of 155,000 to 170,000 vehicles within the study area. Sand Canyon Road, classified as a Major Highway, carries between 108,000 and 119,000 vehicles daily. Lost Canyon Road is a Secondary Highway, and Oak Spring Canyon Road functions as a local street (Dudek 2026; see EIR Appendix H).

A review of the SCAQMD Facility Information Detail indicates there are no stationary sources of air pollution in close proximity to the project site (SCAQMD 2026). According to the CARB *Air Quality and Land Use Handbook*, the residential components of the project comply with recommended siting criteria to minimize sensitive receptor exposure to air pollutants (CARB 2005). The project site is not within 500 feet of a freeway or urban roadway with more than 100,000 vehicles per day, is not adjacent to industrial sources expected to generate over 100 truck trips daily, and does not have any large stationary sources nearby (Dudek 2026).

4.3.1.6 Existing Air Quality Conditions

AMBIENT AIR QUALITY

CARB, air districts, and other agencies monitor ambient air quality at approximately 250 air quality monitoring stations throughout the State. The SCAQMD monitors local ambient air quality in the vicinity of the project site. Air quality monitoring stations typically measure pollutant concentrations at a height of 10 feet above ground level; as a result, air quality is often described in terms of ground-level concentrations. The most recent background ambient air quality data, covering the years 2021 to 2023, are presented in Table 4.3-2. The Santa Clarita monitoring station, located at 22224 Placerita Canyon Road in Santa Clarita, is the closest air quality monitoring station, situated approximately 7.1 miles southwest of the project site. Data collected at this station are considered representative of the air quality in the project vicinity. Table 4.3-2 also shows the number of days when ambient air quality standards were exceeded.

Table 4.3-2. Summary of Ambient Air Quality in the Santa Clarita Area

Pollutant	Standard/Days Exceeded	Monitoring Year		
		2022	2023	2024
O_3	Maximum concentration (1-hour/8-hour average; ppm)	0.129/0.114	0.133/0.115	0.136/0.114
	Number of days State/National 1-hour standard exceeded	28	26	47
	Number of days State/National 8-hour standard exceeded	68/66	57/55	94/94
NO_2	Maximum concentration (1-hour average; ppb)	0.051	0.040	0.047
	Number of days State/National standard exceeded	0/0	0/0	0/0
CO	Maximum concentration (1-hour/8-hour average; ppm)	1.5/0.60	1.1/0.60	1.2/0.70
	Number of days State/National 1-hour standard exceeded	0/0	0/0	0/0
	Number of days State/National 8-hour standard exceeded	0/0	0/0	0/0
$PM_{2.5}$	Maximum 24-hour concentration (µg/m^3)	27.2	24.8	22.8
	Number of days National standard exceeded	0	0	0
PM_{10}	Maximum 24-hour concentration (µg/m^3)	36.9	41.5	70.7
	Number of days State standard exceeded	0	0	6
	Number of days National standard exceeded	0	0	0

Source: Dudek (2026)

Notes: µg/m^3 = micrograms per cubic meter; ppm = parts per million

MATES V

The Multiple Air Toxics Exposure Study V (MATES V) is a monitoring and assessment initiative conducted within the SCAB. Building on previous air toxics studies in the region, MATES V is part of the SCAQMD Governing Board's Environmental Justice Initiative. The study encompasses several components, including an air toxics monitoring program, an updated inventory of TAC emissions, and a modeling effort to assess risk throughout the SCAB. Cancer risks associated with air toxics are estimated using a risk assessment methodology. In addition, MATES V features an exploratory analysis of chronic noncancer health effects, such as cardiovascular, respiratory, and neurological outcomes.

Between 2012 and 2018, toxic air pollution in the SCAB declined by more than 54%, yet air toxics remain a significant contributor to health risks, including cancer and other chronic diseases. In 2018, residents of the SCAB faced an estimated cancer risk of 455 cases per one million people due to exposure to TACs. At the project site, MATES V monitoring data indicate a cancer risk of 280 cases per one million. Within the 91387 zip code, air toxics cancer risk is higher than 9% of the SCAQMD population (Dudek 2026).

CALENVIROSCREEN

The California Communities Environmental Health Screening Tool (CalEnviroScreen) is a mapping tool designed to identify California communities most impacted by multiple sources of pollution, where residents are often particularly vulnerable to its effects. The tool ranks census tracts throughout the State based on potential pollutant exposures, adverse environmental conditions, socioeconomic factors, and the prevalence of certain health conditions. The data used in CalEnviroScreen are sourced from both National and State-level databases.

The project site is not classified as a disadvantaged community under Senate Bill (SB) 535 (Office of Environmental Health Hazard Assessment [OEHHA] 2022), a Low-Income Community under AB 1550 (CARB 2024a), or as part of a Community Air Protection Program pursuant to AB 617 (CARB 2024b). According to CalEnviroScreen, the project site has scores ranging from 10 to 20 (OEHHA 2023). The tool's maximum score is 100, with higher scores (above 50) indicating a greater pollution burden compared to other census tracts in California.

HEALTHY PLACES

The Healthy Places Index (HPI), developed by the Public Health Alliance of Southern California, is a robust and user-friendly data platform designed to promote health equity by providing open access to key social and environmental indicators. The HPI offers neighborhood-level mapping of factors that influence health outcomes, such as educational attainment, employment opportunities, and access to clean air and water—metrics that are positively correlated with life expectancy. This tool enables community stakeholders, policymakers, and researchers to assess and compare the health and well-being of different areas, identify disparities, and quantify the drivers of health within communities.

The HPI score for the project site is 72.8, with the highest possible score being 100. Higher scores (above 50) indicate healthier conditions relative to other census tracts Statewide (Dudek 2026).

4.3.2 Regulatory Setting

4.3.2.1 Federal

FEDERAL CLEAN AIR ACT

The CAA, which was passed in 1970 and last amended in 1990, forms the basis for the National air pollution control effort. The CAA delegates primary responsibility for clean air to the EPA. The EPA develops rules and regulations to preserve and improve air quality and delegates specific responsibilities to State and local agencies. Under the act, the EPA has established the NAAQS for six criteria air pollutants that are pervasive in urban environments and for which National and State health-based ambient air quality standards have been established. O_3, CO, NO_2, SO_2, lead, and particulate matter (PM_{10} and $PM_{2.5}$) are the six criteria air pollutants. Ozone is a secondary pollutant; NO_X and VOCs are of particular interest as they are precursors to O_3 formation. The NAAQS are divided into primary and secondary standards—the primary standards are set to protect human health within an adequate margin of safety, and the secondary standards are set to protect environmental values, such as plant and animal life.

The CAA requires the EPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant, based on whether the NAAQS have been achieved. The act also mandates that the State submit and implement a State implementation plan for areas not meeting the NAAQS. These plans must include pollution control measures that demonstrate how the standards will be met. The standards for all criteria pollutants are presented in Table 4.3-1.

TOXIC SUBSTANCES CONTROL ACT

The Toxic Substances Control Act (TSCA) of 1976 provides the EPA with authority to require reporting, recordkeeping, and testing, and provides restrictions relating to chemical substances and/or mixtures. The TSCA authorized the EPA to secure information on all new and existing chemical substances, as well as to control any of the substances that were determined to cause unreasonable risk to public health or the environment. Congress later added additional titles to the act, with this original part designated at Title I, Control of Hazardous Substances. TSCA regulatory authority and program implementation rests predominantly with the Federal government (i.e., the EPA). However, the EPA can authorize States to

operate their own EPA-authorized programs for some portions of the statute. TSCA Title IV, Lead Exposure Reduction, allows States the flexibility to develop accreditation and certification programs and work practice standards for lead-related inspection, risk assessment, renovation, and abatement that are at least as protective as existing Federal standards.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: ASBESTOS

The EPA air toxics regulation for asbestos is intended to minimize the release of asbestos fibers during activities involving the handling of asbestos. Asbestos was one of the first HAPs regulated under the air toxics program as there are major health effects associated with asbestos exposure (lung cancer, mesothelioma, and asbestosis). On March 31, 1971, the EPA identified asbestos as a hazardous pollutant, and on April 6, 1973, the EPA promulgated the National Emission Standard for Asbestos (40 Code of Federal Regulations [CFR] 61(M)). The asbestos NESHAP has been amended several times. Air toxics regulations under the CAA have guidance on reducing asbestos in renovation and demolition of buildings; institutional, commercial, and industrial building; large-scale residential demolition; exceptions to the asbestos removal requirements; asbestos control methods; waste disposal and transportation; and milling, manufacturing, and fabrication.

4.3.2.2 State

CALIFORNIA CLEAN AIR ACT

The CCAA was adopted by CARB in 1988. The CCAA requires that all air districts in the State endeavor to achieve and maintain CAAQS for O_3, CO, SO_2, and NO_2 by the earliest practical date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. CARB and the local air districts are responsible for achieving CAAQS, which are to be achieved through district-level Air Quality Management Plans (AQMPs) that would be incorporated into the State implementation plan. In California, the EPA has delegated authority to prepare State implementation plans to CARB, which in turn, has delegated that authority to individual air districts. Each district plan is required to either 1) achieve a 5% annual reduction, averaged over consecutive three-year periods, in district-wide emissions of each nonattainment pollutant or its precursors; or 2) to provide for implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both Federal and State planning requirements.

The State of California began to set its ambient air quality standards (i.e., CAAQS) in 1969, under the mandate of the Mulford-Carrell Act. The CCAA requires all air districts of the State to achieve and maintain the CAAQS by the earliest practical date. Table 4.3-1 shows the CAAQS currently in effect for each criteria air pollutant, as well as the other pollutants recognized by the State. The CAAQS are generally more stringent than the corresponding Federal standards and incorporate additional standards for sulfates, H_2S, vinyl chloride, and visibility-reducing particles (see Table 4.3-1).

CALIFORNIA CODE OF REGULATIONS

The California Code of Regulations (CCR) includes regulations that govern air quality emissions. Specifically, 13 CCR § 2485 states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction is limited to five minutes at any location. In addition, 17 CCR § 93115 states that operation of any stationary, diesel-fueled, compression-ignition engine must meet specified fuel and fuel additive requirements and emission standards.

TOXIC AIR CONTAMINANTS REGULATIONS

California regulates TACs primarily through the Tanner Air Toxics Act and the Air Toxics Hot Spots Information and Assessment Act of 1987. In the early 1980s, CARB established a Statewide comprehensive air toxics program to reduce exposure to air toxics. The Tanner Air Toxics Act created California's program to reduce exposure to air toxics. California law requires a Statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks (CARB 2011).

CARB initiated a diesel risk reduction plan in 2000 to reduce diesel PM_{10} (inhalable particulate matter) emissions and the associated health risk by 85% in 2020. The plan identifies 14 measures that target new and existing on-road vehicles (e.g., heavy-duty trucks and buses), off-road equipment (e.g., graders, tractors, forklifts, sweepers, and boats), portable equipment (e.g., pumps), and stationary engines (e.g., standby power generators) (CARB 2000). During the control measure phase, specific Statewide regulations designed to further reduce diesel PM emissions from diesel-fueled engines and vehicles were evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce diesel PM emissions. The project would be required to comply with applicable diesel control measures.

SCAQMD adopted two rules to limit cancer and noncancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating.

IN-USE OFF-ROAD DIESEL VEHICLE REGULATION

In 2007, CARB adopted regulations to reduce diesel PM and NO_X emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, as well as two-engine vehicles that drive on-road, with the limited exception of two-engine sweepers. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, airport ground support equipment, water well drilling rigs, and two-engine cranes. Such vehicles are used in construction, mining, and industrial operations. The regulation does not apply to stationary equipment or portable equipment such as generators. The off-road vehicle regulation establishes emissions performance requirements, reporting, disclosure, and labeling requirements for off-road vehicles, and limits unnecessary idling.

4.3.2.3 Regional

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

SCAQMD shares responsibility with CARB for ensuring that all NAAQS and CAAQS are achieved and maintained throughout all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange and Los Angeles Counties, except for the Antelope Valley; the non-desert portion of western San Bernardino County; and the western and Coachella Valley portions of Riverside County. The SCAB is a subregion of the SCAQMD jurisdiction.

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs. The SCAQMD's most recent iteration of the AQMP, the *2022 Air Quality Management Plan* (Final 2022 AQMP; SCAQMD 2022), was adopted in December 2022. The AQMP provides emissions inventories, ambient measurements, meteorological episodes, and air quality modeling tools. The AQMP also provides policies and measures to guide responsible agencies in achieving Federal standards for healthful air quality in the

SCAB. It also incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources.

The SCAQMD adopts rules and regulations to implement portions of the AQMP, and several of these rules may apply to project construction or operation. For example, SCAQMD Rule 403 requires the implementation of best available fugitive dust control measures during active construction periods capable of generating fugitive dust emissions from on-site earthmoving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

The SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook*, approved in 1993, with the Air Quality Analysis Guidance Handbook (SCAQMD 2022a). In order to assist the CEQA practitioner in conducting an air quality analysis in the interim while this replacement Air Quality Analysis Guidance Handbook is being prepared, supplemental guidance/information is provided on the SCAQMD website and includes: 1) EMission FACtor (EMFAC) on-road vehicle emission factors; 2) background CO concentrations; 3) localized significance thresholds (LSTs); 4) mitigation measures and control efficiencies; 5) mobile source toxics analysis; 6) off-road mobile source emission factors; 7) $PM_{2.5}$ significance thresholds and calculation methodology; and 8) updated SCAQMD air quality significance thresholds (SCAQMD 2022a). The SCAQMD also recommends using approved models to calculate emissions from land use products projects, such as the California Emission Estimator Model (CalEEMod) Version 2022 (California Air Pollution Control Officers Association [CAPCOA] 2022). These recommendations were followed in the preparation of this analysis.

SCAQMD Rule 402

SCAQMD Rule 402 (Nuisance) states that a person should not emit air contaminants or other materials 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 which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403

SCAQMD Rule 403 (Fugitive Dust) prohibits the release of fugitive dust emissions from any active operation, open storage piles, or disturbed surface area beyond the property line of the emission source and prohibits particulate matter deposits on public roadways. SCAQMD Rule 403 also requires projects to incorporate fugitive dust control measures that are at least as effective as the following measures:

- Use water to control dust generation during demolition of structures;
- Clean up mud and dirt carried onto paved streets from the project site;
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the project site;
- Cover all haul trucks or maintain at least six inches of freeboard;
- Sufficiently water or securely cover all material transported off-site to prevent excessive amounts of spillage or dust;
- Suspend earthmoving operations or implement additional watering to meet Rule 403 criteria if wind gusts exceed 25 miles per hour;
- The owner or contractor shall keep the construction area sufficiently dampened to control dust caused by construction and hauling, and at all times provide reasonable dust control of dust caused by wind. All paved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust cover shall be used to reduce dust emissions; and

- An information sign shall be posted at the entrance to the construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive fugitive dust generation. A construction relations officers shall be appointed to act as a community liaison concerning on-site activity, including investigation and resolution of issues related to fugitive dust generating.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. Under Federal law, SCAG is designated as a Metropolitan Planning Organization and under State law as a Regional Transportation Planning Agency and a Council of Governments.

Regional Transportation Plan/Sustainable Communities Strategy

In 2024, SCAG adopted *Connect SoCal: A Plan for Navigating to a Brighter Future, The Southern California Association of Governments' 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS; SCAG 2024). The RTP is a long-range transportation plan that provides a vision for regional transportation investments over a period of 20 years or more. The SCS demonstrates the integration of land use, transportation strategies, and transportation investments within the RTP. This requirement is intended to ensure that the SCAG region can meet its regional greenhouse gas (GHG) reduction targets set by CARB. The RTP/SCS also helps to reduce vehicle delay and VMT within the region (SCAG 2024).

4.3.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011). Table 4.3-3 provides goals and policies related to air quality that would be applicable to the project:

Table 4.3-3. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 7	Clean air to protect human health and support healthy ecosystems.
Objective CO 7.1	Reduce air pollution from mobile sources.
Policy 7.1.1	Through the mixed land use patterns and multi-modal circulation policies set forth in the Land Use and Circulation Elements, limit air pollution from transportation sources.
Policy 7.1.2	Support the use of alternative fuel vehicles.
Policy 7.1.3	Support alternative travel modes and new technologies, including infrastructure to support alternative fuel vehicles, as they become commercially available.
Objective CO 7.2	Apply guidelines to protect sensitive receptors from sources of air pollution as developed by CARB, where appropriate.

Goal/Objective/ Policy	Description
Policy CO 7.2.1	Ensure adequate spacing of sensitive land use from the following sources of air pollution: high traffic freeways and roads; distribution centers; truck stops; chrome plating facilities; dry cleaners using perchloroethylene; and large gas stations, as recommended by CARB.
Objective CO 7.3	Coordinate with other agencies to plan for and implement programs for improving air quality in the South Coast Air Basin.
Policy CO 7.3.1	Coordinate with local, regional, State, and federal agencies to develop and implement regional air quality policies and programs.

4.3.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to air quality if the project would:

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

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.

c. Expose sensitive receptors to substantial pollutant concentrations.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Each of these thresholds is discussed under Section 4.3.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.3.4 Impact Assessment Methodology

The following impact analysis is based, in part, on the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; see EIR Appendix H). The following analysis evaluates the potential increase in criteria air pollutants resulting from the project. To assist in the evaluation of air quality impacts, SCAQMD has developed recommended significance thresholds, published in its *CEQA Air Quality Handbook* (SCAQMD 1993). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SCAQMD's thresholds are exceeded.

Emissions associated with the construction of the project were calculated using CalEEMod, Version 2022 (Dudek 2026). Emissions modeling was conducted based on project-specific information provided, including estimated construction schedules, equipment use, and vehicle trips. All other modeling parameters, such as vehicle fleet mix and trip distances, were based on default information contained in the model for Los Angeles County. Construction emissions were amortized based on an estimated project life of 30 years and included with operations emissions. Operations emissions were calculated based on vehicle trip-generation rates derived from the *Transportation Assessment for Belcaro at Sand Canyon, Santa Clarita, California* (Gibson Transportation Consulting, Inc. [Gibson] 2026; EIR Appendix I). Other operational data, including vehicle fleet mix and travel distribution/distances were based on model defaults.

A construction HRA was performed to evaluate potential health risks associated with construction of the project; supporting construction HRA documentation, including detailed assumptions, is presented in EIR Appendix H. The air dispersion modeling methodology was based on generally accepted modeling practices of SCAQMD (SCAQMD 2023a). Air dispersion modeling was performed using EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 23132 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 12.0.0. The HRA followed the OEHHA 2015 guidelines (OEHHA 2015) and SCAQMD guidance to calculate the health risk impacts at all proximate receptors (on- and off-site).

4.3.4.1 Construction Emissions

Table 4.3-4 presents SCAQMD's recommended regional threshold criteria to determine the significance and appropriate mitigation level for a project's short-term construction emissions. Construction-generated emissions that exceed these thresholds would be considered to have a potentially significant impact (SCAQMD 2023b).

Table 4.3-4. SCAQMD Thresholds of Significance, Project Construction Emissions

Pollutant	Construction Threshold (pounds/day)
NO_X	100
VOC	75
PM_{10}	150
$PM_{2.5}$	55
SO_X	150
CO	550
Pb	3

Source: SCAQMD (2023b)

4.3.4.2 Operations Emissions

Table 4.3-5 presents SCAQMD's regional threshold criteria to determine the significance and appropriate mitigation level for a project's long-term operations emissions. Operations emissions that exceed these thresholds would be considered to have a potentially significant impact (SCAQMD 2023a).

Table 4.3-5. SCAQMD Thresholds of Significance, Project Operations Emissions

Pollutant	Operations Threshold (pounds/day)
NO_X	55
VOC	55
PM_{10}	150
$PM_{2.5}$	55
SO_X	150
CO	550
Pb	3

Source: SCAQMD (2023b)

4.3.4.3 Toxic Air Contaminants

Based on the criteria in SCAQMD *CEQA Air Quality Handbook* (SCAQMD 1993), the project may have a significant TAC impact if it:

- Results in the exposure of sensitive receptors to carcinogenic contaminants or TACs that exceeds the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0. Projects with a maximum incremental cancer risk between one in one million and 10 in one million would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

4.3.4.4 Odors

Screening of potential odor impacts is typically recommended for the following situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

A full analysis of odor impacts is recommended if the project would position receptors and known odor sources within one mile of each other. Known odor sources of primary concern, as identified by the SCAQMD, include landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities.

4.3.5 Project-Specific Impacts and Mitigation Measures

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

As discussed in Section 4.3.1.1, *Geography*, the project site is located within the SCAB and is under the jurisdiction of the SCAQMD, which is the agency responsible for ensuring that air quality regulations for the project area are met. The SCAQMD *CEQA Air Quality Handbook* establishes criteria for determining consistency with the most current AQMP, currently, the Final 2022 AQMP (SCAQMD 1993, 2022). The criteria include:

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP, or increments based on the year of project buildout and phase.

SCAQMD CONSISTENCY CRITERION NO. 1

Impact AQ-2 below applies the SCAQMD mass daily construction and operational thresholds, as seen in Tables 4.3-6 and 4.3-7, to evaluate the project's potential impacts to the cumulatively considerable net increase of a nonattainment criteria pollutant and potential impacts to the frequency, severity, or introduction of air quality violations. Project construction emissions would not exceed the SCAQMD criteria pollutant emissions thresholds.

Project operations emissions would not exceed the SCAQMD regional threshold criteria. Further, the combination of construction and operations emissions for the project would not exceed SCAQMD regional thresholds. The project's criteria air pollutant emissions would be less than significant; thus, the project would not have the potential to increase the frequency or severity of air quality violations. The project would not conflict with Consistency Criterion No. 1 of the SCAQMD *CEQA Air Quality Handbook*; therefore, impacts would be *less than significant*, and mitigation is not necessary.

SCAQMD CONSISTENCY CRITERION NO. 2

A project is considered consistent with the Final 2022 AQMP if socioeconomic factors, such as population and employment growth, are consistent with the regional plans used to develop the AQMP. The project includes the construction of 341 single-family senior housing dwelling units. According to the *Transportation Assessment for Belcaro at Sand Canyon*, the average size of a household for senior detached housing is 1.8 persons; therefore, the project would have the potential to house approximately 614 people (Gibson 2026). According to the SCAG 2020-2045 RTP/SCS, the project's estimated 614 new residents would fall within SCAG's projection of 40,600 new City residents through 2045 (SCAG 2020). The project would not result in near-term increases in population that would exceed year 2045 population projections. As such, the project would be consistent with the SCAG 2020-2045 RTP/SCS.

The additional population growth attributable to the project in combination with the existing population of the City fall within the SCAG 2020-2045 RTP/SCS growth projections for the City. The project does not require a General Plan Amendment because is it consistent with the land use designations for the project site and the Santa Clarita Municipal Code; thus, the project is consistent with the Final 2022 AQMP regional growth projections since the Final 2022 AQMP uses communities' general plans to project growth. The project would not conflict with Consistency Criterion No. 2 of the SCAQMD *CEQA Air Quality Handbook*; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact AQ-1
The project would not conflict with an applicable air quality plan.
Mitigation Measures
Mitigation is not necessary. Impact AQ-1 would be less than significant.

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

The SCAB is currently designated nonattainment for the State's one-hour and eight-hour O_3, $PM_{2.5}$, and PM_{10} standards and the Federal one-hour and eight-hour O_3 and $PM_{2.5}$ standards. Short-term construction and long-term operational air quality impacts that would increase criteria pollutants that could affect regional air quality attainment or maintenance conditions are discussed below.

SHORT-TERM CONSTRUCTION EMISSIONS

The project is anticipated to be constructed over a five-year period, commencing in 2027 and ending with a full operational buildout in 2032.

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. Construction of the project would result in the temporary generation of emissions, primarily associated with construction equipment and construction vehicle trips, as well as fugitive dust emissions associated with the excavation and movement of soil. Of particular concern, given the region's nonattainment status, are emissions of O_3 precursor pollutants (i.e., ROG and NO_X) and emissions of particulate matter. Emissions of O_3 precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne particulate matter largely depend on the amount of ground disturbance associated with site preparation and excavation activities. Estimated maximum daily emissions associated with the construction of the project are presented in Table 4.3-6.[1]

Table 4.3-6. Unmitigated Daily Construction Emissions Summary

	Unmitigated Construction Emissions Summary					
	VOC	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction Year	**Pollutant Emission (pounds per day)**					
Summer						
2027	9.23	80.98	82.84	0.20	6.27	13.03
2028	10.66	90.30	101.76	0.24	6.57	13.55
2029	10.53	16.98	30.46	0.04	0.88	2.16
2030	18.75	18.09	33.37	0.05	0.88	2.28
2031	9.40	10.32	19.81	0.03	0.61	1.74
Winter						
2027	9.23	81.01	82.39	0.20	6.27	13.03
2028	8.93	75.55	81.38	0.20	6.06	12.80
2029	15.39	38.39	66.47	0.10	1.90	4.38
2030	21.60	40.17	72.36	0.11	2.13	5.51
2031	17.79	12.92	23.17	0.04	0.70	2.04
2032	9.31	10.08	18.73	0.03	0.59	1.72
Maximum Daily Emissions	***21.60***	***90.30***	***101.76***	***0.24***	***6.57***	***13.55***
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Threshold exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Dudek (2026).

Note: <0.01 = reported value less than 0.01.

As depicted in Table 4.3-6, maximum daily emissions associated with the construction of the project would not exceed SCAQMD's regional significance thresholds. The proposed construction would also be required to comply with SCAQMD's Rule 402 (Nuisance) and Rule 403 (Fugitive Dust), which would require implementation of control measures for fugitive dust generated during on-site ground-disturbing

[1] CalEEMod modeling for construction emissions was completed based on preliminary information from the project applicant that had estimated construction beginning in September 2026 and full operational buildout occurring in 2031. The construction schedule used in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years.

activities. With compliance with applicable regulatory requirements and given that construction-generated emissions would not exceed applicable significance thresholds, this impact would be considered *less than significant*, and mitigation is not necessary.

LONG-TERM OPERATIONS EMISSIONS

Operation of the project would generate VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ emissions from mobile sources, including vehicular traffic generated by residents, employees, customers, and visitors; energy sources from natural gas usage; area sources, including the use of landscaping equipment, consumer products, and hearths; and architectural coatings. Table 4.3-7 compares the unmitigated maximum daily area, energy, and mobile source emissions associated with project operation to SCAQMD thresholds.[2]

Table 4.3-7. Unmitigated Daily Operational Emissions Summary – Full Buildout

	Unmitigated Construction Emissions Summary					
	VOC	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Construction Year	**Pollutant Emission (pounds per day)**					
Summer						
Mobile	4.47	3.41	45.19	0.13	12.85	3.31
Energy	23.32	0.18	19.76	<0.01	0.01	0.01
Area	0.00	0.00	0.00	0.00	0.00	0.00
Total Daily Summer Emissions	**27.79**	**3.59**	**64.95**	**0.13**	**12.86**	**3.32**
Winter						
Mobile	4.44	3.73	41.05	0.12	12.85	3.31
Energy	21.59	0.00	0.00	0.00	0.01	0.01
Area	0.00	0.00	0.00	0.00	0.00	0.00
Total Winter Summer Emissions	**26.03**	**3.73**	**41.05**	**0.12**	**12.86**	**3.32**
Maximum Daily Emissions	***27.79***	***3.73***	***64.95***	***0.13***	***12.86***	***3.32***
SCAQMD Regional Significance Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold exceeded?	*No*	*No*	*No*	*No*	*No*	*No*

Source: Dudek (2026).

Note: <0.01 = reported value less than 0.01.

As shown in Table 4.3-7, the worst-case daily operational emissions for the project would not exceed SCAQMD's thresholds. As a result, this impact would be considered *less than significant*, and mitigation is not necessary.

[2] CalEEMod modeling for operational emissions was completed based on preliminary information from the project applicant that had estimated full operational buildout occurring in 2031. Although the full buildout year has since been revised to occur one year later, the emissions estimates have not been updated, as the earlier modeling year yields higher emissions. Because emissions are expected to decrease over time due to mobile fleet turnover and progressively more stringent regulations, the estimates presented in Table 4.3-7 represent a conservative assessment.

Impact AQ-2
The project 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.
Mitigation Measures
Mitigation is not necessary. Impact AQ-2 would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

HEALTH RISK ASSESSMENT

Construction

A construction HRA was performed to estimate the Maximum Individual Cancer Risk and the Chronic Hazard Index for residential receptors resulting from project construction. As shown in Table 4.3-8, the HRA results from the unmitigated scenario show that project construction would result in a Residential Chronic Hazard Index of 0.006, which is below the 1.0 significance threshold; however, project construction would result in cancer risks exceeding the 10 in one million threshold. For these reasons, without mitigation, project construction could result in toxic air contaminants exposure that could be *significant*.

Table 4.3-8. Construction Health Risk Assessment Results – Unmitigated

Impact Parameter	Unit	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk – Residential	per million	13.62	10	Potentially Significant
Chronic Hazard Index – Residential	Index Value	0.006	1.0	Less than Significant

Source: SCAQMD (2023)

Note: See Appendix D in Dudek 2026 (see Appendix H) for detailed results.

Mitigation Measure MM AQ-1 would reduce project construction-generated diesel PM emissions to the extent feasible through requiring all 25 horsepower or greater diesel-powered equipment to be powered with CARB-certified Tier 4 Interim engines. With the implementation of Mitigation Measure MM AQ-1, the estimated cancer risk during project construction would be reduced below the SCAQMD threshold of 10 in one million (Table 4.3-9). Therefore, impacts would be *less than significant with mitigation.*

Table 4.3-9. Construction Health Risk Assessment Results – Mitigated

Impact Parameter	Unit	Project Impact	CEQA Threshold	Level of Significance
Maximum Individual Cancer Risk –Residential	per million	8.37	10	Less than Significant
Chronic Hazard Index – Residential	Index Value	0.006	1.0	Less than Significant

Source: SCAQMD (2023)

Note: See Appendix D in Dudek 2026 (see Appendix H) for detailed results.

Operation

According to SCAQMD, projects such as residential developments (e.g., apartments, condos, mobile homes, single-family homes), commercial spaces (e.g., offices, banks, government buildings, pharmacies), recreational facilities (e.g., parks, restaurants, golf courses, health clubs, hotels, theaters), educational institutions (e.g., daycares, schools, colleges, libraries, churches), and retail uses (e.g., auto care centers, supermarkets, malls) typically result in low operational health risk impacts (SCAQMD 2023c). The project is a residential development, which SCAQMD identifies as having a low potential for health risks. Operation of the project would not produce any non-permitted direct emissions, such as those from stationary sources like diesel generators, nor would it result in a substantial increase in diesel vehicles (i.e., more than 100 delivery trucks per day). Therefore, the project would not be a long-term source of TAC emissions. As a result, project impacts related to exposing sensitive receptors to substantial pollutant concentrations, specifically health risks from operations, would be *less than significant*.

Impact AQ-3	
The project could expose sensitive residential receptors to substantial pollutant concentrations during construction related to diesel exhaust.	
Mitigation Measures	
MM AQ-3.1	***Construction Equipment Exhaust Minimization.*** *Before allowing any construction vehicles on-site, the permittee must provide evidence to the Director of Community Development that, for off-road equipment with diesel engines rated at 25 horsepower or greater, no construction equipment may be used that is less than Tier 4 Final as defined by the U.S. Environmental Protection Agency's* Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuel; Final Rule *(EPA 2004). An exemption from this requirement may be granted by the Director if 1) the permittee documents equipment with Tier 4 Final engines are not reasonably available, and 2) the required corresponding reductions in criteria air pollutant emissions can be achieved for the project from other combinations of construction equipment. Before an exemption may be granted, the permittee must 1) demonstrate that at least three construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Los Angeles County during the desired construction schedule, and 2) the proposed replacement equipment was evaluated using the California Emissions Estimator Model or other industry standard emission estimation method and documentation has been provided to the City to confirm that necessary project-generated emissions reductions are achieved.*
Impacts Following Mitigation	
With implementation of Mitigation Measure MM AQ-3.1, diesel PM would be reduced during the construction period and substantial pollutant concentrations would be less than significant, as demonstrated by the analysis conducted to calculate the effectiveness of the mitigation measures. Therefore, impacts would be less than significant with mitigation.	

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

Construction and operation of the project would produce various emissions; however, criteria air pollutants, fugitive dust, and TACs are addressed in Impact AQ-2 and Impact AQ-3. The severity and occurrence of odor impacts depend on factors such as the nature, frequency, and intensity of the source, wind speed, and direction and the sensitivity of the receiving location. While offensive odors rarely cause physical harm, they can be bothersome and lead to public complaints.

During construction, odors would be generated from vehicle and equipment exhaust, architectural coatings, and asphalt paving. These odors would disperse quickly from the project site and are unlikely to affect a substantial number of people, making construction-related odor impacts less than significant.

Odor complaints are typically associated with uses such as agriculture, wastewater treatment, food processing, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any of these activities. As a senior residential community, the project would not create new sources of operational odors. Therefore, odor impacts during both construction and operation would be *less than significant*, and mitigation is not necessary.

Impact AQ-4
The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
Mitigation Measures
Mitigation is not necessary. Impact AQ-4 would be less than significant.

4.3.6 Cumulative Impacts

The geographic area affected by the project and the potential for the project to contribute to cumulative impacts vary based on the environmental resource under consideration. For air quality, the geographic scope for the cumulative impact analysis of the project encompasses the entire SCAB.

Based on SCAQMD guidance, individual construction projects that exceed SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the SCAB is nonattainment, as discussed below (SCAQMD 2003):

> As Lead Agency, the AQMD [Air Quality Management District] uses the same significance thresholds for project-specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR… Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

Therefore, consistent with the accepted and established SCAQMD cumulative impact evaluation methodologies, a project's construction or operation emissions would be considered cumulatively considerable if project-specific emissions exceed an applicable SCAQMD-recommended significance threshold.

As analyzed in Section 4.3.5, *Project-Specific Impacts and Mitigation Measures*, the project would be consistent with the SCAQMD Final 2022 AQMP during both construction and operation (Impact AQ-1), and the project would not result in a cumulatively considerable net increase of criteria pollutants that would exceed applicable SCAQMD thresholds during either construction or operation (Impact AQ-2). In addition, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people during either construction or operation (Impact AQ-4). As such, and consistent with SCAQMD guidance, the project would not contribute significantly to cumulative impacts associated with these issues.

However, the project's construction HRA determined the project could expose sensitive residential receptors to substantial pollutant concentrations during construction related to diesel exhaust emissions (Impact AQ-3). Given the construction and diesel exhaust emissions that could occur in the project vicinity concurrent with project construction, prior to mitigation, this impact could be considered both a direct impact and a contribution to cumulative impacts related to diesel emissions. Implementation of Mitigation Measure MM AQ-3.1 would reduce project construction emissions below the SCAQMD threshold, as shown in Table 4.3-9. As such, and consistent with SCAQMD guidance, after implementation of the mitigation measure, the project's contribution to diesel emissions would be less than cumulatively considerable.

Impact AQ-5 (Cumulative Impacts)
The project's air pollutant emissions related to diesel exhaust during construction could result in a cumulative contribution to air pollution in the region.
Mitigation Measures
Implement Mitigation Measure MM AQ-3.1.
Impacts Following Mitigation
With implementation of Mitigation Measure MM AQ-3.1 to reduce project-specific impacts, the project's contribution would be less than cumulatively considerable, and impacts would be less than significant with mitigation.

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4.4 BIOLOGICAL RESOURCES

This section of the EIR describes the existing conditions and regulatory setting for biological resources related to the project, evaluates potential environmental impacts to biological resources that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Biological Resources Technical Report for Belcaro at Sand Canyon Project* (BRTR) (Dudek 2026; EIR Appendix C).

The existing conditions and impacts analysis of the project area presented below is based on data collected by Dudek through a review of pertinent literature, field reconnaissance, and tree survey. The study area for the BRTR encompasses the parcels proposed for residential development and the areas required for associated roadway improvements and access. Because the BRTR studies the total acreage of the parcels proposed for residential development, the area covered by this analysis is larger than the project site, as defined in Chapter 2, *Project Description*. In total, when considering the addition of the transportation and access improvements included in the project, the study area studied by Dudek is approximately 238 acres,[1] which includes areas that are proposed for development as well as areas proposed for conservation.

4.4.1 Existing Conditions

The project area, including the project site and all off-site improvements, totals approximately 208 acres. The project site, comprising 193.8 acres of vacant land controlled by the applicant, represents the majority of the project area and consists of the following Assessor Parcel Numbers (APNs): 2840-001-118 and 2840-015-025, -031, -032, -033, -034, -035, -045, and -047. The project area includes the following off-site improvements:

- An extension of Lost Canyon Road with a bridge connecting the project site to provide access from the existing Lost Canyon Road.
- A roundabout at Lost Canyon Road and Sand Canyon Road.
- The development of the proposed J Street, which would connect to Robinson Ranch Road.
- Infrastructure and roadway improvements within the existing right-of-way (ROW) on Lost Canyon Road adjacent to the project site, including the expansion of local utilities infrastructure (water, sewer, and storm drain lines) .
- The development of public trails along existing and expanded sections of Lost Canyon Road, as well as along the new J Street.

The project area is bordered by the Santa Clara River to the north (and farther north by State Route [SR-] 14), Sand Canyon Country Club to the south, undeveloped land to the east, and existing single-family development to the west.

4.4.1.1 Soils

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2026), the project area is included within the Soil Survey of the Antelope Valley Area, California (NRCS 1970). The following soil map units were mapped on the project area. As detailed below, three of the soil map units present within the project area are included in the

[1] The study area for the BRTR (238 acres) exceeds the Chapter 2, *Project Description*, project site acreage, which is described as 208 acres, because the 208 acres does not include some areas where no site or ground disturbance is proposed.

NRCS hydric soils (wetland) list—Metz loam, 2 to 5 percent slopes; riverwash; and sandy alluvial land (NRCS 2026):

- **Hanford Series:** The project area contains Hanford sandy loam, 0 to 2 percent slopes, and Hanford sandy loam, 2 to 9 percent slopes. Hanford soils consist of very deep, well-drained or somewhat excessively drained soils found on stream bottoms, floodplains, and alluvial fans. Neither of these soil map units are rated as hydric soil.
- **Metz Series:** The project area contains Metz loam, 2 to 5 percent slopes. Metz soils consist of very deep, somewhat excessively drained soils found on alluvial fans and floodplains. This soil map unit is included in the NRCS hydric soils list but is rated "predominantly nonhydric," meaning that no major component of the map unit is rated as hydric but one minor component comprising 1% of the map unit is rated hydric (NRCS 2026).
- **Oak Glen Series:** The project area contains Oak Glen sandy loam, 0 to 2 percent slopes, and Oak Glen gravelly sandy loam, 2 to 9 percent slopes. Oak Glen soils consist of deep, well-drained soils found on alluvial fans and toe of slopes. Neither of these soil map units are rated as hydric soil.
- **Saugus Series:** The project area contains eroded Saugus loam, 30 to 50 percent slopes. Saugus soils consist of deep, well-drained soils found on uplands made up of dissected terraces and foothills. This soil map unit is not rated as hydric soil.
- **Riverwash:** This soil map unit is mapped within the Santa Clara River along the northern boundary of the project area and is composed of alluvial sandy to gravelly material in intermittent streambeds. This soil map unit is included in the NRCS hydric soils list, rated "predominantly hydric," meaning that all major components of the map unit are rated as hydric and at least one minor component is not rated hydric (NRCS 2026). In this case, riverwash is classified as a hydric soil due to the presence of drainageways, likely associated with the Santa Clara River (NRCS 2026).
- **Sandy Alluvial Land:** This soil map unit is mapped on the edges of the Santa Clara River along the northern boundary of the project area and is primarily composed of stratified unconsolidated sandy to loamy sandy alluvial material within floodplains. This soil map unit is included in the NRCS hydric soils list and rated "predominantly hydric," meaning that all major components of the map unit are rated as hydric and at least one minor component is not rated hydric (NRCS 2026). In this case, sandy alluvial land is classified as a hydric soil due to the presence of floodplains (criterion code 2) and drainageways, likely associated with the Santa Clara River (NRCS 2026).

4.4.1.2 Watershed

The project area lies within the Santa Clara subbasin, which contains the Santa Clara River along the northern boundary and the Oak Spring Canyon Creek drainage, a direct tributary that runs through the southern and western portions of the project area.

The project area is also within the Sand Canyon–Santa Clara River subwatershed of the Headwaters of Santa Clara River watershed, which ultimately drains into the reaches of the Santa Clara River contained within Soledad Canyon. The Sand Canyon–Santa Clara River subwatershed is the westernmost and farthest downstream unit of this watershed.

4.4.1.3 Vegetation Communities and Land Covers

Dudek conducted vegetation mapping in accordance with California Department of Fish and Wildlife (CDFW) protocols for surveying special-status plant populations and natural communities. Community classifications follow CDFW's List of Vegetation Alliances and Associations, derived from *A Manual of California Vegetation* (Second and Online Editions). Vegetation stands were delineated using field observations and aerial imagery, based on vegetation composition, dominant species, density, topography, and site disturbance. Communities were classified to the alliance level and refined to the association level where appropriate. Non-natural or disturbed land covers not included in CDFW classifications were mapped using categories recognized by regulatory agencies.

Table 4.4-1 summarizes the vegetation associations and three land cover types mapped within the project area. Figure 4.4-1 presents the spatial distribution of the vegetation communities. Descriptions of these vegetation communities and land cover types are provided in detail below. The project area contains the following native riparian vegetation communities that are adjacent to aquatic features: cattail marshes, mulefat thickets, scale broom scrub, and Fremont cottonwood forest and woodland.

Table 4.4-1. Vegetation Communities and Land Cover Types within the Project Area

Alliance/Land Cover Type-Common Name	Alliance Scientific Name	Association	Sensitive[1]	Acres of Vegetation Community in Project Area
Native Upland Scrub Communities				
Big sagebrush scrub	*Artemisia tridentata* shrubland	*Artemisia tridentata–Ericameria nauseosa*	No	8.60
		Artemisia tridentata ssp. *parishii*	Yes	28.56
		Artemisia tridentata-Eriogonum fasciculatum	No	0.05
California brittle bush–ashy buckwheat scrub	*Encelia californica-Eriogonum cinereum* shrubland	*Encelia californica*	Yes	0.63
California buckwheat scrub	*Eriogonum fasciculatum* shrubland	*Eriogonum fasciculatum–Artemisia tridentata*	Yes	4.79
California sagebrush–(purple sage) scrub	*Artemisia californica*-(*Salvia leucophylla*) shrubland	*Artemisia californica*	No	6.79
		Artemisia californica–Salvia leucophylla	No	1.44
Deerweed–silver lupine–yerba santa scrub	*Acmispon glaber-Lupinus albifrons-Eriodictyon* spp. shrubland	*Eriodictyon crassifolium*	No	6.40
Fourwing saltbush scrub	*Atriplex canescens* shrubland	*Atriplex canescens*	No	1.53
		Native Upland Scrub Communities Subtotal[2]		*58.79*
Native Upland Chaparral Communities				
Basket bush–river hawthorn–desert olive patches	*Rhus aromatica–Crataegus rivularis–Forestiera pubescens* shrubland	*Rhus aromatica*	Yes	2.49
Chamise chaparral	*Adenostoma fasciculatum* shrubland	*Adenostoma fasciculatum*	No	2.36
		Adenostoma fasciculatum–(*Ceanothus cuneatus*)	No	15.56

Alliance/Land Cover Type-Common Name	Alliance Scientific Name	Association	Sensitive[1]	Acres of Vegetation Community in Project Area
		Adenostoma fasciculatum–Eriogonum fasciculatum	No	1.79
Holly leaf cherry–toyon–greenbark ceanothus chaparral	*Prunus ilicifolia–Heteromeles arbutifolia–Ceanothus spinosus* shrubland	*Prunus ilicifolia* ssp. *ilicifolia*	Yes	10.95
Tucker oak chaparral	*Quercus john-tuckeri* shrubland	*Quercus john-tuckeri*	No	3.59
		Native Upland Chaparral Communities Subtotal[2]		*36.73*
Native Upland Woodland Communities				
Coast live oak woodland and forest	*Quercus agrifolia* woodland and forest	*Quercus agrifolia*	No	6.73
Native Riparian Communities				
Cattail marshes	*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance	*Typha angustifolia-Typha latifolia-Typha domingensis*	No	0.06
Mulefat thickets	*Baccharis salicifolia* shrubland	*Baccharis salicifolia*	No	0.59
Scale broom scrub	*Lepidospartum squamatum* shrubland	*Lepidospartum squamatum–Atriplex canescens*	Yes	2.45
		Lepidospartum squamatum–Eriogonum fasciculatum	Yes	16.83
Fremont cottonwood forest and woodland	*Populus fremontii–Fraxinus velutina–Salix gooddingii* forest and woodland	*Populus fremontii*	Yes	1.27
		Populus fremontii–Salix laevigata	Yes	0.42
		Native Riparian Communities Subtotal[2]		*21.63*
Semi-Natural Upland Communities[1]				
Non-native grassland	N/A	N/A	No	59.74
Upland mustards or star-thistle fields	*Brassica nigra–Centaurea* (*solstitialis, melitensis*) herbaceous semi-natural	*Hirschfeldia incana*	No	13.98
		Semi-Natural Upland Communities1Subtotal[2]		*73.71*
Non-Natural Land Cover Types				
Disturbed habitat	N/A	N/A	No	18.22
Ornamental plantings	N/A	N/A	No	2.10
Unvegetated wash and river bottom	N/A	N/A	No	0.78
Urban/Developed land	N/A	N/A	No	19.02
		Non-Natural Land Cover Types Subtotal[2]		*40.11*
			Total	**237.70**

Source: Dudek (2026)

Note: N/A = Not Applicable.

[1] Sensitive vegetation alliances or associations as identified in the most current California Natural Community List, released on February 27, 2025.

[2] Totals may not sum due to rounding.

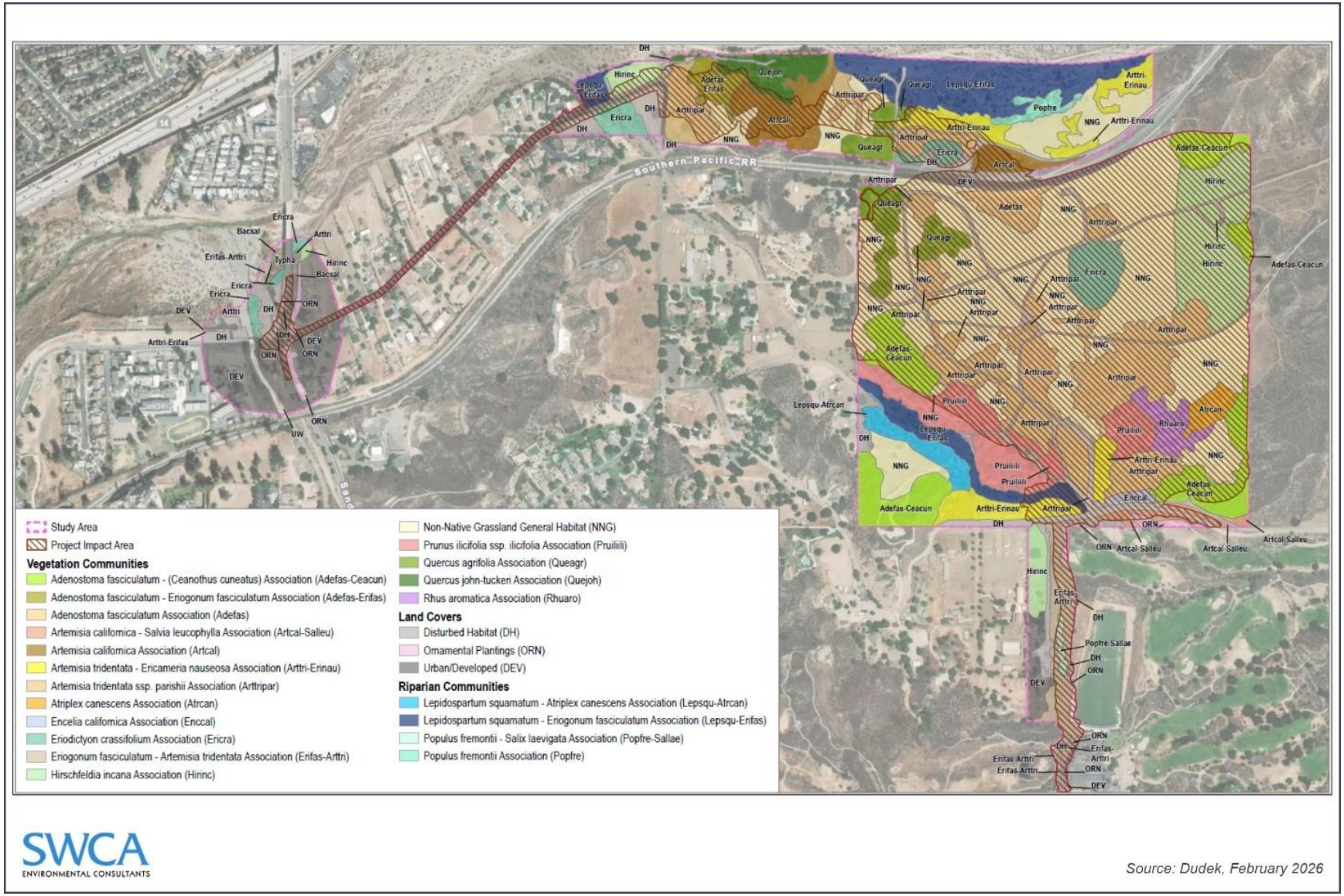


Figure 4.4-1. Vegetation Communities and Land Covers in the Project Area.

NATIVE UPLAND COMMUNITIES

Big Sagebrush Scrub

Three associations within the big sagebrush scrub alliance were mapped in the project area: *Artemisia tridentata* ssp. *parishii* association, *Artemisia tridentata–Ericameria nauseosa* association, and *Artemisia tridentata-Eriogonum fasciculatum* association. Big sagebrush scrub occurs throughout the central portion of the project area.

California Brittle Bush–Ashy Buckwheat Scrub

The only association within the California brittlebush–ashy buckwheat scrub alliance mapped in the project area was the *Encelia californica* association. California brittle bush–ashy buckwheat scrub occurs on a north-facing slope in the southeast corner of the project area.

California Buckwheat Scrub

The only association within the California buckwheat scrub alliance mapped in the project area was the *Eriogonum fasciculatum–Artemisia tridentata* association. California buckwheat scrub occurs on the gentle slopes in the southernmost tip of the project area.

California Sagebrush–(Purple Sage) Scrub

Two associations within the California sagebrush–(purple sage) scrub alliance were mapped in the project area: *Artemisia californica* association and *Artemisia californica–Salvia leucophylla* association. These associations are mapped on the slopes north of the railroad, as well as the southeast corner of the project area.

Deerweed–Silver Lupine–Yerba Santa Scrub

The only association within the deerweed–silver lupine–yerba santa scrub alliance mapped in the project area was the *Eriodictyon crassifolium* association. This association is mapped in the central and northern portion of the project area.

Fourwing Saltbush Scrub

The only association within the fourwing saltbush scrub alliance mapped in the project area was the *Atriplex canescens* association. This association is mapped in the southeastern portion of the project area.

Basket Bush–River Hawthorn–Desert Olive Patches

The only association within the basket bush–river hawthorn–desert olive patches alliance mapped in the project area was the *Rhus aromatica* association. This association occurs in the southeast corner of the project area.

Chamise Chaparral

Three associations within the chamise chaparral alliance were mapped in the project area: *Adenostoma fasciculatum* association, *Adenostoma fasciculatum–*(*Ceanothus cuneatus*) association, and *Adenostoma fasciculatum–Eriogonum fasciculatum* association. These associations are mapped on slopes throughout the edges of the project area.

Holly Leaf Cherry–Toyon–Greenbark Ceanothus Chaparral

The only association within the holly leaf cherry–toyon–greenbark ceanothus chaparral alliance mapped in the project area was the *Prunus ilicifolia* ssp. *ilicifolia* association. This association is mapped in the southern portion of the project area on undulating slopes north of Oak Spring Canyon Creek.

Tucker Oak Chaparral

The only association within the Tucker oak chaparral alliance mapped in the project area was the *Quercus john-tuckeri* association. This association is mapped in the southern portion of the project area on undulating slopes north of Oak Spring Canyon Creek.

Coast Live Oak Woodland and Forest

The only association within the coast live oak woodland and forest alliance mapped in the project area was the *Quercus agrifolia* association. This association is mapped in the northwestern portion of the project area.

NATIVE RIPARIAN COMMUNITIES

Cattail Marshes

Cattail marshes (*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance) were found in the project area surrounding the proposed Lost Canyon Road and Sand Canyon Road roundabout. The community was located at an outlet for an underground stormwater culvert.

Mulefat Thickets

The mulefat thickets shrubland alliance consists of woodland vegetation dominated by mulefat (*Baccharis salicifolia*). The community was located at an outlet for an underground stormwater culvert.

Scale Broom Scrub

Two associations within the scale broom scrub alliance were mapped in the project area: *Lepidospartum squamatum–Atriplex canescens* association and *Lepidospartum squamatum–Eriogonum fasciculatum* association. These associations are mapped within or adjacent to the stream channels for the Santa Clara River along the northern boundary of Oak Spring Canyon Creek, which cuts through the southwest and northwest corners of the project area.

Fremont Cottonwood Forest and Woodland

Two associations within the Fremont cottonwood forest and woodland alliance were mapped in the project area: *Populus fremontii* association and *Populus fremontii–Salix laevigata* association. These associations are mapped within the Santa Clara River stream channels, as well as in the southernmost extent of the project area.

SEMI-NATURAL UPLAND COMMUNITIES

Nonnative Grassland

Nonnative grassland is not included in the CDFW California Natural Community List (Dudek 2026); however, nonnative grassland is scattered throughout flat and gently sloping areas of the project area.

Upland Mustards or Star-Thistle Fields

The only association within the upland mustards or star-thistle fields alliance mapped in the project area was the *Hirschfeldia incana* association. This association is mapped primarily in the northeastern portion of the project area, but also in the southernmost extent and the northwest corner.

NON-NATURAL LAND COVER TYPES

Disturbed Habitat

Disturbed habitat refers to areas where soils have been recently or repeatedly disturbed by grading, compaction, or clearing of vegetation. Disturbed habitat is not a listed vegetation community under the CDFW California Natural Community List (Dudek 2026). Disturbed habitat is mapped along unpaved roadways throughout the project area, as well as lots adjacent to residences or roads that appear to be regularly mowed.

Ornamental Plantings

Ornamental plantings refer to areas where nonnative ornamental species and landscaping schemes have been installed and maintained, usually as part of commercial or residential property/park. Parks and ornamental plantings land cover are not a listed vegetation community under the CDFW California Natural Community List (Dudek 2026); however, ornamental plantings are mapped in the southeast corner of the project area, comprising the Sand Canyon Country Club golf course facilities.

Urban/Developed Land

Urban or developed land refers to areas that have been constructed on or otherwise physically altered to the point where vegetation is no longer present. In the project area, the urban/developed land cover consists of a paved road, Lost Canyon Road, in the northwest corner and maintained areas associated with residences along the southernmost extent of the project area.

4.4.1.4 Special-Status Plant Species

Special-status plant species include those listed or proposed for listing under the Federal and California Endangered Species Acts (FESA and CESA) and plants with a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 1 or 2. Species with a CRPR of 3 or 4 were not considered special-status for CEQA and were not analyzed further.

Special-status wildlife species include those listed or proposed under the FESA or CESA, California Species of Special Concern (SSC), and fully protected species under the California Fish and Game Code.

The potential for special-status plants and wildlife to occur was evaluated based on known geographic and elevational ranges, habitat suitability, and relevant life-history information. Following reconnaissance surveys, species were assigned likelihood-of-occurrence categories ranging from “known to occur” to “not expected to occur,” with supporting rationale provided for each determination:

- **Known to occur:** the species has been documented on the property by a reliable source.
- **High potential to occur:** the species has not been documented on the property but is known to recently occur in the vicinity and suitable habitat is present.
- **Moderate potential to occur:** the species has not been documented on the property or in the vicinity, but the project site is within the known range of the species and suitable habitat for the species is present.

- **Low potential to occur:** the species has not been documented in the vicinity or on the property, but the project site is within the known range of the species; however, suitable habitat for the species on-site is of low quality.
- **Not expected to occur:** the property is outside the known geographic or elevational range of the species and/or the project site does not support suitable habitat for the species.

Two special-status plant species—slender mariposa lily (*Calochortus clavatus* var. *gracilis*) and Peirson's morning-glory (*Calystegia peirsonii*)—were recorded in the project area. Table 4.4-2 summarizes the regulatory status, ecological associations, and potential for the two species to occur. No other species were determined to have a moderate or high potential to occur in the project area. No critical habitat for plants has been designated within the project area (Dudek 2026).

Table 4.4-2. Special-Status Plant Species Occurring in the Project Area

Scientific Name	Common Name	Status (Federal / State / CRPR)	Primary Habitat Associations / Life Form / Blooming Period / Elevation Range	Potential to Occur
Calochortus clavatus var. *gracilis*	slender mariposa lily	None / None / 1B.2[1]	Chaparral, coastal scrub, valley and foothill grassland / perennial bulbiferous herb / March–June (November) / 1,045–3,280 feet	**Occurs.** Seven individuals were documented in the southeast corner of the project area, where the species has previously been documented.
Calystegia peirsonii	Peirson's morning-glory	None / None / 4.2[2]	Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland / perennial rhizomatous herb / April–June / 100–4,920 feet	**Occurs.** Eighty-one individuals were observed at four locations along the northeastern and southeastern boundaries of the project area.

Source: Dudek (2026)

[1] CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere;
Threat rank of _.2: Moderately threatened in California (20%–80% of occurrences threatened/moderate degree and immediacy of threat).

[2] CRPR 4: Watch List: Plants of limited distribution;
Threat rank of _.2: Moderately threatened in California (20% - 80% of occurrences threatened/moderate degree and immediacy of threat).

SLENDER MARIPOSA LILY

One special-status plant—slender mariposa lily—occurs within the project area. Seven individual plants were documented in 2024, compared to eight in 2014, none in 2016 or 2018, and 11 in 2019. This species is CRPR 1B, indicating the plant is rare, threatened, or endangered in California or elsewhere. The plants on-site are likely part of a population previously mapped on the adjacent parcel to the east (Dudek 2026). The species is widely distributed, with 143 CNDDB occurrences (91 within 15 miles of the project area) and 140 herbarium records, and reported population sizes ranging from fewer than 10 to nearly 10,000 individuals (Dudek 2026).

PEIRSON'S MORNING-GLORY

Eighty-one individual plants of Peirson's morning-glory were documented at four locations along the northeastern and southeastern boundaries of the project area. The species is designated as CRPR 4, indicating limited distribution or infrequent occurrence Statewide and a need for ongoing monitoring

(Dudek 2026). This species is represented by 26 CNDDB occurrences and 182 herbarium records, primarily in northwestern Los Angeles County (Dudek 2026).

4.4.1.5 Special-Status Wildlife Species

The appendices to the BRTR[2] list special-status wildlife species are known to occur in the vicinity of the project area (Dudek 2026; see EIR Appendix C). From this more comprehensive listing, Dudek narrowed the list of special-status species that have either been observed at the project site or have a moderate to high potential to occur at the area studied for the BRTR (which includes the larger approximate 238-acre study area of the BRTR[3]). Table 4.4-3 summarizes the regulatory status, ecological associations, and potential for the special-status species that have the potential to occur within the project's proposed development area.

Table 4.4-3. Special-Status Wildlife Species Occurring or with a Moderate or High Potential to Occur in the Project Area

Scientific Name	Common Name	Status[1] (Federal / State)	Habitat	Potential to Occur
Invertebrates				
Bombus crotchii	Crotch's bumble bee	None / CSE	Open grassland and scrub communities supporting suitable floral resources	**Occurs.** This species was identified in the project area during focused surveys for bumble bees.
Fish				
Dudek's initial screening identified a moderate potential to occur for several listed fish species within the project parcels -- Santa Ana sucker (*Catostomus santaanae*), unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), and arroyo chub (*Gila orcuttii*). However, as substantiated by the analysis in the BRTR, it has been determined that there is no suitable habitat for these species within the area proposed for development (Dudek 2026).				
Reptiles				
Anniella spp.	California legless lizard	None / SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	**Moderate potential to occur.** Suitable habitat for this species is present in the project site.
Anniella stebbinsi	Southern California legless lizard	None / SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	**Moderate potential to occur.** Suitable habitat for this species is present in the project site.
Arizona elegans occidentalis	California glossy snake	None / SSC	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils	**Moderate potential to occur.** Suitable habitat for this species is present in the project site.

[2] See Appendices G and H to the BRTR (see EIR Appendix C).

[3] Only a portion of the 238-acre area is proposed for development. Because the BRTR analyzed a larger area than is proposed for development, there is a difference between the "project site" (208 acres) identified in Chapter 2, *Project Description*, and the BRTR study area (238 acres).

Scientific Name	Common Name	Status[1] (Federal / State)	Habitat	Potential to Occur
Aspidoscelis tigris stejnegeri	coastal whiptail	None / SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas	**Occurs.** This species was observed in the project site.
Phrynosoma blainvillii	Blainville's horned lizard	None / SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	**High potential to occur.** This species was observed during surveys in 2016 but not during subsequent surveys of the project site.
Birds				
Accipiter cooperii (nesting)	Cooper's hawk	None / WL	Nests and forages in dense stands of live oak, riparian woodlands, or other woodland habitats often near water	**Occurs.** This species was observed foraging in the project area during surveys. Suitable nesting habitat is present in the *Quercus agrifolia* association located in the northwestern portion of the project site.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None / WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	**Occurs.** This species was observed during surveys in 2024 in the *Adenostoma fasciculatum* - (*Ceanothus cuneatus*) association in the western portion of the project site.
Artemisiospiza belli belli	Bell's sage sparrow	None / WL	Nests and forages in coastal scrub and dry chaparral; typically in large, unfragmented patches dominated by chamise; nests in more dense patches but uses more open habitat in winter	**High potential to occur.** Suitable habitat for this species is present and there is a 2007 record approximately 2,000 feet from the project site.
Mammals				
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None / SSC	Coastal sage scrub habitats in Southern California; intermediate canopy stages of shrub habitats and open shrub / herbaceous and tree / herbaceous edges	**Occurs.** One individual was observed during 2018 surveys and suitable habitat for this species is present at the project site.
Puma concolor (Southern California/ Central Coast Evolutionarily Significant Unit)	mountain lion	None / ST	Scrubs, chaparral, riparian, woodland, and forest; rests in rocky areas and on cliffs and ledges that provide cover; most abundant in riparian areas and brushy stages of most habitats throughout California, except deserts	**High potential to occur.** This wide-ranging species is expected to use the project area for range movement, foraging, and dispersal, but not for natal dens due to the human activity present (i.e., railroad use, golf course, SR-14, and residential housing).

Source: Dudek (2026)

[1] Status Abbreviations: ST: State Listed Threatened; CSE: Candidate for State Endangered; SSC: California Species of Special Concern; WL: CDFW Watch List

A discussion of the species identified in Table 4.4-3 is provided below.

In addition, focused surveys were conducted at the project site for the Federally threatened coastal California gnatcatcher (*Polioptila californica californica*), which is also a CDFW SSC, due to a heightened level of concern regarding this species and its regulatory status. This species is not included in Table 4.4-3 because it was determined to not have potential to occur in the project area through these focused surveys. Protocol presence/absence surveys for the coastal California gnatcatcher were conducted between May 15 and June 29, 2024, following U.S. Fish and Wildlife Service (USFWS) guidelines. Six surveys were completed during the breeding season, providing full auditory and visual coverage of suitable habitat within the project area. The survey effort focused on on-site habitat and adjacent areas within 500 feet of the project area boundary; however, no individuals of the species were observed during the focused surveys.

SPECIAL-STATUS INVERTEBRATES

Crotch's bumble bee (*Bombus crotchii*) is one of several bumble bee species proposed for listing as an endangered species under the CESA (Dudek 2026). It is considered a candidate species under the CESA and receives the same protection as a listed species. Like most bumble bees, Crotch's bumble bee nests in cavities in the soil, often in abandoned rodent burrows. Adults (queens, workers, and males) are active in the daytime and forage for nectar and pollen resources. Crotch's bumble bee utilizes a diverse range of floral resources and exhibit clear contextual preferences associated with flower species availability on any given time and location. Typically, *Asclepias* spp., *Salvia* spp., *Astragalus* spp., *Acmispon* spp., and *Vicia* spp. are among much preferred flowers.

Three protocol-level surveys for Crotch's bumble bee were conducted on June 11, July 1, and July 17, 2024, in accordance with CDFW guidance. Surveys were completed under suitable weather conditions and at an intensity of one person-hour per three acres of suitable habitat, using wandering transects to detect foraging bees and potential nest sites.

Eight Crotch's bumble bee were identified within the project area. The individuals were found within the *Artemisia tridentata* ssp. *parishii* association in the southern portion of the project area near Oak Spring Canyon Road. More than 100 Voznesensky bumble bee (*Bombus vosnesenskii*) and six black tail bumble bee (*Bombus melanopygus*), both common species, were also observed.

SPECIAL-STATUS FISH

Santa Ana sucker (*Catostomus santaanae*) is a fish species endemic to the Los Angeles, San Gabriel, and Santa Ana watersheds and was Federally listed as threatened on April 12, 2000 (Dudek 2026). Santa Ana sucker also occurs in the Santa Clara River, where it was previously assumed to be introduced; this population was not considered part of the listed entity. This species could occur in the Santa Clara River; however, there is no suitable habitat within the area that is proposed for project development. Similarly, unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*) and arroyo chub (*Gila orcuttii*) could occur in the northern portion of the Santa Clara River; however, there is no suitable habitat within the area that is proposed for project development.

SPECIAL-STATUS TERRESTRIAL WILDLIFE

The San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) is a CDFW SSC. San Diego black-tailed jackrabbit was observed within the BRTR study area during 2018 surveys and suitable habitat is present at the project site. The species uses open grasslands, agricultural fields, and sparse coastal scrub and it is not typically found in high grass or dense brush.

The California mountain lion (*Puma concolor*) has a high potential to occur in the project area. This wide-ranging species is expected to use the project area for range movement, foraging, and dispersal, but not for natal dens due to the human activity present (i.e., railroad use, golf course, SR-14, and residential housing). However, no natal dens were detected during extensive field surveys, and none are expected due to nearby human disturbances (i.e., rail traffic, golf course, SR-14, and residential development), which typically deter denning females (Dudek 2026). Regional mountain lion movement is expected to occur primarily in undeveloped areas east of the project site, including the Angeles National Forest, and along the Santa Clara River.

Five reptile species—California legless lizard (*Anniella* spp.), Southern California legless lizard (*Anniella stebbinsi*), California glossy snake (*Arizona elegans occidentalis*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), and Blainville's horned lizard (*Phrynosoma blainvillii*)—have the potential to occur at the project site; all are designated as CDFW SSC.

SPECIAL-STATUS AND PROTECTED NESTING BIRD SPECIES

Three special-status bird species—Cooper's hawk (*Accipiter cooperii*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and Bell's sage sparrow (*Artemisiospiza belli belli*)—have suitable nesting habitat within the project site. In addition, nesting habitat is present for several common bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (§§ 3503, 3503.5, and 3513).

4.4.1.6 Wildlife Corridors and Habitat Linkages

Wildlife corridors connect large areas of natural open space and facilitate animal movement, including aquatic pathways for fish. Habitat linkages are smaller areas that connect habitat blocks and help reduce fragmentation by allowing wildlife movement.

The project area is not located within any designated wildlife corridors or habitat linkages identified by South Coast Wildlands or CDFW's California Essential Habitat Connectivity Project, as shown in the CDFW Biogeographic Information and Observation System (BIOS) database (Dudek 2026). Locally, the Santa Clara River along the northern edge of the project area provides limited aquatic and terrestrial wildlife movement when water is present. However, SR-14, residential development, railroad tracks, and nearby urban land uses constrain wildlife movement to the north, south, and west. Hillsides to the east, including Angeles National Forest lands approximately 0.25 mile away, may support regional terrestrial wildlife movement.

4.4.1.7 Native Wildlife Nursery Sites

Vegetation within the project area may provide nesting habitat for common bird species. However, no evidence of bird rookeries (e.g., multiple nests or whitewash) or large maternal or overwintering bat roosts (e.g., concentrated guano or roost odors) was observed. Sparse ornamental landscaping and limited foraging habitat reduce the likelihood of bird rookeries, and the absence of typical urban bat roost features (such as bridges or older buildings with structural gaps) make bat natal roosting unlikely.

4.4.1.8 Locally Protected Oak Trees

The City protects certain oak trees within the City boundaries. Santa Clarita Municipal Code (SCMC) § 17.51.040 (Oak Tree Preservation) governs the removal, pruning, cutting, and/or encroachment into the protected zone of oak trees. The SCMC provides certain designations for protected oak trees and zones. To comply with the SCMC, tree inventories were conducted by Dudek from February 14 through 16 and August 7 through 9, 2024, and on March 11, 2025. The tree inventories documented all regulated oak trees within the project area. Trees were mapped using Esri ArcGIS Field Maps with sub-meter GPS receivers, and certified arborists evaluated trees potentially affected by project development.

Within the project area, 421 oak trees with protected zones were documented. Of these, 355 qualify as regulated trees under the SCMC, including 73 designated as heritage oak trees. The remaining 66 trees, including all dead trees, are non-jurisdictional and not protected by the City. Table 4.4-4 provides a summary of the species and regulation status of all trees mapped within the project area. Additional information regarding locally protected oak trees within the project area is available in the BRTR (Dudek 2026; see EIR Appendix C).

Table 4.4-4. Summary Trees within the Project Area

Scientific Name	Common Name	Total Trees
Quercus agrifolia	coast live oak	202 (159) ((73))
Quercus john-tuckeri	Tucker oak	218 (195) ((0))
Quercus chrysolepis	canyon live oak	1 (1) ((0))
	Total	**421 (355) ((73))**

Source: Dudek (2026)

Note: (X) = regulated trees; ((X)) = number of heritage trees.

4.4.1.9 Jurisdictional Wetlands and Waters

A desktop review of the USFWS National Wetland Inventory (NWI) database identified four features in the vicinity of the project site: Santa Clara River, Oak Spring Canyon Creek, Sand Canyon Creek, and a stormwater channel adjacent to Sand Canyon Road near the proposed roundabout (Dudek 2026). The Santa Clara River occurs in the northern extent of the project area. Oak Spring Canyon Creek, a drainage located in the southern and western extent of the project site, is a direct tributary to the Santa Clara River. Sand Canyon Creek generally runs parallel to Sand Canyon Road; in the vicinity of the project, it is north of the Lost Canyon Road and Sand Canyon Road intersection (where the roundabout is proposed).

WATERS OF THE UNITED STATES

Wetlands subject to U.S. Army Corps of Engineers (USACE) jurisdiction were delineated following the *Corps of Engineers Wetlands Delineation Manual* and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Dudek 2026). Non-wetland waters were identified using ordinary high-water mark (OHWM) indicators consistent with USACE guidance for the Arid West (Dudek 2026). Channel widths were measured in the field, and OHWM data forms were completed at representative cross-sections.

Approximately 15.75 acres of non-wetland waters potentially regulated by USACE were mapped within the Santa Clara River, as summarized in Table 4.4-5 and illustrated in Figure 4.4-2.

Table 4.4-5. Potential USACE Aquatic Resource Summary for the Project Area

Feature Name	Cowardin[1]	OHWM Indicators[2]	Acres / Linear Feet
Santa Clara River	Riverine, At-Least-Intermittent	CAST, CVS, CVC, BBS, SD, SB, SS, DP	15.75 / 3,138

Source: Dudek (2026)

[1] Pursuant to *Classification of Wetlands and Deepwater Habitats of the United States* and *Cowardin Codes for ORM Data Entry*.

[2] CAST = change in average sediment texture; CVS = change in vegetation species; CVC = change in vegetation cover; BBS = break in bank slope; SD = sediment deposition; SB = sediment benches; SS = surface scour; DP = drainage patterns

WATERS OF THE STATE POTENTIALLY REGULATED BY RWQCB

Waters of the State under Regional Water Quality Control Board (RWQCB) jurisdiction were delineated in accordance with the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Dudek 2026). Wetlands were delineated using USACE wetland methods, and non-wetland waters were delineated at the OHWM.

Approximately 21.98 acres of non-wetland waters potentially regulated by the RWQCB were mapped within the Santa Clara River, Oak Spring Canyon Creek, Sand Canyon Creek, and a stormwater channel adjacent to the east of Sand Canyon Road near the roundabout, as summarized in Table 4.4-6 and illustrated in Figure 4.4-3.

Table 4.4-6. Potential RWQCB Aquatic Resource Summary for the Project Area

Feature Name	Acres / Linear Feet[1]
Non-Wetland Waters	
Santa Clara River	15.75 / 3,138
Oak Spring Canyon Creek	5.25 / 2,546
Sand Canyon Creek	0.81 / 790
Stormwater Channel	0.17 / 310
Total	**21.98 / 6,784**

Source: Dudek (2026)

[1] Totals may not sum due to rounding.

AQUATIC RESOURCES POTENTIALLY REGULATED BY CDFW

Dudek mapped areas subject to CDFW jurisdiction consistent with Fish and Game Code § 1602, including streambeds, channel banks, and the outer dripline of riparian vegetation. Streambed delineations followed the Cowardin classification system, based on the presence of hydric soils, hydrophytic vegetation, and/or hydrologic indicators.

Approximately 24.98 acres of streambed and adjacent riparian vegetation potentially regulated by the CDFW were mapped within the Santa Clara River, Oak Spring Canyon Creek, Sand Canyon Creek, and a stormwater channel adjacent to the east of Sand Canyon Road near the roundabout, as summarized in Table 4.4-7 and illustrated in Figure 4.4-3.

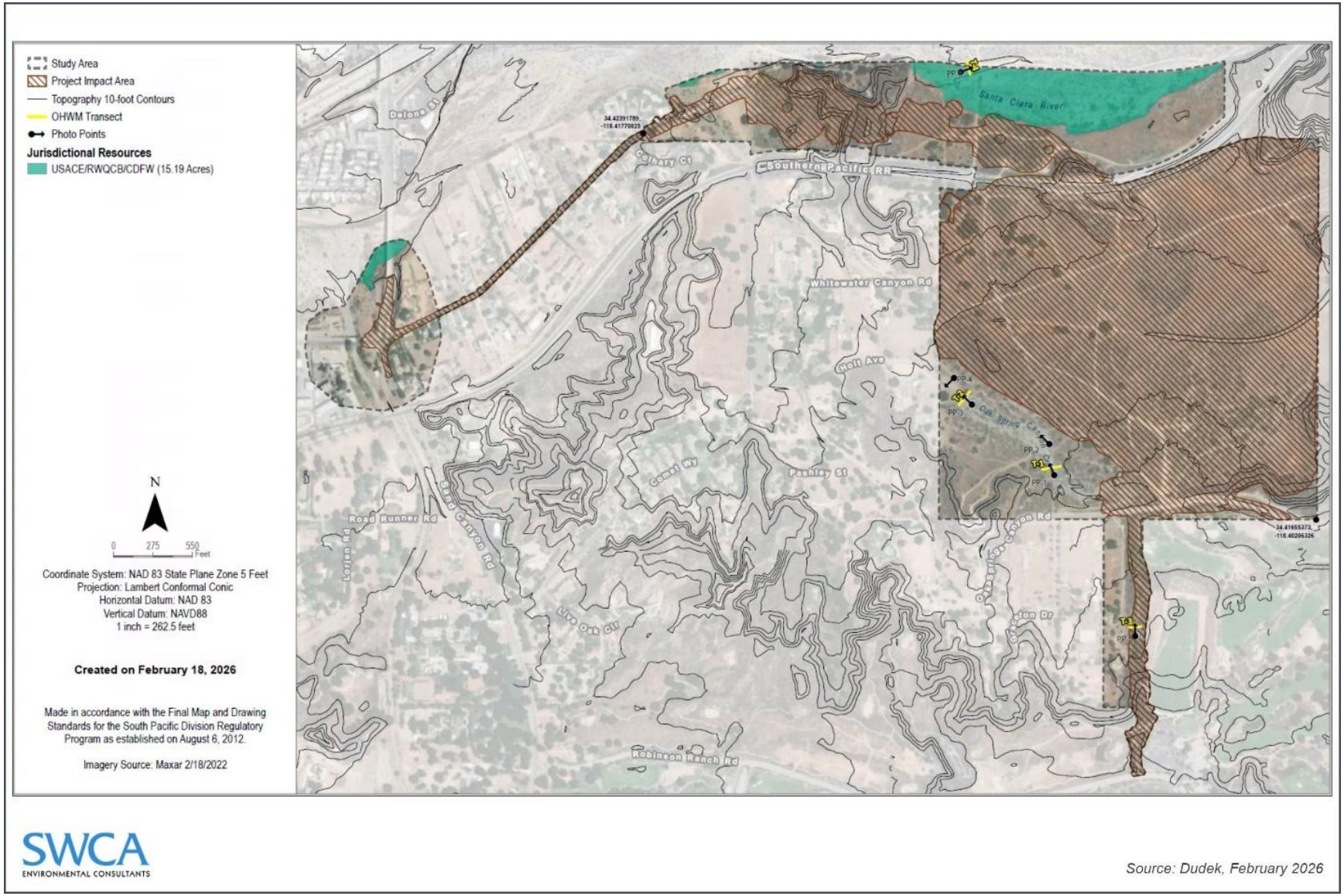


Figure 4.4-2. Potential USACE Jurisdictional Aquatic Resources.

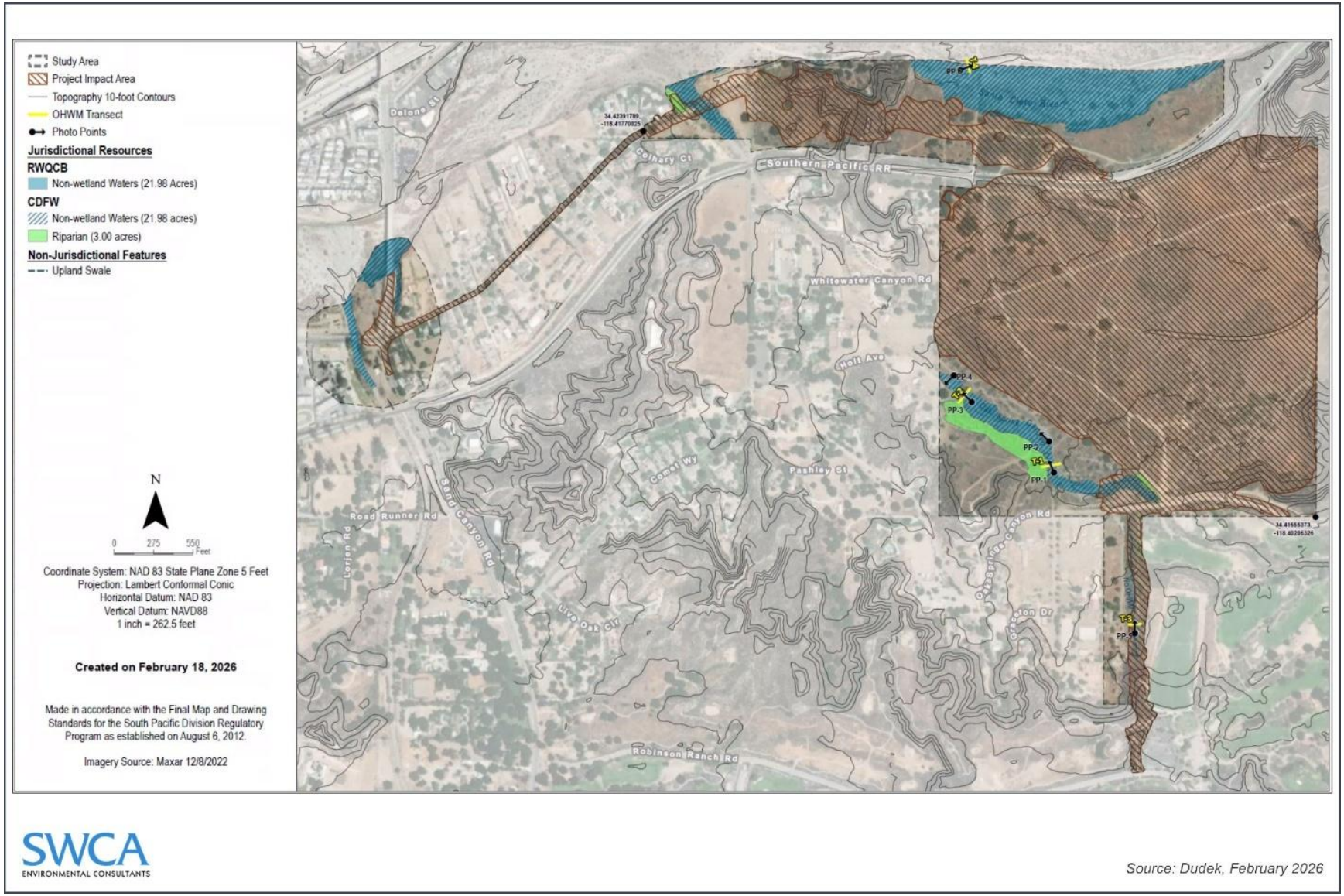


Figure 4.4-3. Potential RWQCB and CDFW Jurisdictional Aquatic Resources.

Table 4.4-7. CDFW Aquatic Resource Summary for the Project Area

Feature Name	Acres / Linear Feet[1]
Streambed and Bank	
Santa Clara River	15.75 / 3,138
Oak Spring Canyon Creek	5.25 / 2,546
Sand Canyon Creek	0.81 / 790
Stormwater Channel	0.17 / 310
Streambed and Bank Total	**21.98 / 6,784**
Adjacent Riparian Vegetation	
Santa Clara River	**3.00 / --**
Adjacent Riparian Vegetation Total	**24.98 / 6,784**

Source: Dudek (2026)
[1] Totals may not sum due to rounding.

4.4.1.10 Significant Ecological Area Overlay Zone

Portions of the project area are located within the City designated Significant Ecological Area (SEA) and are subject to SCMC § 17.38.080 (SEA—Significant Ecological Area Overlay Zone). The Santa Clara River SEA was established to protect sensitive plant communities, including native grassland, riparian forest and woodland types, freshwater marsh, alluvial fan sage scrub, and vernal pools (Dudek 2026). The SEA also serves as a critical regional wildlife movement corridor linking the Mojave Desert, San Gabriel Mountains, Santa Susana Mountains, Coast Ranges, and Oxnard coastal plain (Dudek 2026).

The SEA Overlay Zone supports, or has the potential to support, numerous sensitive plant and wildlife species. Most of these species have been determined to be absent from the project site and/or have a low potential to occur, including the slender-horned spineflower (*Dodecahema leptoceras*), California red-legged frog (*Rana draytonii*), arroyo toad (*Anaxyrus californicus*), southwestern pond turtle (*Actinemys pallida*), least Bell's vireo (*Vireo bellii pusillus*), and southwestern willow flycatcher (*Empidonax traillii extimus*) (Dudek 2026). For additional analysis of these species and information documenting their low potential for occurrence, refer to Appendix G and H to the BRTR (Dudek 2026; see EIR Appendix C). In addition to these species, the SEA Overlay Zone also protects the Federally endangered unarmored threespine stickleback, which has a moderate potential to occur in the Santa Clara River; however, there is no suitable habitat for this species within the area proposed for development (the project site); the project site does not encroach into the Santa Ana River.

4.4.1.11 Local, Regional, or State Habitat Conservation Plans

The project area is not located within any habitat conservation plan (HCP), natural community conservation plan (NCCP), or other approved local, regional, or State HCP (Dudek 2026).

4.4.2 Regulatory Setting

4.4.2.1 Federal

CLEAN WATER ACT

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity" of the waters of the United States. Waters of the United States are broadly defined to include navigable waters, perennial and intermittent streams, lakes, rivers, and ponds, as well as wetlands, marshes, and wet meadows.

Section 404

Section 404 of the CWA (33 United States Code [USC] § 1344) authorizes the USACE to issue permits regulating the discharge of dredged or fill materials into the waters of the United States. The objective is to ensure that no discharge of dredged or fill material may be permitted if a practical and less-damaging alternative exists or if the waters of the United States would be significantly degraded. Projects may be permitted on an individual basis or may be covered under one of several approved nationwide permits. Individual permits are required for potentially significant impacts and are assessed based on the type of action (e.g., amount of fill). Individual permits also typically require substantial time for review and approval by the USACE. Nationwide permits are preapproved for a project if it meets appropriate conditions set forth in a nationwide permit. A CWA Section 401 (33 USC § 1341) Water Quality Certification, which is administered by the State Water Resources Control Board (State Water Board), must be issued before issuance of any Section 404 permit.

Section 401

Section 401 of the CWA (33 USC § 1341) requires an applicant requesting a Federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide State certification that the proposed activity will not violate Federal and State water quality standards. In California, a Section 401 Certification is issued by the RWQCBs and by the State Water Board for multi-region projects. If a Section 401 Certification is issued, it may include binding conditions, imposed either through the certification itself or through the requested Federal license or permit.

FEDERAL ENDANGERED SPECIES ACT (16 USC §§ 1531-1544)

The USFWS and National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) share responsibility for implementing the FESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NOAA Fisheries implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered animal species, or a threatened or endangered plant species if occurring on Federal land, are required to obtain permits from the USFWS or NOAA Fisheries through either interagency consultation with a Federal nexus or a Habitat Conservation Plan, depending on the involvement by the Federal government in funding, authorizing, or carrying out a project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under Federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of FESA; however, the USFWS and NOAA Fisheries advise project applicants that they could be elevated to listed status at any time.

MIGRATORY BIRD TREATY ACT (16 USC §§ 703–712)

The MBTA of 1918 is intended to ensure the sustainability of populations of all protected migratory bird species. The MBTA prohibits the take of protected migratory bird species without prior authorization by USFWS. A migratory bird species is included on the list of protected species if it meets one or more of the following criteria:

- Occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments;
- Revised taxonomy results in the species being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes; or
- New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

MBTA requires USFWS to publish a list of all nonnative, human-introduced bird species to which the MBTA does not apply. List of Birds Protected by the MBTA is codified in 50 Code of Federal Regulations § 10.13.

4.4.2.2 State

CALIFORNIA ENDANGERED SPECIES ACT

The CESA (Fish and Game Code §§ 2050 et seq.) prohibits take of State-listed threatened or endangered species. Take under the CESA is defined as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, the CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the FESA, the CESA's protections extend to candidate species during the period (typically 1 year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

CALIFORNIA FISH AND GAME CODE

The Fish and Game Code prohibits the take of species designated as fully protected, such as certain species of birds (e.g., egret, osprey, etc.), fish, amphibians, and reptiles (Fish and Game Code §§ 3505, 3511, 4700, 5050, and 5515). If a project is planned in an area where any of these fully protected species occur, the applicant must either design the project to avoid take of these protected species or apply for a permit to take the species under Fish and Game Code § 2081.7 or § 2835.

Fish and Game Code § 1602 requires persons to first notify the CDFW before undertaking any work that could substantially change the flow or the bed, bank, or channel of a river, stream, or lake, or place material where it could wash into those waters. After the CDFW receives a complete notice, if it decides the work will not substantially harm existing fish or wildlife resources, it allows work to proceed without a Lake or Streambed Alteration Agreement (SAA). If the CDFW decides the work may substantially harm those resources, it will issue a draft SAA that lists reasonable measures to protect them, and persons must agree to and follow those measures before starting work. For standard-term agreements, the CDFW generally issues a draft SAA within 60 days after determining the notification package is complete. If the

CDFW does not issue a draft agreement within that timeframe, work may proceed as described in the notice, including implementation of any proposed protective measures.

PORTER-COLOGNE WATER QUALITY CONTROL ACT

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (Water Code § 13000, et seq.), the policy of the State is as follows:

- The quality of all the waters of the State must be protected,
- All activities and factors affecting the quality of water must be regulated to attain the highest water quality within reason, and
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established the State Water Board and nine RWQCBs (based on watershed boundaries), which are all charged with implementing its provisions and have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, reviews RWQCB decisions, and allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The State Water Board and RWQCBs have numerous nonpoint source-related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

4.4.2.3 Local

CITY OF SANTA CLARITA OAK TREE REGULATIONS

The City of Santa Clarita Oak Tree Preservation regulations (SCMC § 17.51.040, Oak Tree Preservation) protects and preserves oak trees in the City and provides regulatory measures to accomplish this purpose. This policy applies to the removal, pruning, cutting, and/or encroachment into the protected zone of oak trees. The following definitions are provided in the ordinance:

- "Oak tree" means any oak tree of the genus *Quercus*, including but not limited to valley oak (*Q. lobata*), California live oak (*Q. agrifolia*), canyon oak (*Q. chrysolepis*), interior live oak (*Q. wislizenii*), and scrub oak (*Q. dumosa*), regardless of size.
- "Heritage oak tree" means any oak tree measuring 108 inches or more in circumference or, in the case of a multiple trunk oak tree, two or more trunks measuring 72 inches each or greater in circumference, measured 4.5 feet above the natural grade surrounding each tree. In addition, the City Planning Commission and/or City Council may classify any oak tree, regardless of size, as a heritage tree if it is determined by a majority vote thereof that such tree has exceptional historic, aesthetic, and/or environmental qualities of major significance or prominence to the community.
- "Oak tree protected zone" means a specifically defined area totally encompassing an oak tree within which work activities are strictly controlled. Using the dripline as a point of reference, the protected zone shall commence at a point five feet outside of the dripline and extend inward to the trunk of the tree. In no case may the protected zone be less than 15 feet from the trunk of an oak tree.

An oak tree permit is required to cut, prune, remove, relocate, endanger, damage, or encroach into the protected zone of any oak tree on any public or private property within the city. Oak trees that do not exceed six inches in circumference when measured at a point 4.5 feet above the tree's natural grade are exempt from the permit.

SIGNIFICANT ECOLOGICAL AREA OVERLAY ZONE

The project area is within the City's SEA Overlay Zone and includes biological resources, including trees, that are protected under SCMC § 17.38.080 (SEA—Significant Ecological Area Overlay Zone). The SEA Overlay Zone was established to achieve the City's objective to preserve the SEA within the city limits for the public health, safety, and welfare for the long-term benefit of the community, maintenance of the unique visual characteristics, resources, and ridgeline integrity. The associated infrastructure improvements proposed in the southern portion of the project area would be within the City's Planned Development (PD) Overlay Zone.

CITY OF SANTA CLARITA GENERAL PLAN

Applicable goals, objectives, and policies from the *City of Santa Clarita General Plan Conservation and Open Space Element* are listed below in Table 4.4-8.

Table 4.4-8. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Objective CO 1.5	Manage urban development and human-built systems to minimize harm to ecosystems, watersheds, and other natural systems, such as urban runoff treatment trains that infiltrate, treat and remove direct connections to impervious areas.
Policy CO 1.5.2	Design and manage public urban infrastructure systems to reduce impacts to natural systems.
Policy CO 1.5.3	Consider life-cycles for buildings, development patterns, and uses, and their long-term effects on natural systems, through the following measures: • Through the environmental review and development review processes, consider the impacts of new development on renewable systems through various phases including construction, use and operation, potential reuse, cessation of use, demolition, and reuse or restoration of the development site. • Ensure that mitigation measures and conditions of approval intended to protect natural systems are adequately funded and monitored for the required timeframe.
Goal CO 3	Conservation of biological resource and ecosystems, including sensitive habitats and species.
Objective CO 3.1	In review of development plans and Projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.
Policy CO 3.1.2	Avoid designating or approving new development that will adversely impact wetlands, floodplains, threatened or endangered species and habitat, and water bodies supporting fish or recreational uses, and establish an adequate buffer area as deemed appropriate through site specific review.
Policy CO 3.1.5	Promote the use of site-appropriate native or adapted plant materials and prohibit use of invasive or noxious plant species in landscape designs.
Policy CO 3.1.6	On development sites, preserve and enhance natural site elements including existing water bodies, soil conditions, ecosystems, trees, vegetation and habitat, to the extent feasible.
Policy CO 3.1.8	On development sites, require tree planting to provide habitat and shade to reduce the heat island effect caused by pavement and buildings.
Policy CO 3.1.9	During construction, ensure preservation of habitat and trees designated to be protected through use of fencing and other means as appropriate, so as to prevent damage by grading, soil compaction, pollution, erosion or other adverse construction impacts.
Policy CO 3.1.10	To the extent feasible, encourage the use of open space to promote biodiversity.

Goal/Objective/ Policy	Description
Objective CO 3.2	Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.
Policy CO 3.2.2	Ensure that development is located and designated to protect oak, and other significant indigenous woodlands.
Policy CO 3.2.3	Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.
Policy CO 3.2.4	Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources.
Policy CO 3.3.1	Protect the banks and adjacent riparian habitat along the Santa Clara River and its tributaries, to provide wildlife corridors.
Policy CO 3.3.5	Encourage connection of natural open space areas in site design, to allow for wildlife movement.
Policy CO 3.5.1	Continue to plant and maintain trees on public lands and within the public right-of-way to provide shade and walkable streets, incorporating measures to ensure that roots have access to oxygen at tree maturity, such as use of porous concrete.
Policy CO 3.5.2	Where appropriate, promote planting of trees that are native or climactically appropriate to the surrounding environment, emphasizing oaks, sycamores, maple, walnut, and other native species in order to enhance habitat, and discouraging the use of introduced species such as eucalyptus, pepper trees, and palms except as ornamental landscape features.
Policy CO 3.6.1	Minimize light trespass, sky-glow, glare, and other adverse impacts on the nocturnal ecosystem by limiting exterior lighting to the level needed for safety and comfort; reduce unnecessary lighting for landscaping and architectural purposes and encourage reduction of lighting levels during nonbusiness nighttime hours.

4.4.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to biological resources if the project would:

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

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, without limitation, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means.

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.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

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.

Each of these thresholds is discussed under Section 4.4.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.4.4 Impact Assessment Methodology

The analysis of impacts related to biological resources considered the improvements in the project area, including the project's off-site improvements. The impact assessment focuses on identifying potential impacts associated with implementation of the project and is based on the project area's existing conditions, the regulatory setting, and the project description. The emphasis is on determining the potential effects of the project on Federally, State, and locally regulated species and habitats within the project area. The impact assessment is based on the results of the BRTR prepared for the project (Dudek 2026; see EIR Appendix C). Data used by Dudek to assess biological resources present within the project area were obtained through a review of pertinent literature, field reconnaissance, and tree survey. Information, conclusions, and mitigation measures included in the assessment are based on a review of relevant regulations (Section 4.4.3, *Regulatory Setting*) and the information gathered through the various existing conditions reconnaissance efforts. For a full description of how existing biological setting information was obtained, which sets the basis for the analysis, refer to the full BRTR (Dudek 2026).

4.4.4.1 Conservation and Mitigation Elements of the Project

During the project design and development process, the applicant determined that areas of the project site should be set aside for conservation and restoration. These conservation and habitat enhancement efforts are integral to the project being proposed and form a foundation for consideration of whether the project would cause significant impacts to biological habitats and resources, it is important to understand these features before considering the detailed environmental analysis under each of the thresholds of significance for biological resources.

The applicant's proposal includes two areas of the project site that would be designated as a Conservation Area—the first is within the northern portion of the project site (north of the Metro-owned railroad) and the second is to the southwest of the project footprint and impact area. These areas would include natural open space, landscaped areas, manufactured slopes, trails, fuel modification zones, and flood control features. As described in the BRTR, the area proposed for conservation and permanent preservation totals 50.78 acres, of which 24.39 acres are of sensitive vegetative communities (Dudek 2026; see EIR Appendix C); the location and boundaries of the proposed Conservation Area are shown in Figure 4.4-4. The applicant would fund the development of a long-term Conservation Management Plan (CMP), and a conservation easement over this property would be established to provide for monitoring and maintenance and long-term management of the lands. The CMP would identify the required resource management activities and the entities that would be responsible for managing those activities in perpetuity.

The conservation easement holder for the land that is to be permanently preserved is anticipated to be a public or private sector entity, which has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species. No grading or other construction activities would occur within the Conservation Area, except for proposed habitat enhancement and restoration, construction and maintenance of signage, and trail maintenance.

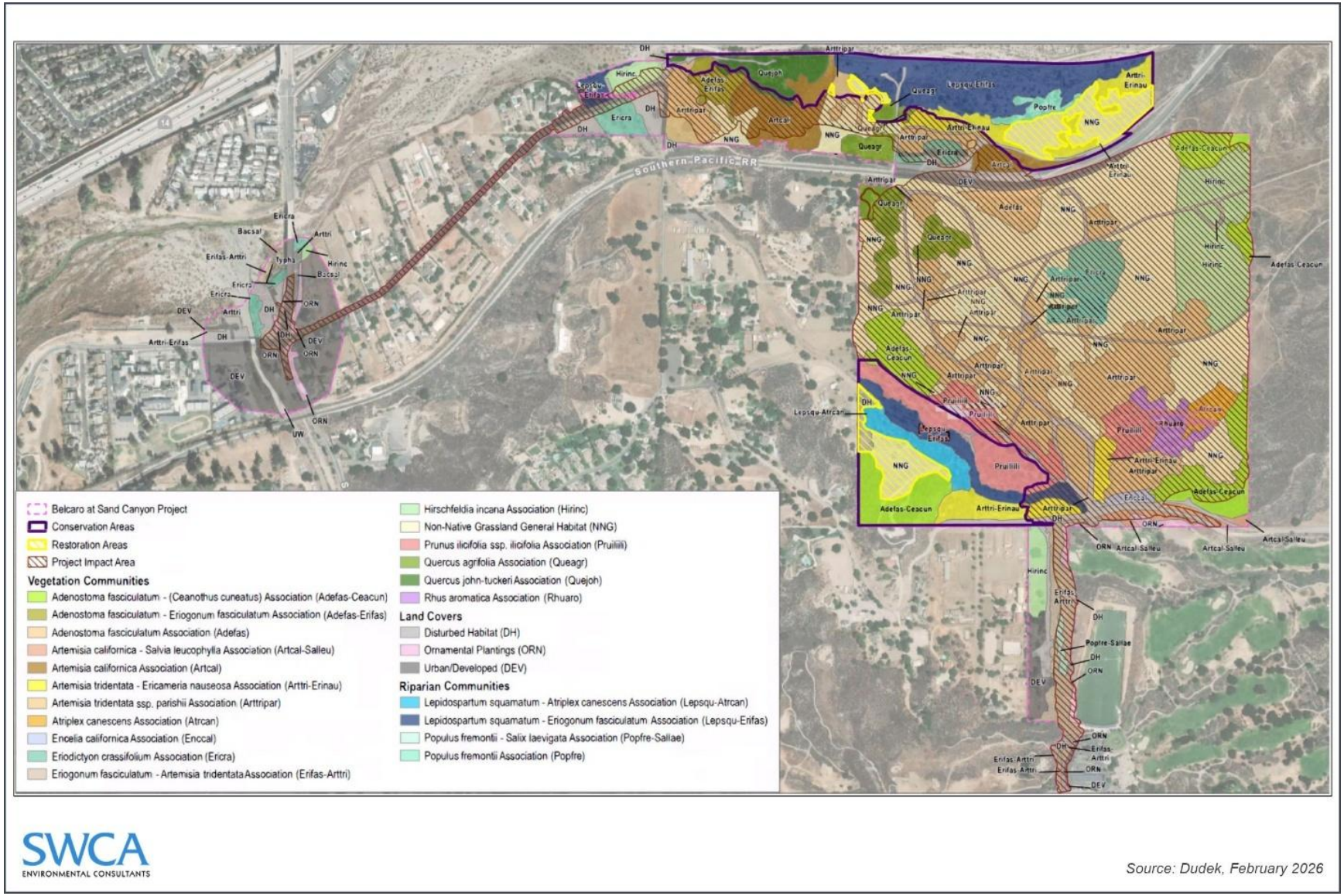


Figure 4.4-4. Proposed On-Site Conservation and Mitigation Areas.

As noted, the applicant is also proposing that certain lands within the Conservation Area be enhanced. Specifically, the applicant proposes that the conditions would improve portions of the Conservation Area (10.78 acres) that are currently nonnative grasslands, upland mustards, and disturbed habitat. For this area, a specific approach for each type of habitat restoration and establishment area and special-status species transplant location would be specified in a Habitat Mitigation and Monitoring Plan (HMMP). The acreages allotted for on-site establishment apply to 10.78 acres of nonnative grassland and disturbed habitat in the Conservation Area. *Artemisia tridentata* ssp. *parishii* association, a sensitive community, would be established in the Conservation Area. The implementation of the HMMP would be funded and implemented by the applicant.

More detail regarding the Conservation Area and the planned restoration is provided within the biological analysis presented in this section, including how the conservation and restoration elements would address the potential biological impacts of the project. The specific requirements anticipated for the conservation and restoration elements of the project are in Mitigation Measure (MM) BIO-1.4 and MM BIO-1.5.

Areas currently supporting native vegetation that are temporarily disturbed by construction would be restored and revegetated with a native species mix similar to the pre-disturbance conditions, allowing full biological function to be reestablished following completion of work in the Conservation Area. Areas not currently supporting native vegetation would be adequately restored to prevent adverse effects such as erosion or establishment of invasive species following construction.

4.4.4.2 Off-Site Infrastructure and Utility Requirements

Most infrastructure and utilities would be provided within the 208-acre project area identified in Chapter 2, *Project Description*, and addressed by the BRTR (Dudek 2026). This includes tying into existing water lines below Oak Spring Canyon and Lost Canyon Roads and the provision of a new sewer connection below Lost Canyon Road.

The only project-related improvement that would not be within the 208-acre project area is the new one-million-gallon capacity concrete water storage tank and associated facilities that would be located at the existing Live Oak Storage Reservoir site. The Live Oak Storage Reservoir site is located southeast of the intersection of Live Oak Spring Canyon and Canyon End Roads. As part of this project element, a Reservoir Management System building would also be constructed within the existing reservoir site. Neither the tank nor the Reservoir Management System building would result in ground disturbance, as the new features would be constructed atop the existing cement foundation at the Live Oak Storage Reservoir site.

4.4.4.3 Impact Characterization in the Biological Resources Analysis

In this section, impacts are categorized into either direct impacts or indirect impacts. Direct impacts are the immediate physical loss or modification of habitat or species resulting from a project, and indirect impacts (or secondary effects) are reasonably foreseeable impacts that occur later in time or at a greater distance from the project site.

Examples of direct impacts include removal of sensitive natural communities due to grading or paving, species mortality (direct injury or death of special-status plants or animals during site clearing or excavation, or the direct removal or filling of jurisdictional wetlands or other regulated waters. Examples of indirect impacts include edge effects, increased noise or human activity, introduction of nonnative species, altered hydrology, and long-term degradation of adjacent habitats.

4.4.5 Project-Specific Impacts and Mitigation Measures

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

DIRECT IMPACTS

Special-Status Plants

As previously stated in Section 4.4.1.4, *Special-Status Plant Species*, slender mariposa lily occurs within the project area. Given the number of individuals present in the project area, summarized in Section 4.4.1.4, loss of the individuals within the project area is not expected to reduce the species' abundance or range, and impacts are considered l*ess than significant*.

As previously stated in Section 4.4.1.4, *Special-Status Plant Species*, Peirson's morning-glory has been documented at four locations along the northeastern and southeastern boundaries of the project area. Given its broader regional presence, summarized in Section 4.4.1.4, loss of individuals within the project area is not expected to reduce the species' abundance or range, and impacts are therefore considered *less than significant*.

Special-Status Invertebrates

As previously stated in Section 4.4.1.5, *Special-Status Plant Wildlife Species*, Crotch's bumble bee was observed foraging within the project area during focused surveys. Therefore, impacts to Crotch's bumble bee would be significant, and mitigation is warranted. MM BIO-1.1 through MM BIO-1.3 provide for preconstruction nest surveys with buffers, full-time biological monitoring during vegetation removal and initial grading, and Worker Environmental Awareness Program (WEAP) training. In addition, the mitigation measures identified for the project include preservation of 50.78 acres of potential foraging and nesting habitat on-site, habitat enhancement within the Conservation Area to increase floral resources, additional habitat preservation, and project footprint delineation to avoid unintended impacts to native vegetation during construction. These mitigation measures are described later in this analysis as MM BIO-1.4 through MM BIO-1.7. With these identified mitigation measures, impacts to Crotch's bumble bee would be *less than significant with mitigation*.

Special-Status Fish

No direct impacts are anticipated to the Santa Clara River channels where unarmored threespine stickleback, Santa Ana sucker, and arroyo chub may occur. Although the existing Lost Canyon Road crosses through the active channel of Oak Spring Canyon Creek (Arizona crossing), impacts to Oak Spring Canyon Creek, including the proposed Arizona crossing removal and bridge construction, would not affect these species because the creek is ephemeral. Therefore, *no direct impact* to special-status fish species would occur.

Special-Status Terrestrial Wildlife

Because the Central and Southern California distinct population segment of the California mountain lion is a threatened species under the CESA, any direct take would require an Incidental Take Permit from the CDFW. However, no natal dens were detected during extensive field surveys, and none are expected due to nearby human disturbances (i.e., rail traffic, golf course, SR-14, and residential development), which typically deter denning females (Dudek 2026). Regional mountain lion movement is expected to occur primarily in undeveloped areas east of the project site, including the Angeles National Forest, and along the Santa Clara River. The residential components of the project are located south of the railroad berm, which is expected to buffer the Santa Clara River from project-related activity and lighting. As a result, mountain lion movement in the area would not be substantially affected, and no direct take is anticipated. Therefore, *no direct impact* to mountain lion would occur.

In addition to mountain lion, five reptile species—California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard—and one mammal—San Diego black-tailed jackrabbit—could be directly impacted; all are designated as CDFW SSC. While habitat loss alone does not constitute a significant impact unless it results in a substantial adverse effect on the species as a whole, individuals can be vulnerable to injury or mortality during vegetation removal and ground-disturbing construction activities. Although the limited footprint and short duration of construction are unlikely to affect regional population viability, impacts to individual animals are reasonably foreseeable and could be significant.

Implementation of MM BIO-1.2 through MM BIO-1.4 and MM BIO-1.8, would reduce direct impacts to special-status terrestrial wildlife to *less than significant with mitigation*.

Special-Status and Protected Nesting Bird Species

Three special-status bird species—Cooper's hawk, Southern California rufous-crowned sparrow, and Bell's sage sparrow—have suitable nesting habitat within the project area. In addition, nesting habitat is present for several common bird species protected under the MBTA and Fish and Game Code (§§ 3503, 3503.5, and 3513). While impacts to adults and juveniles are not expected, construction during the breeding season could disrupt active nests, resulting in abandonment, reduced reproductive success, or direct loss of nests, eggs, or young during vegetation removal and grading. Such impacts would be significant. Implementation of preconstruction nest surveys and buffers (MM BIO-1.9), along with MM BIO-1.2 and MM BIO-1.3, would reduce impacts to nesting birds to *less than significant with mitigation*.

INDIRECT IMPACTS

Special-Status Plants

Construction activities could result in short-term indirect impacts to slender mariposa lily and Peirson's morning-glory located on the adjacent parcel east of the project area. Potential impacts include fugitive dust, increased human activity, and pollutant emissions from construction equipment. Excessive dust may reduce plant vigor and productivity by limiting light penetration and affecting photosynthesis and respiration. Construction and landscaping activities also present a risk of introducing invasive nonnative plant species that could alter habitat and compete with special-status plants. Long-term indirect effects could additionally result from increased human presence and associated edge effects following project build-out. These indirect impacts could be significant if unmitigated. Dust control measures, including the use of water trucks, would reduce fugitive dust. Implementation of MM BIO-1.10 and MM BIO-1.11, which require weed-free construction equipment and prohibit invasive species in landscaping, would

minimize the introduction and spread of nonnative plants and reduce indirect impacts to *less than significant with mitigation*.

Special-Status Invertebrates

Indirect impacts to Crotch's bumble bee could result from the introduction of nonnative vegetation, use of herbicides or pesticides, and competition with western honeybee (*Apis mellifera*) (Dudek 2026). MM BIO-1.4 requires recordation of a conservation easement and preparation of a CMP, which would discourage herbicide and pesticide use, limit applications to CDFW-approved products, and prohibit commercial apiaries within the Conservation Area. In addition, MM BIO-1.10 and MM BIO-1.11 would minimize introduction of nonnative plants by requiring weed-free equipment and prohibiting invasive species in landscaping. Implementation of these mitigation measures would reduce indirect impacts to Crotch's bumble bee to *less than significant with mitigation*.

Special-Status Fish

Three special-status fish species—Santa Ana sucker, unarmored threespine stickleback, and arroyo chub—have a moderate potential to occur in the Santa Clara River; however, the project would not result in direct impacts to the Santa Clara River (i.e., the project footprint does not encroach into the river), where the species have potential to occur. Therefore, long-term or temporary direct impacts would not occur to these species. Temporary indirect impacts to unarmored threespine stickleback, Santa Ana sucker, and arroyo chub in the Santa Clara River could occur from construction-related sediment generation and potential chemical pollutants (e.g., fuels, oils, lubricants, herbicides). Excessive sediment and pollutants could degrade water quality and aquatic habitat. However, as described further in Section 4.10, *Hydrology and Water Quality*, construction would comply with the Stormwater Pollution Prevention Plan (SWPPP) for the project and require coverage under the State Water Board's National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which are intended to protect surface water quality. The SWPPP will require implementation of best management practices (BMPs) to control erosion and prevent pollutant discharges from exposed soils. With these regulatory requirements in place, temporary indirect impacts to these fish species would be *less than significant*.

Special-Status Terrestrial Wildlife

Project implementation could result in short- and long-term indirect impacts to seven special-status wildlife species—California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, Blainville's horned lizard, San Diego black-tailed jackrabbit, and mountain lion—through habitat degradation and effects on individuals. Short-term construction-related impacts may include fugitive dust, runoff, sedimentation, chemical pollution, and erosion, while long-term impacts could result from altered hydrology, changes in fire regimes, nonnative plant invasion, and increased human activity along the urban–open space interface, potentially leading to vegetation trampling and soil compaction. As well, post-construction, indirect impacts could occur from increased human presence, including recreation, traffic, lighting, and potential human–wildlife interactions.

The CDFW classifies most of the project area as low-suitability habitat for mountain lion (Dudek 2026). Although the project would affect 138.63 acres of potential habitat, this represents a very small portion of a mountain lion's home range (approximately 0.15% for adult males and 0.19% for sub-adult males); therefore, mountain lion use of the project area is expected to be limited and transient, primarily for foraging and movement (Dudek 2026). Large, contiguous habitat occurs in the Angeles National Forest, approximately 0.25 mile east of the project site, and the Santa Clara River is expected to serve as the primary east–west movement corridor. SR-14 limits north–south movement, with nearby overpasses and underpasses providing crossing opportunities.

MM BIO-1.4 would preserve more than 44 acres of habitat contiguous with these open space areas, ensuring continued habitat availability, which would be beneficial to all the species with potential for indirect impacts. Additionally, MM BIO-1.4 would maintain connectivity for the mountain lion, and replacement of the Arizona crossing with a bridge, as proposed by the project, would further reduce the risk of vehicle strikes for the mountain lion. Further, MM BIO-1.12 would require community signage informing residents and trail users of possible mountain lion presence. With the implementation of these mitigation measures, indirect habitat degradation would not substantially reduce available habitat or cause special-status wildlife populations to fall below self-sustaining levels. Therefore, these indirect impacts to terrestrial species would be *less than significant with mitigation*.

Special-Status and Protected Nesting Bird Species

Indirect impacts to Cooper's hawk, Southern California rufous-crowned sparrow, and Bell's sage sparrow could occur from the use of herbicides or pesticides and noise/ground disturbance from prolonged human presence near nesting birds during construction and maintenance actions; such impacts would be significant. Implementation of preconstruction nest surveys and buffers (see MM BIO-1.9), along with MM BIO-1.2, and MM BIO-1.3, would reduce indirect impacts to nesting birds to *less than significant with mitigation*.

OFF-SITE INFRASTRUCTURE AND UTILITY REQUIREMENTS

The project analyzed in the BRTR includes transportation and access improvements associated with the project, including: 1) a northern project access point provided by extending Lost Canyon Road eastward from its current terminus at Oak Spring Canyon Road; 2) a southern access point to Oak Spring Canyon Road east of Graceton Drive; and 3) a new road connecting Oak Spring Canyon Road and Robinson Ranch Road, as well as the construction of a bridge, retention basin, and culvert for Oak Spring Canyon Creek. The project would also be required by the City to implement improvements to Sand Canyon Road and to the intersection of Sand Canyon Road and Lost Canyon Road. All these transportation and access improvements are included in the comprehensive analysis contained in the BRTR (see EIR Appendix C) and summarized in the previous sections of this EIR.

In addition to the transportation and access improvements associated with the project, a new one-million-gallon capacity concrete water storage tank and associated facilities would be required. This facility would be located at the existing Live Oak Storage Reservoir site, which is located southeast of the intersection of Live Oak Spring Canyon and Canyon End Roads. As part of this project element, a Reservoir Management System building would also be constructed within the existing reservoir site. This feature is not addressed in the BRTR; however, because no biological impacts would occur from this project feature, it is appropriate to only consider it within this EIR analysis without a supporting technical report. Neither the tank nor the Reservoir Management System building would result in ground disturbance as the new features would be constructed atop the existing cement foundation at the Live Oak Storage Reservoir site. Accordingly, no direct impacts would occur as there would be no habitat modifications or habitat removal. Short-term indirect impacts are not anticipated, as construction activities would not result in excessive dust or pollutant emissions from construction equipment and no grading is proposed. Additionally, the introduction of nonnative vegetation and use of herbicides or pesticides is not anticipated. Therefore, installation of the proposed one-million-gallon water storage tank and Reservoir Management System would not result in adverse effects, either directly or through habitat modifications on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the USFWS or CDFW. Therefore, *no impact* related to these proposed off-site infrastructure improvements would occur.

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The project could have a substantial adverse effect on 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. Direct impacts could occur to Crotch's bumble bee, California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard, and indirect impacts could occur to the same species listed for direct impacts, in addition to slender mariposa lily and Peirson's morning-glory.
Mitigation Measures
MM BIO-1.1 ***Crotch's Bumble Bee Habitat Preservation and Impact Minimization.*** *A preconstruction survey for Crotch's bumble bee must be conducted within the project area before starting initial vegetation removal or initial grading activities occurring during the Crotch's bumble bee nesting period (February 1–October 31). The survey must confirm that no nests for Crotch's bumble bee are located within the construction area. The preconstruction survey must include 1) a habitat assessment and 2) focused surveys, both of which will be based on recommendations described in the* Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023 (CDFW 2023), or the most current at the time of construction.* *a. The habitat assessment must, at a minimum, include historical and current species occurrences; document potential habitat on-site, including foraging, nesting, and/or overwintering resources; and identify which plant species are present. Nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies such as rock walls, rubble, and furniture. If nesting resources are present in the impact area, focused surveys will be conducted.* *b. If required, the focused survey must be performed by a biologist approved by the Director of Community Development and with the two official qualification credentials from the CDFW that authorizes the biologist to handle and conduct surveys for Crotch's bumble bee (a Memorandum of Understanding [MOU] and Scientific Collecting Permit [SCP] for bumble bees), and include at least three survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys must coincide with the Colony Active Period (April 1–August 31 for Crotch's bumble bee). Surveys may occur between one hour after sunrise and two hours before sunset. Surveys will not be conducted during wet conditions (e.g., foggy, raining, or drizzling) and surveyors will wait at least one hour following rain. Optimal survey conditions are when there are sunny to partly sunny skies with temperatures that are greater than 60 degrees Fahrenheit. Surveys may be conducted earlier if other bees or butterflies are flying. Surveys may not be conducted when it is windy (i.e., sustained winds greater than eight miles per hour). The biologist must look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, a qualified biologist must watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then the individual bumble bee must be identified to species. The biologist should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point, which would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).* *Identification will include netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the* National Protocol Framework for the Inventory and Monitoring of Bees *(U.S. Fish and Wildlife Service [USFWS] 2016), by the biologist who holds the MOU and SCP for bumble bees. The bee must be placed in a clear container for observation and photographically documented. The bee will be photographed using a macro lens from various angles to record key identifying characteristics. If bumble*

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	bee identifying characteristics cannot be adequately captured in the container due to movement, the container will be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee will be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee must be released into the same area from which it was captured upon completion of identification. *If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities may occur within 100 feet of the nest, or as determined by the biologist through evaluation of topographic features or distribution of floral resources. The nest resources will be avoided for the duration of the Crotch's bumble bee nesting period (February 1–October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, and males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.* *c. A written survey report will be submitted to the Director of Community Development within 30 days of the preconstruction survey and be reviewed and approved by the Director of Community Development before the start of grading and construction activities. The survey report must also be submitted to the CDFW within the same timeframe for its consideration and action in accordance with applicable laws and regulations. The report will include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report will include the qualifications/resumes of the surveyor(s) and biologist who holds the MOU and SCP for bumble bees, detailed habitat assessment, and photo vouchers. If Crotch's bumble bee nests are observed, the survey report must also include recommendations for avoidance, and the location information will be submitted to the California Natural Diversity Database at the time of, or before, submittal of the survey report.* *Once the habitat assessment and survey results (if applicable) are available, the applicant must consult with the CDFW to determine whether an Incidental Take Permit is required. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee must be incorporated into the Habitat Mitigation and Monitoring Plan described in MM BIO-1.5.* *If Crotch's bumble bee is no longer a candidate for listing under the California Endangered Species Act (CESA) or listed under CESA at the time of the start of construction of the project, MM BIO-1.1 will no longer be required, as removal of the candidate status without a successfully listing of the species would indicate that CDFW determined that the threshold for listing under CESA was not met.*
MM BIO-1.2	***Biological Monitoring.*** *Before the City Engineer issues a grading permit, the applicant must submit the qualifications of potential Biological Monitor(s) to the Director of Community Development for review and approval. The applicant must then fund the City-approved Biological Monitor(s) during project construction to monitor construction activities and ensure compliance with all mitigation measures. The Biological Monitor must be present on-site during all vegetation removal and each day before the commencement of grading activities. The Biological Monitor is responsible for conducting a preconstruction clearance survey and any special-status species shall be relocated to the Conservation Area (see MM BIO-1.4). Preconstruction clearance surveys must be conducted before construction of each new phase of the development. The Biological Monitor must monitor to ensure that wildlife does not become entrapped in excavation or trenching areas. Safeguards must be implemented during daytime periods of non-activity and overnight, such as placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction must be halted until the Biological Monitor arrives on-site and authorizes resumption of work (in compliance with all applicable permits and authorizations).* *The Biological Monitor must regularly inspect the project as needed after the completion of all grading activities. During visits, the Biological Monitor must: 1) address the potential*

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establishment of invasive species and require weed abatement (if necessary) in accordance with MM BIO-1.10; 2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; and 3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources.

Daily monitoring reports must be prepared by the Biological Monitor that, at a minimum, provide documentation of the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective actions taken during the reporting period. The monitoring reports must include photos as appropriate and be made available to the Director of Community Development upon request.

MM BIO-1.3 ***Worker Environmental Awareness Program.*** *Before the initiation of the initial vegetation removal or initial grading activities, all personnel associated with those activities must attend a Worker Environmental Awareness Program (WEAP) conducted by a Qualified Biologist approved by the Director of Community Development. In general, the WEAP must review any potentially occurring sensitive biological resources or species and habitat preference(s), occupied habitat in the area, and life histories, as well as potential construction impacts, protection measures, and project limits. Legal protections and regulations pertinent to the biological resources that may be present on-site must also be included in the WEAP. A species and habitat fact sheet must be drafted before the training program and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.*

After the kickoff meeting, the applicant must notify the Qualified Biologist in advance if additional contractors are employed during the initial vegetation removal or initial grading activities. A sign-in sheet will be circulated for signatures to all personnel that attend the workers educational training to confirm that program materials were received and that they understand the information presented.

MM BIO-1.4 ***On-Site Conservation Area***

Establishment of a Conservation Area

The on-site conservation easement area must be designated on the final map. Additionally, the applicant must obtain a letter of intent from the Conservation Easement holder, the qualifications for which are described below. Before the City Engineer issues a grading permit, the applicant must record an easement in favor of a qualified conservation organization or land trust, as defined by Civil Code § 815.1, that permanently preserves 50.78 acres of open space within the project boundaries for long-term conservation and management as a natural Conservation Area. The table below lists the vegetation communities that would be preserved, which includes 24.49 acres of sensitive vegetation communities.

Vegetation Community / Land Cover	Preserved via Conservation Easement
Adenostoma fasciculatum-(Ceanothus cuneatus) Association	4.27
Adenostoma fasciculatum-Eriogonum fasciculatum Association	0.34
Artemisia californica Association	1.69
Artemisia tridentata-Ericameria nauseosa Association	5.61
Artemisia tridentata ssp. *parishii* Association[1]	0.61
Disturbed habitat	2.55
Eriogonum fasciculatum-Artemisia tridentata Association[1]	0.01
Hirschfeldia incana Association	0.01
Lepidospartum squamatum-Atriplex canescens Association[1]	2.45
Lepidospartum squamatum-Eriogonum fasciculatum Association[1]	14.92

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Nonnative Grassland General Habitat		8.22
Populus fremontii Association[1]		1.27
Prunus ilicifolia ssp. *ilicifolia* Association[1]		5.22
Quercus agrifolia Association		0.49
Quercus john-tuckeri Association		3.11
	Total Acres	**50.78**

[1] Sensitive Vegetation Community

Conservation Management Plan

As part of recording the Conservation Easement, a long-term Conservation Management Plan (CMP) applicable to the On-Site Conservation Area must be prepared and submitted to the Director of Community Development for approval. The CMP must identify the required resource management activities and the entities that are responsible for managing those activities in perpetuity. The CMP must set forth the following requirements that must be implemented by the entity that holds the Conservation Easement and/or manages and stewards the Conservation Area:

a. Grading and construction activities are prohibited within the Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance;

b. Off-trail activities (e.g., hiking, biking, horseback riding) are prohibited;

c. Signage must be installed at the trailheads and at any access points to the On-Site Conservation Area, which includes information on the organization that holds the Conservation Easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities;

d. Signage must be placed in visible locations and that require humans and domesticated pets to remain within the limits of designated hiking trails, all domesticated pets must be on leashes, owners must clean up after domesticated pets, and smoking is prohibited;

e. No fencing or other barriers to wildlife movement may be installed;

f. Dog waste bag dispensers and wildlife-proof receptacles for trash must be provided at appropriate locations on the trail;

g. Commercial honeybee operations are prohibited from using the Conservation Area for storing their apiaries;

h. Rodenticides are prohibited;

i. Herbicides and pesticides are discouraged, and only those typically used for invasive plant management in California wildlands are allowed, per the California Invasive Plant Council and Pesticide Research Institute's Best Management Practices for Wildland Stewardship;[4]

j. At least one annual walk-through survey must be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species;

k. Collect and remove trash, repair vandalized signs, and rectify trespass impacts; and

l. Provide annual reporting to the Director of Community Development that documents the conditions of the Conservation Area.

[4] California Invasive Plant Council and Pesticide Research Institute. 2015. *Best Management Practices for Wildland Stewardship*. Available at: https://cal-ipc.org/docs/bmps/dd9jwo1ml8vttq9527zjhek99qr/BMPHerbicide.pdf. Accessed October 2023.

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	Approved work must be outlined in the CMP and Conservation Easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities must be delineated. The Conservation Easement holder must be a public or private sector entity, which has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The entity that holds the endowment must meet the criteria outlined in Government Code § 65968(b). Funding for implementation of the tasks in the CMP must be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association, a Land Trust organization, or other equivalent mechanism(s). *The recorded Conservation Easement document must:* *a. Clearly delineate the boundaries of all preserved open space areas;* *b. Prohibit uses inconsistent with the CMP;* *c. Provide management of the land in perpetuity and be binding on all successors and assigns;* *d. Designate the Land Manager organization as the responsible party for all monitoring, maintenance, and reporting obligations; and* *e. Expressly relieve the City of any maintenance, monitoring, or financial obligation with respect to the preserved areas.*
MM BIO-1.5	***Habitat Mitigation and Monitoring Plan.*** *Before the City Engineer issues a grading permit, a Director of Community Development-approved Restoration Biologist must be retained by the applicant to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area and special-status species transplant location, and will outline detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. The HMMP must be submitted to and approved by the Director of Community Development before the onset of project-related ground-disturbing activities. The minimum acreages allotted for on-site establishment apply to a total of 10.78 acres of nonnative grassland and disturbed habitat in the Conservation Area (see MM BIO-1.4). The locations of the restoration areas are shown in Figure 4.4-4 of the Environmental Impact Report.* Artemisia tridentata *ssp.* parishii *association, a sensitive community, would be established in the Conservation Area. The implementation of the HMMP will be funded and implemented by the applicant.* *The HMMP must include and address the following performance criteria, requirements, and elements. The HMMP must be implemented by the applicant, including all required planting and seeding, weed control, maintenance, monitoring, reporting, and final agency sign-off efforts necessary to reach the required performance standards.* <u>*Schedule*</u> *Establishment of restoration/revegetation sites will be conducted between October 15 and January 30, with planting and/or seeding occurring immediately after the restoration sites are prepared.* <u>*Stressors*</u> *Any stressors causing habitat degradation should be addressed before starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species will include the following:* *a. Removal of nonnative species in patches of native habitat must be conducted in such a way as to minimize impacts to the existing native vegetation.* *b. Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates:* *1. that other methods of invasive species control have been tested, and that a single application of herbicide has been determined to be the best solution;*

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2. *that there is a post-application plan for revegetation and/or mulching; and*
3. *that the treatment is a one-time application.*

c. *Preemergent herbicide is prohibited.*

Plant Material

The following will be implemented:

a. *Details regarding the planned source of their plant material will be provided.*
b. *All stock from nurseries will be derived from plants originally collected within cismontane Los Angeles County.*
c. *Plant material used for habitat restoration purposes will consist of native species that are local to the immediate area of the mitigation site.*
d. *All plant material proposed for use in a habitat restoration program will be inspected by a City-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species.*
e. *Container plants and other landscaping materials (including organic mulches) should be inspected by the City-approved Restoration Biologist to ensure they do not contain Argentine ants.*
f. *Native seed mixes will be inspected by the City-approved Restoration Biologist before their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens.*
g. *Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility.*
h. *One application of mulch will be done, except for areas that will provide nesting opportunities for native bees.*

Maintenance Plan/Guidelines

A Maintenance Plan will be included that outlines the following:

a. *Weed control, including cleaning of equipment to prevent further spread or introduction of new weeds;*
b. *Herbivory control;*
c. *Trash removal;*
d. *Irrigation system maintenance;*
e. *Maintenance training; and*
f. *Replacement planting.*

Signage and Fencing

Signage specifications will be developed to identify the site as a restoration/preserve area and to either state that trespassing is not allowed or to instruct visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access will be provided.

Monitoring Methods

Proposed plantings, enhancement/restoration, and receptor sites will be monitored for five years following the completion of seeding or planting. The monitoring program will consist of the observation and evidence of vegetative growth; observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants; photo-documentation; and measurements of annual rainfall.

A Director of Community Development-approved Restoration Biologist, restoration specialist, biologist, or horticulturist with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments.

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The Director of Community Development-approved Restoration Biologist will conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites will be monitored on a monthly basis through seed production for five years to document the growth of the enhanced or restored habitat type or replacement population. *Qualitative surveys, consisting of a general site walkover and habitat characterization, will be completed during each monitoring visit. General observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, will be noted in each site walkover. The Director of Community Development-approved Restoration Biologist will also note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records will be kept of mortality and other problems such as insect damage, weed infestation, and soil loss.* *<u>Surveying Flowering and Seed Production</u>* *In the case of replacement populations for specific species, flowering individuals observed within receptor sites will be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits will aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots will be tallied and recorded on data sheets. The total yearly population will be calculated each year for the annual monitoring results.* *<u>Photo Documentation</u>* *Permanent stations for photo documentation will be established before or during the first annual monitoring event. Photos must be taken each monitoring period from the same vantage point and in the same direction each year and reflect material discussed in the annual monitoring report.* *<u>Monitoring Schedule</u>* *During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site will be monitored monthly through seed production for five years.* *<u>Annual Monitoring Reports</u>* *At the end of each monitoring period an annual report will be prepared for submittal to the Director of Community Development. The report will summarize the information collected during the qualitative and quantitative monitoring. Each report will document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of success, and recommendations for the project and/or remedial measures, if necessary.* *Since seeding of particular species may not occur when planned, monitoring must be tied to the actual implementation date (e.g., the first annual report must be delivered on January 15 of the year following the first growing season after enhancement/restoration and/or seeding). These reports will describe the success of the relocation and will discuss the efficacy of the various methods employed to propagate this species. These reports will also include the following:* *a. a list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year;* *b. a vicinity map indicating location of the mitigation site;* *c. a mitigation site plan, identifying plot locations, photo station locations, etc., as appropriate;* *d. copies of all monitoring photographs; and* *e. an analysis of all qualitative and quantitative monitoring data.*

Impact BIO-1	
	Performance Standards *The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards will be considered to have been achieved if during any three years of the five-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory.* *The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan proposes a five-year monitoring term to track flowering individuals which provides the best and easiest indicators to track that the translocation is succeeding.* *Various threats to plants must be minimized to ensure survival, and ultimate flowering of seeded individuals leading to future germination/successful reproduction.* *Habitat characteristics, including nonnative grasses and herbaceous weeds, are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory.* *Should the performance standards be achieved early in the program, monitoring will continue for the full five years to ensure that there is no degradation of the habitat values during the five-year period.* *Performance Standards for Five-Year Monitoring Period* *The performance standards for the five-year monitoring period include the following:* *a. Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the two-year monitoring period (at least three years of the five-year monitoring period).* *b. Survival of 80% of established individuals.* *c. Habitat subject to translocation must exhibit same or less cover by nonnative grasses; and forbs than during the initial planting (30%).* *Adaptive Management* *The HMMP must include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the five-year monitoring period, the applicant must implement remedial measures to attempt to achieve the performance standards. These include installing additional container plants, broadcasting additional seeds, and extending the irrigation period.*
MM BIO-1.6	***Off-Site Habitat Preservation.*** *Implementation of MM BIO-1.4 would preserve 24.49 acres of sensitive vegetation communities, and MM BIO-1.5 would create 10.78 acres of* Artemisia tridentata *ssp.* parishii *association within areas of nonnative vegetation. Because a total of 39.62 acres of sensitive vegetation communities would be permanently impacted by the project, the mitigation described under MM BIO-1.4 and MM BIO-1.5 does not fully compensate for the direct habitat impacts on-site and additional on-site mitigation is not available with the proposed site configuration and project. Therefore, additional off-site mitigation will be required. Off-site acquisition of sensitive vegetation communities at a 2:1 ratio must be attained for the remaining 4.9 acres of direct impact to sensitive vegetation communities, for a total of 9.8 acres of off-site sensitive vegetation mitigation. Acceptable forms of off-site mitigation include bank credits, and/or turnkey projects with mitigation banks (as approved by the Director of Community Development) before the City Engineer issues a grading permit. Off-site mitigation may be used for additional acres of impacts as well, but only if it is not feasible to address the mitigation of impacts on-site and the Director of Community Development approves the approach and use of off-site mitigation beyond the 9.8 acres. All off-site mitigation shall be provided at least at a 2:1 (mitigation-to-impact) ratio.*

Impact BIO-1	
MM BIO-1.7	***Demarcation of Disturbance Limits.*** *Before commencement of earthwork for each phase of project construction, the construction area boundaries must be clearly demarcated (e.g., installation of flagging or temporary high-visibility construction fence), as recommended by the Director of Community Development-approved Biological Monitor. All construction activities, including equipment staging and maintenance, must be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging must be maintained throughout construction.*
MM BIO-1.8	***Special-Status Wildlife Relocation Plan.*** *Before commencement of any vegetation-clearing, earthmoving, or other ground-disturbing activities or the preconstruction staging of equipment on the project site, the applicant must contract with a Director of Community Development-approved biologist to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including California legless lizard, Southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard. San Diego black-tailed jackrabbit is highly mobile and would be expected to leave areas of the project site on its own volition. The Preconstruction Wildlife Survey and Relocation Plan must be submitted to the Director of Community Development for review before any ground-disturbing activities within potentially occupied habitat.* *The Preconstruction Wildlife Survey and Relocation Plan must include, at a minimum, the following:* *a. Protocols for preconstruction surveys to flush out and/or move identified special-status wildlife within the project area, as feasible.* *b. Relocation to the on-site Conservation Area is the primary location, unless otherwise approved by the City.* *c. The timing, frequency, and locations where surveys should be conducted.* *d. Surveys will be conducted 24 hours before construction activities and repeated the morning of the proposed activity.* *e. Surveys must be conducted in all areas anticipated to be subject to vegetation clearing.* *f. The habitat and conditions in the proposed relocation site(s).* *g. The methods that would be used for trapping and relocating identified species.* *h. All equipment used in the effort will be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens.* *i. Any wildlife handling and relocation methodology from the California Department of Fish and Wildlife (CDFW)-issued Streambed Alteration Agreement, if any, will be incorporated in the Preconstruction Wildlife Survey and Relocation Plan.* *j. Protocols for documentation/recordation of the species and number of animals relocated.* *k. Relocations must be logged and made available to the City, if requested.* *l. Protocols for notifying the CDFW if identified species cannot be relocated.* *m. Attempts at relocation must be logged and notification must occur within 24 hours.* *n. Notations of the timing and frequency of reports documenting the results of the surveys.*

Impact BIO-1	
MM BIO-1.9	***Nesting Bird Avoidance.*** *Project construction must be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests.* *Vegetation removal may only occur during the non-breeding season for nesting birds and raptors; no vegetation removal shall occur between February 1–September 30.* *Project activities other than vegetation removal may occur within the breeding season for nesting birds and raptors (February 1–September 30), as long as a preconstruction survey is conducted by the Biological Monitor (see MM BIO-1.2) for nesting birds and/or raptors within three days before any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitor does not find any active nests immediately adjacent to the impact areas, the project activity may proceed.* *If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor must establish an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts must be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the Director of Community Development within three days after the completion of the survey. The active nest must be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities are required until nests are no longer active, as determined by the Biological Monitor: 1) work limits must be established within a buffer around any occupied nest (the buffer must be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor, and 2) access and surveying must be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest is only allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor determines that fledglings have left the nest, or the nest has failed.*
MM BIO-1.10	***Invasive Species Prevention Plan.*** *To prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the project, the following measures must be implemented:* *a. The Worker Environmental Awareness Program (WEAP) (see MM BIO-1.3) will include invasive species prevention measure implemented for the project.* *b. All mobile vehicles and construction equipment must be washed before entering the project in an upland location where any seed material from invasive species will be contained and not carried onto the project. Logs of the washing will be submitted monthly to the Director of Community Development.* *c. Following the completion of grading activities, for those areas of the project site that are graded but not yet developed/landscaped, the Director of Community Development approved Biological Monitor must conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM BIO-1.2). If abundant invasive species are identified, the Biological Monitor must inform the construction contractor about the infested area and recommend that the invasive species be removed. The recommendation will be included in the daily report.* *d. All vegetative material removed from the project footprint must be transported in a covered vehicle and will be disposed of at a certified disposal site.*

Impact BIO-1	
MM BIO-1.11	***Landscaping Plan.*** *Before the City Engineer issues the first grading permit and before vegetation clearance, the applicant must prepare a landscaping plan for the Homeowners' Association (HOA)-maintained areas and submit the Landscaping Plan to the Director of Community Development for review and approval. The Landscaping Plan for the HOA-maintained areas must include, without limitation, the following:* *a. Plant species list shall include scientific name, common name, plant container size, and quantities.* *b. Invasive plant species (designated by California Invasive Plant Council) may not be included in the Landscaping Plan.* *c. Nonnative milkweeds shall not be included in the landscaping plan.* *d. Plant layout must indicate the location of the plant species.* *e. Planting notes must include irrigation and plant installation requirements such as mulch requirements.* *f. Ornamental varietals and selections of native species must be avoided if they have the potential to hybridize with local native populations.* *g. Where native species are required, the species must be indigenous native species of the region (locally indigenous native species).*
MM BIO-1.12	***Homeowners' Association Covenants, Conditions, and Restrictions.*** *The Homeowner's Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs) must include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species:* *a. Invasive plant species (designated by the California Invasive Plant Council) are prohibited on all residential lots.* *b. All trash/garbage waste and recycling receptacles have locking devices that discourage wildlife foraging in common areas/parks and encourages the use of such locking devices on residential receptacles, as feasible.* *c. Intentional feeding of wildlife, including mule deer, is prohibited.* *d. The exterior use of rodenticides is prohibited.* *e. Speed limits of 15 miles per hour must be posted, and the CC&Rs must require residents to comply with the posted speed limits.* *f. Smoking is prohibited in common space areas.* *g. The HOA may not use balloons for any community events, and the use of balloons by individual homeowners must be discouraged.* *h. Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife is prohibited.* *i. Public information signage must be installed at the trailhead and in the recreation facility and printed information must be provided to the HOA in order to:* *1. Educate and inform the public about wildlife, especially mountain lions present in the area;* *2. Advise on proper avoidance measures to reduce human-wildlife conflicts;* *3. Advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and* *4. Provide local contact information to report injured or dead wildlife.* *Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.*

Impact BIO-1
Impacts Following Mitigation
With implementation of MM BIO-1.1 through MM BIO-1.12, impacts to candidate, sensitive, or special-status species would be reduced to less than significant.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

DIRECT IMPACTS

Direct permanent impacts would result from vegetation removal, soil disturbance from grading, and project development. As shown in Table 4.4-9, the project would permanently impact 39.62 acres of sensitive vegetation communities.

Temporary impacts would occur within a 15-foot buffer adjacent to grading limits, where vegetation would be cleared without grading. As shown below in Table 4.4-9, the project would temporarily impact 0.45 acre of sensitive vegetation communities.

Implementation of MM BIO-1.4 would preserve 24.49 acres of sensitive vegetation communities, and MM BIO-1.5 would create 10.78 acres of *Artemisia tridentata* ssp. *parishii* association within areas of nonnative vegetation, resulting in 1:1 on-site preservation and habitat creation. The remaining 4.9 acres of impacts would be mitigated through off-site preservation at a 2:1 ratio under MM BIO-1.6, for a total of 9.8 acres of off-site sensitive vegetation mitigation. MM BIO-1.7 would delineate the project footprint to avoid inadvertent impacts. Collectively, these measures would provide sufficient preservation, protect remaining sensitive vegetation, and reduce direct impacts to *less than significant with mitigation*.

Table 4.4-9. Impacts to Vegetation Communities and Land Cover Types within the Project Area

Alliance / Land Cover Type Common Name	Alliance Scientific Name	Association	Sensitive[1]	Permanent Impacts (acres)	Temporary Impacts (acres)
Native Upland Scrub Communities					
Big sagebrush scrub	*Artemisia tridentata* shrubland	*Artemisia tridentata–Ericameria nauseosa*	No	2.77	0.21
		Artemisia tridentata ssp. *parishii*	Yes	26.22	0.27
		Artemisia tridentata-Eriogonum fasciculatum	No	0	0
California brittle bush–ashy buckwheat scrub	*Encelia californica-Eriogonum cinereum* shrubland	*Encelia californica*	Yes	0.63	0
California buckwheat scrub	*Eriogonum fasciculatum* shrubland	*Eriogonum fasciculatum–Artemisia tridentata*	Yes	3.29	0

Alliance / Land Cover Type Common Name	Alliance Scientific Name	Association	Sensitive[1]	Permanent Impacts (acres)	Temporary Impacts (acres)
California sagebrush–(purple sage) scrub	*Artemisia californica-* (*Salvia leucophylla*) shrubland	*Artemisia californica*	No	3.53	0.51
		Artemisia californica–Salvia leucophylla	No	0.80	0
Deerweed–silver lupine–yerba santa scrub	*Acmispon glaber-Lupinus albifrons-Eriodictyon* spp. shrubland	*Eriodictyon crassifolium*	No	4.02	0.23
Fourwing saltbush scrub	*Atriplex canescens* shrubland	*Atriplex canescens*	No	1.53	0
		Native Upland Scrub Communities Subtotal[2]		*42.78*	*1.23*
Native Upland Chaparral Communities					
Basket bush–river hawthorn–desert olive patches	*Rhus aromatica–Crataegus rivularis–Forestiera pubescens* shrubland	*Rhus aromatica*	Yes	2.49	0
Chamise chaparral	*Adenostoma fasciculatum* shrubland	*Adenostoma fasciculatum*	No	2.36	0
		Adenostoma fasciculatum–(*Ceanothus cuneatus*)	No	9.51	0
		Adenostoma fasciculatum–Eriogonum fasciculatum	No	1.32	0.09
Holly leaf cherry–toyon–greenbark ceanothus chaparral	*Prunus ilicifolia–Heteromeles arbutifolia–Ceanothus spinosus* shrubland	*Prunus ilicifolia* ssp. *ilicifolia*	Yes	5.72	0
Tucker oak chaparral	*Quercus john-tuckeri* shrubland	*Quercus john-tuckeri*	No	0.26	0.22
		Native Upland Chaparral Communities Subtotal[2]		*21.65*	*0.30*
Native Upland Woodland Communities					
Coast live oak woodland and forest	*Quercus agrifolia* woodland and forest	*Quercus agrifolia*	No	4.18	0.18
Native Riparian Communities					
Cattail marshes	*Typha* (*angustifolia, domingensis, latifolia*) *Herbaceous Alliance*	*Typha angustifolia-Typha latifolia-Typha domingensis*	No	0	0
Mulefat thickets	*Baccharis salicifolia* shrubland	*Baccharis salicifolia*	No	0	0
Scale broom scrub	*Lepidospartum squamatum* shrubland	*Lepidospartum squamatum–Atriplex canescens*	Yes	0	0
		Lepidospartum squamatum–Eriogonum fasciculatum	Yes	0.86	0.18
Fremont cottonwood forest and woodland	*Populus fremontii–Fraxinus velutina–Salix gooddingii* forest and woodland	*Populus fremontii*	Yes	0	0
		Populus fremontii–Salix laevigata	Yes	0.41	0
		Native Riparian Communities Subtotal[2]		*1.27*	*0.18*

Alliance / Land Cover Type Common Name	Alliance Scientific Name	Association	Sensitive[1]	Permanent Impacts (acres)	Temporary Impacts (acres)
Semi-Natural Upland Communities[1]					
Nonnative grassland	N/A	N/A	No	49.58	0.41
Upland mustards or star-thistle fields	*Brassica nigra–Centaurea* (*solstitialis, melitensis*) herbaceous semi-natural	*Hirschfeldia incana*	No	11.23	0.15
		Semi-Natural Upland Communities Subtotal[2]		*60.81*	*0.56*
Non-Natural Land Cover Types					
Disturbed habitat	N/A	N/A	No	9.26	0.50
Ornamental plantings	N/A	N/A	No	0.62	0
Unvegetated wash and river bottom	N/A	N/A	No	0	0
Urban/Developed land	N/A	N/A	No	2.36	0.18
		Non-Natural Land Cover Types Subtotal[2]		*12.25*	*0.68*
			Total	**142.94**	**3.13**

Source: Dudek (2026)

Note: N/A = Not Applicable.

[1] Sensitive vegetation alliances or associations as identified in the most current California Natural Community List, released on February 27, 2025.

[2] Totals may not sum due to rounding.

INDIRECT IMPACTS

Indirect impacts could result from the introduction of invasive nonnative plant species during construction, long-term landscaping, and project operation. MM BIO-1.10 and MM BIO-1.11 would minimize the introduction of invasive species during construction and operation, while MM BIO-1.12 would establish resident rules to reduce detrimental activities. With implementation of these measures and compliance with applicable regulations, indirect impacts to vegetation communities would be *less than significant with mitigation.*

OFF-SITE INFRASTRUCTURE AND UTILITY REQUIREMENTS[5]

Direct permanent impacts would not occur during either construction or operation of the proposed one-million-gallon water storage tank and Reservoir Management System, as no vegetation removal, grading, or soil disturbance would be required. As such, installation of the off-site water tank and Reservoir Management System would not have the potential to disturb riparian habitat. Additionally, indirect impacts to riparian habitat are not anticipated, as the Live Oak Storage Reservoir site currently contains a one-million-gallon water storage tank, and operation of the new one-million-gallon water storage tank and Reservoir Management System would be similar to existing conditions. The introduction

[5] Most infrastructure and utilities would be provided within the 208-acre project area identified in Chapter 2, *Project Description*, and addressed by the BRTR (Dudek 2026). This includes tying into existing water lines below Oak Spring Canyon and Lost Canyon Roads and the provision of a new sewer connection below Lost Canyon Road. As described above, the only potential project-related improvement that would not be within the 208-acre project area and that is not addressed by the BRTR is the potential for a new one-million-gallon capacity concrete water storage tank and associated facilities that would be located at the existing Live Oak Storage Reservoir site. The Live Oak Storage Reservoir site is located southeast of the intersection of Live Oak Spring Canyon and Canyon End Roads.

of invasive nonnative plant species during construction and operation is not anticipated. Therefore, *no impact* related to these proposed off-site infrastructure improvements would occur.

Impact BIO-2
The project could have substantial adverse effects on riparian habitat and sensitive natural communities.
Mitigation Measures
Implement MM BIO-1.4 through MM BIO-1.7 and MM BIO-1.10 through MM BIO-1.12.
Impacts Following Mitigation
With implementation of MM BIO-1.4 through MM BIO-1.7 and MM BIO-1.10 through MM BIO-1.12, impacts to riparian habitat and sensitive natural communities would be reduced to less than significant.

c) Have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

DIRECT IMPACTS

The project would result in permanent direct and temporary impacts to jurisdictional waters during the construction of the extension of Lost Canyon Road, the bridge on Lost Canyon Road over Oak Spring Canyon Creek, and a retention basin and culvert for Oak Spring Canyon Creek at Oak Spring Canyon Road, as well as fuel modification for structures that are near Oak Spring Canyon Creek. Table 4.4-10 provides the acres of permanent and temporary impacts that would be caused by the project. The proposed road work at Sand Canyon Road and Lost Canyon Road would not impact Sand Canyon Creek or the stormwater channel adjacent to the east of Sand Canyon Road.

MM BIO-1.4 would preserve 14.24 acres of waters of the United States, 18.96 acres of waters of the State, and 21.63 acres of streambed, bank, and riparian vegetation. MM BIO-3.1 would require off-site compensation at a 3:1 ratio, resulting in 3.57 acres of compensatory mitigation. The project would also obtain required permits from the CDFW, RWQCB, and USACE, which may include additional conditions or mitigation. With implementation of MM BIO-1.4 and MM BIO-3.1, direct impacts to Federally protected wetlands would be *less than significant with mitigation*.

Table 4.4-10. Direct Impacts to Potential Jurisdictional Waters

Jurisdictional Waters Type	Permanent Direct Impacts (acres)	Temporary Direct Impacts (acres)	Total Direct Impacts (acres)
USACE waters of the United States	0.03	0.06	0.09
RWQCB waters of the State	0.81	0.38	1.19
CDFW streambed, bank, and riparian vegetation	1.14	0.44	1.59

Source: Dudek (2026)

INDIRECT IMPACTS

Temporary indirect impacts to the Santa Clara River, Oak Spring Canyon Creek, Sand Canyon Creek, and the stormwater channel east of Sand Canyon Road could occur during construction from fugitive dust, erosion, and the potential release of chemical pollutants. These impacts could affect vegetation vigor, water quality, and adjacent habitats. However, construction would comply with the NPDES General Permit for Construction Activities, including preparation and implementation of a SWPPP with erosion and sediment control BMPs. With compliance with applicable regulations and implementation of required BMPs, temporary indirect impacts would be *less than significant*.

OFF-SITE INFRASTRUCTURE AND UTILITY REQUIREMENTS

Installation of the proposed off-site water tank and Reservoir Management System would not have impacts on either the Santa Clara River, Oak Spring Canyon Creek, Sand Canyon Creek, or the stormwater channel east of Sand Canyon Road, as the Live Oak Storage Reservoir site is not located within the vicinity of these jurisdictional waters. Therefore, *no impact* related to these proposed off-site infrastructure improvements would occur.

Impact BIO-3	
The project could have substantial adverse effects on Federally protected wetlands as defined by Section 404 of the Clean Water Act.	
Mitigation Measures	
Implement MM BIO-1.4.	
MM BIO-3.1	***Jurisdictional Waters Compensation.*** *Mitigation for up to 3.57 acres of direct impacts to jurisdictional waters must be implemented through off-site acquisition, such as mitigation bank credits, and/or turnkey projects with mitigation banks (as approved by the City of Santa Clarita) after the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Los Angeles Regional Water Quality Control Board issue permits and before the City Engineer issues a grading permit.*
Impacts Following Mitigation	
With implementation of MM BIO-1.4 and MM BIO-3.1, impacts to Federally protected wetlands would be reduced to less than significant.	

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

DIRECT IMPACTS

The project would not directly affect active channels within the Santa Clara River; therefore, fish passage would not be impacted. No rookeries or maternal or wintering bat roosts are expected to occur. Additionally, SR-14 and the existing railroad tracks already function as barriers to terrestrial wildlife movement in the area, limiting north–south movement for most species and restricting passage for smaller wildlife. Therefore, *no direct impact* to established native resident or migratory wildlife corridors would occur.

INDIRECT IMPACTS

The project could affect localized wildlife movement between undeveloped lands to the east and southeast and the Santa Clara River. Nearby Angeles National Forest lands provide continuous habitat and connectivity to the wash. MM BIO-1.4 would preserve upland areas adjacent to the Santa Clara River and Oak Spring Canyon Creek, maintaining this connection. In addition, replacing the Arizona crossing at Lost Canyon Road with a bridge would reduce wildlife–vehicle collision risk. With implementation of these mitigation measures, in addition to the design of the project, impacts to wildlife movement corridors would be *less than significant with mitigation.*

OFF-SITE INFRASTRUCTURE AND UTILITY REQUIREMENTS

Installation and operation of the proposed off-site water tank and Reservoir Management System would not impact the Santa Clara River; therefore, movement of migratory fish would not be impacted. The Live Oak Storage Reservoir site currently contains a one-million-gallon water storage tank located on a cement foundation. Accordingly, development of the additional one-million-gallon water storage tank and Reservoir Management System on the cement foundation would not introduce a new barrier to terrestrial wildlife movement in the area. Therefore, *no impact* related to these proposed off-site infrastructure improvements would occur.

Impact BIO-4
The project could interfere substantially with established native resident or migratory wildlife corridors.
Mitigation Measures
Implement MM BIO-1.4.
Impacts Following Mitigation
With implementation of MM BIO-1.4, impacts to established native resident or migratory wildlife corridors would be reduced to less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

CITY OF SANTA CLARITA-PROTECTED TREES

Tree species vary widely in their tolerance to construction impacts, and individual tree response depends on age and condition. This analysis evaluates impacts to regulated oak trees with protected zones within the proposed improvement and disturbance areas identified in the February 2024 project plan. Impacts were determined by comparing tree locations to planned grading and infrastructure development, which will require grading across much of the project area.

Of the 355 regulated oak trees, 16 (4.51%), including three heritage trees, are proposed for removal. Construction activities are expected to result in major encroachment into the protected zones of seven trees (1.97%), including one heritage tree, and minor encroachment into the protected zones of 82 trees (23.1%), including 44 heritage trees. The remaining 250 regulated oak trees (70.42%), including 25 heritage trees, will remain unaffected. Table 4.4-11 summarizes impact determinations for trees within the project area that are subject to regulation under the SCMC.

Table 4.4-11. City of Santa Clarita Regulated Oak Tree Impact Determinations

Species	Impact Determination				
	Removal	Major Encroachment	Minor Encroachment	No Impact	Total
Canyon live oak	0	0	0	1	1
Coast live oak	13 (3)	6 (1)	72 (44)	68 (25)	159 (73)
Tucker oak	3	1	10	181	195
Total	**16 (3)**	**7 (1)**	**82 (44)**	**250 (25)**	**355 (73)**

Source: Dudek (2026)

Note: (X) = heritage trees

Sixteen regulated trees are proposed for removal, and seven regulated trees would experience major encroachment into their protected zones. Although the encroachment trees may survive with appropriate protection measures, the BRTR assumes a conservative worst-case scenario in which these trees require replacement (Dudek 2026). Under the SCMC, the appraised value of removed trees must be applied toward oak tree planting within the developed landscape. The BRTR provides monetary calculations for compensation to comply with the SCMC.

The SCMC requires new trees that are planted to compensate for regulated tree loss to meet California Department of Forestry and Fire Protection specifications, with a minimum planting size of 24-inch box and encouragement of larger specimen trees (36-inch box and larger) in front- and side-yard setbacks (SCMC § 17.51.030, Landscaping and Irrigation Standards). Based on the appraised value for the 16 removals and seven major encroachments, compensation may require the equivalent of seven hundred twelve 24-inch box trees, or approximately 31 replacement trees per impacted tree. This equates to replacement ratios of approximately 68:1 for 15-gallon, 13.2:1 for 36-inch box, 3.5:1 for 48-inch box, and 1.6:1 for 60-inch box trees. The applicant would also be required to obtain a Class IV Oak Tree Permit (SCMC § 17.23.170, Oak Tree Permit).

During both construction and operation of the proposed one-million-gallon water storage tank and Reservoir Management System, removal, relocation, trimming, or replacement of protected oak trees would not be required. Grading is not proposed as installation would occur atop the existing cement foundation.

COUNTY OF LOS ANGELES SEA ORDINANCE AND CITY OF SANTA CLARITA SEA OVERLAY ZONE

The Santa Clara River SEA was established to protect habitats and sensitive plant and wildlife species associated with the river. The project area is largely located in upland habitats, with most impacts occurring south of the railroad tracks, and preserves riparian habitats associated with the Santa Clara River. Impacts to riparian vegetation (1.20 acres) and jurisdictional waters (0.04 acre) would not degrade the integrity of the SEA. The project does not fragment habitat, as it is adjacent to existing development, retains the functional connectivity of Oak Spring Canyon Creek and the Santa Clara River, and minimizes edge effects by siting residential development south of the railroad tracks. Approximately half of the project impacts occur in nonnative or disturbed land covers, with the remainder primarily in upland vegetation communities. Riparian habitats are further buffered by the railroad tracks and preserved open space. The project would not degrade the ecological or hydrological function of the Santa Clara River and would improve conditions at Oak Spring Canyon Creek by replacing the Arizona crossing with a bridge. Accordingly, the project conforms with the SEA ordinance.

In addition, MM BIO-1.2 through MM BIO-1.5, MM BIO-1.7, MM BIO-1.10, and MM BIO-1.11 require construction monitoring, WEAP training, on-site habitat preservation and enhancement, footprint delineation, and measures to prevent the introduction of nonnative plant species. Implementation of these measures would reduce direct impacts to SEA resources to *less than significant with mitigation*.

Impact BIO-5
The project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
Mitigation Measures
Implement MM BIO-1.2 through MM BIO-1.5, MM BIO-1.7, MM BIO-1.10, and MM BIO-1.11.
Impacts Following Mitigation
With implementation of MM BIO-1.2 through MM BIO-1.5, MM BIO-1.7, MM BIO-1.10, and MM BIO-1.11, impacts related to tree preservation policies and ordinances would be reduced to less than significant.

f) Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

There are no USFWS-designated critical habitats, HCPs, CDFW NCCPs, or other Federal, State, or local designated conservation areas on or directly adjacent to the project area nor the Live Oak Storage Reservoir site. Therefore, project construction and operation would not conflict with any approved State, regional, or local HCPs, and *no impact* would occur.

Impact BIO-6
Construction and operation of the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

4.4.6 Cumulative Impacts

A cumulative impact to biological resources may occur if a project has the potential to collectively degrade the quality of the environment; substantially reduce wildlife species habitat; cause a population to drop below self-sustaining levels, thereby threatening to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal species.

To consider the cumulative environment, the Sand Canyon Resort project was examined, as that is the only cumulative project located within 1,000 feet of the project site. The Sand Canyon Resort is located south of the project site at the Sand Canyon Country Club. The resort project includes the development of a four-story, 283-room hotel with amenities; 12 suites in villas; a function building; a spa building; a kids building; and pools. The project is under planning review.

For each identified impact, related project mitigation measures have been developed to address the project's construction and operation impacts to biological resources (i.e., MM BIO-1.1 through MM BIO1.12 and MM BIO-3.1). These mitigation measures have been developed to address both impacts from temporary construction and long-term impacts from project operation. Current and future development projects within the project vicinity would be subject to separate environmental review pursuant to CEQA to determine potential impacts related to biological resources and would be required to implement mitigation measures to reduce project impacts. With adherence to applicable regulations and site-specific mitigation measures, which would be anticipated under for any potential impacts of the Sand Canyon Resort's City-led environmental review, the project and related projects would not result in significant cumulative impacts related to biological resources.

Therefore, with implementation of MM BIO-1.1 through MM BIO1.12 and MM BIO-3.1, the project would not contribute toward a cumulatively considerable impact related to biological resources, and impacts would be less than cumulatively considerable.

BIO Impact 7
The project would not contribute to cumulative biological resources impacts.
Mitigation Measures
Implement MM BIO-1.1 through MM BIO1.12 and MM BIO-3.1.
Impacts Following Mitigation
With implementation of MM BIO-1.1 through MM BIO1.12 and MM BIO-3.1, the project's contribution to potential cumulative impacts related to biological resources would be less than significant.

4.5 CULTURAL RESOURCES

This section of the EIR describes the existing conditions and regulatory setting for cultural resources as it pertains to the project, evaluates potential environmental impacts to cultural resources that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. This evaluation includes impacts to archaeological and historic-era built environment resources and the potential for newly discovered archaeological and built environment resources that could be impacted by the construction of the project. Unless otherwise indicated, the information in this section is taken from the *Cultural Resources Inventory and Evaluation Report for the Belcaro at Sand Canyon Project, City of Santa Clarita, Los Angeles County, California* (Cultural Resources Report) (Dudek 2025; EIR Appendix J).

4.5.1 Existing Conditions

4.5.1.1 Environmental and Geologic Setting

The project site is located in the Soledad Canyon area of the Santa Clarita Valley. Elevations throughout the project area range from approximately 1,569 to 1,630 feet above mean sea level. The project area is bordered by the Santa Clara River to the north and the Angeles National Forest to the east. The project site is currently vacant, undeveloped land that is traversed by dirt paths and roadways primarily used by off-road vehicles, horses, bicycles, and pedestrians. Vegetation throughout the project area primarily consists of cottonwood/willow riparian and riparian scrub species. Other surrounding vegetation types include chaparral, coastal sage scrub, oak woodland, and some buckwheat and cholla cacti species.

4.5.1.2 Prehistoric Setting

Various chronological frameworks have been developed to help interpret cultural changes in Southern California. Drawing from earlier research and emphasizing data synthesis, Wallace (1955, 1978) established a prehistoric chronology for the Southern California coastal region that remains widely referenced today and is applicable to both near-coastal and many inland areas. Wallace's sequence divides prehistory into four periods: Early Man, Milling Stone, Intermediate, and Late Prehistoric. While Wallace's original synthesis (1955) was limited by a lack of precise dating due to few absolute dates (Dudek 2025), this issue has largely been resolved with the acquisition of thousands of radiocarbon dates by Southern California archaeologists (Dudek 2025). Wallace's framework has undergone several revisions, incorporating radiocarbon data and projectile point analyses (Dudek 2025).

HORIZON I: EARLY MAN (CA. 10,000–6000 BC)

Mainland sites attributed to the Early Man period generally indicate that the economy was a diverse mixture of hunting and gathering, with a major emphasis on aquatic resources in many coastal areas and a greater emphasis on large-game hunting inland. Fundamental elements of lithic tool technology described by Wallace (1955) for this period include numerous scrapers, choppers, chipped and notched crescents, and large blades and points. Wallace also describes clamshell and bone beads, along with an absence of seed-grinding implements from the type site for this period, Malaga Cove. Several sites in Orange and San Diego Counties contain components that date to between 9,000 and 10,000 years ago, and radiocarbon dates from the Goleta Slough area in Santa Barbara County indicate occupations spanning circa 7300–6400 BC with a primary subsistence focus on lagoon/bay shellfish.

HORIZON II: MILLING STONE (6000–3000 BC)

The Millingstone period corresponds to the Early Holocene when rising sea levels continued to encroach on coastlines, although the global climate was slowly stabilizing. Set during a warmer and drier climatic regime than the previous horizon, the Millingstone period is characterized by subsistence strategies centered on collecting plant foods and small animals, although in coastal areas where archaeological assemblages have been preserved, there is also ample evidence of marine resource use during this time. The importance of seed processing is apparent in the dominance of stone grinding implements in archaeological assemblages from this period, namely milling stones (metates) and hand stones (manos).

Millingstone assemblages are characterized by the extensive use of milling implements (particularly manos and metates) and mullers along with scraper planes, choppers, and core tools and a general lack of finely crafted projectile points, although leaf-shaped points believed to be darts are present. The general lack of faunal remains along with bone and shell tools at some sites dated to this period have led researchers to suggest a stronger reliance on plant food resources (i.e., seeds), with only a minor focus on hunting. Several sites have been described for this horizon throughout Southern California, including Little Sycamore in Ventura, Porter Ranch in San Fernando, and the La Jolla shell mounds in San Diego. Los Angeles County sites with Millingstone components include Malaga Cove (Level 2, LAN-138), the Tank Site (LAN-1) in Topanga Canyon, the La Brea Tar Pits Archaeological Site (LAN-159/H), the Zuma Creek Site (LAN-174), the Sweetwater Mesa Site (LAN-267), the Shobhan Paul Site (LAN-958), and the Parker Mesa site (LAN-215). Primary sites with Millingstone components in Orange County include Bolsa Chica (ORA-83), ORA-64, and the Landing Hill Site.

HORIZON III: INTERMEDIATE (3000 BC–AD 500)

The Intermediate period corresponds with the Middle Holocene and early Late Holocene time periods geologically and marks the point when current shorelines were established in most parts of the world. Consequently, evidence for marine resource use appears to have increased after 5,000 to 6,000 years ago. The Intermediate period is characterized by important changes in almost all aspects of culture, including settlement patterns, economic activities, mortuary practices, and technology. During this period, economic practices shifted toward a hunting and maritime subsistence strategy, along with a wider use of plant foods. An increasing variety and abundance of fish, land mammal, and sea mammal remains are found in sites from this horizon along the California coast. Related chipped stone tools suitable for hunting, including side-notched projectile points, are more abundant and diversified, and shell fishhooks became part of the toolkit during this period. Mortars and pestles became more common during this period, gradually replacing manos and metates as the dominant milling equipment and signaling a shift away from the processing and consuming of hard-shelled seed resources to the increasing importance of fleshier fruits like the acorn. Bow and arrow technology is first seen toward the end of the Intermediate period (ca. 1500–1000 B.P.) when it appears to have spread to the Southern California coast from the north and east.

Technological markers described for this horizon consist of basket-hopper mortars, mortars and pestles, diverse and plentiful chipped stone assemblages with greater numbers and a wider variety of projectile point types, and bone and antler tools, which are present to some degree but not in the quantity seen during later phases, along with occasional use of bitumen (asphalt) and steatite. Faunal assemblages often include terrestrial mammals representing wild game, along with some marine mammal bones and often high densities of shellfish remains.

The Middle Holocene also marks a time of cultural innovation in the archaeological record of California. Significant cultural developments are seen in the increasing formation of larger settlements; the intensification of long-distance trade networks, including distinct cultural spheres throughout western

North America; and the elaboration of art and personal aesthetics (e.g., shell and stone pendants and increasing variety of shell bead types and styles). Finally, archaeological data indicate possible migrations into coastal Southern California by desert peoples from the east during the Intermediate period, based on changes in mortuary practices (i.e., cremations), the presence of desert tanged projectile points, and increased numbers of stone as opposed to shell beads.

HORIZON IV: LATE PREHISTORIC (AD 500–HISTORIC CONTACT)

The Late Prehistoric period extended from the end of the Intermediate period (approximately AD 500) until Spanish colonization, marked by the Cabrillo expedition in AD 1542. This period is characterized by extensive population growth and a large increase in the number and types of sites along the Southern California coast. During this period, there was a significant increase in the population of Native peoples in Southern California accompanied by the advent of larger, more permanent villages, particularly at the mouths of large mainland coastal canyons and drainages with year-round water supplies. Large populations and, in places, high population densities are characteristic, with some coastal and near-coastal settlements containing as many as 1,500 people. Many of the larger settlements were permanent villages in which people resided year-round, although the populations of these villages may have also increased seasonally. The development of social differentiation is indicated during this period by the complexity of site layouts with numerous complex features and the highly variable nature of mortuary treatments and burial grounds.

During the Late Prehistoric period, there was an increase in the use of plant food resources in addition to an increase in terrestrial and marine mammal hunting. There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric period, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely flaked projectile points suggests increased use of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Steatite cooking vessels and containers are also present in sites from this time, and there is an increased presence of composite bone gorges and circular shell fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments such as beads made from shell, bone, and stone. Olivella shell bead styles include a variety of wall and callus beads in addition to the previous spire-lopped and cup beads. There was also an increased use of asphaltum, or bitumen, for waterproofing basketry and caulking canoes and as an adhesive.

Technological markers of this horizon include the increased use of the bow and arrow, stemless points with concave or convex bases, steatite containers, widespread use of asphaltum as adhesive, and increased abundance and types of bone tools, as well as shell, bone, and stone ornaments. Wallace also describes notable distinctions between northern and southern groups during this period, including less pottery north of Orange County, where steatite vessels were more prevalent, and the presence of portable mortars and pestles and basket-hopper slabs in the north with bedrock mortars and milling stones being more prevalent in the San Diego area.

By AD 1000, fired clay smoking pipes and ceramic vessels were being used at some sites. The scarcity of pottery in coastal and near-coastal sites implies that ceramic technology was not well developed, or that occupants were trading with neighboring groups to the south and east for ceramics. The lack of widespread pottery manufacture is usually attributed to the high quality of tightly woven and watertight basketry that was caulked with bitumen (asphaltum) and functioned in the same capacity as ceramic vessels.

4.5.1.3 Ethnographic Setting

The project area lies within the ethnographic territory of the *Tataviam* people (Dudek 2025). Numerous neighboring tribes are known to have interacted with the *Tataviam* in this region, including the Ventureño *Chumash* to the west, the Gabrielino to the southeast, the Serrano to the east, and the Kitanemuk to the north. It should be emphasized that this ethnographic overview is intended to offer a basic introduction to the Tribe's geographic association, language, social and political structures, religious and spiritual beliefs, material culture, and subsistence practices, rather than serve as a comprehensive cultural history.

TATAVIAM ETHNOGRAPHY

Tataviam territory encompassed the upper Santa Clara River drainage east of Piru Creek, extended north to the Sawmill Mountains, and included the southwestern portion of the Antelope Valley. Information about the *Tataviam* is limited, with most of what is known today coming from the research of Alfred L. Kroeber and John P. Harrington, as well as interviews with Juan José Fustero, a key consultant (Dudek 2025).

There are differing theories regarding the linguistic affiliation of the *Tataviam*. Some researchers propose that the *Tataviam* spoke a language uncommon in Southern California, while others suggest it may have been a Takic language, similar to those spoken by neighboring southern groups (Dudek 2025). As with many languages, Takic dialects likely varied most at the geographic edges, with subtle shifts in pronunciation and vocabulary from one community to another. One theory posits that *Tataviam* Takic speakers occupied the northern boundary of Western Tongva lands, speaking a related but distinct language from Northern Takic (Dudek 2025).

Based on Harrington's information, King and Blackburn (Dudek 2025) identified several significant *Tataviam* settlements, such as the important village of *Tsawayung* near Castaic Junction at Rancho San Francisquito (Newhall Ranch). Other notable villages include *Tikatsing* on upper Castaic Creek and *Pi'ing* at the confluence of Castaic Creek and Elizabeth Lake Canyon. *Tochonaga*, another major settlement, was documented on an 1843 land grant map and appears to be southeast of Newhall. Additional villages and seasonal camps noted by Harrington include *Akure'eng* at the original Newhall townsite, *Apatsitsing* on upper Castaic Creek, and *Naqava'atang* east of Townsend Peak. Several village and rancheria sites were also present along Piru Creek at the northern edge of *Tataviam* territory (Dudek 2025).

Tataviam villages are thought to have ranged in size from large centers with up to 200 residents, to mid-sized villages housing 20 to 60 people, to smaller settlements of 10 to 15 individuals (Dudek 2025). Permanent family dwellings, known as *Ki'j*, were 12- to 20-foot-diameter dome-shaped structures constructed from willow branches and typically covered with bulrush or cattails. A hole was left at the top of the roof to allow smoke from indoor fires to escape.

Tataviam subsistence was primarily based on hunting and gathering (Dudek 2025). Plant foods included yucca, acorns, sage seeds, juniper berries, and islay berries, while animal foods consisted of small mammals, deer, and possibly antelope. Archaeological evidence also points to the consumption of marine shellfish and fish at some *Tataviam* sites. It is believed that the *Tataviam* relied more heavily on yucca buds than neighboring groups (Dudek 2025).

Pedro Fages's account of the 1769 Portolá expedition records that the first *Chumash* settlement encountered after leaving *Tataviam* territory was west of the mouth of Piru Creek. The village of *kamulus* (Camulos), located east of Piru Canyon, bears a *Chumash* name and is thought to have been inhabited by a mixed *Chumash-Tataviam* population (Dudek 2025).

4.5.1.4 Historic Setting

The post-contact history of California is commonly categorized into three distinct periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). The Spanish Period officially began in 1769 with the establishment of a settlement at San Diego and the founding of Mission San Diego de Alcalá. California's transition to the Mexican Period occurred in 1822, following its independence from Spain. The onset of the American Period is marked by the signing of the Treaty of Guadalupe Hidalgo in 1848, which ended the Mexican–American War and resulted in California becoming a territory of the United States.

SPANISH PERIOD (1769–1822)

Spanish explorers conducted maritime expeditions along the Southern California coastline from the mid-1500s to the mid-1700s. The Spanish crown asserted its claim to California based on the explorations and surveys conducted by Cabrillo and Vizcaíno (Dudek 2025). In 1769, Captain Gaspar de Portolá led an overland expedition to the region, which is recognized as the start of California's historic era. Portolá, accompanied by 64 soldiers, missionaries, Indigenous peoples from Baja California, and Mexican settlers, established the Presidio of San Diego, the first Spanish military outpost in Alta California. In July 1769, while Portolá explored Southern California, Franciscan Father Junípero Serra founded Mission San Diego de Alcalá at Presidio Hill—the first of 21 missions established in Alta California by the Spanish and the Franciscan Order between 1769 and 1823.

During the Spanish Period, a primary focus was the construction of missions and presidios, which aimed to convert the Indigenous population to Christianity and incorporate them into communal life. Efforts were also made to encourage settlement in pueblos, or towns, although only three pueblos were founded during this era. Of these, two—San José and Los Angeles—flourished and remain as cities today. Growth in Alta California was limited by several factors, including the threat of foreign incursions, political discontent, and unrest among Indigenous communities.

MEXICAN PERIOD (1822–1848)

Following more than a decade of sporadic rebellion and conflict, New Spain—which included present-day Mexico and California—achieved independence from Spain in 1821. The following year, California's Mexican legislature ended the isolationist measures that had protected the Spanish monopoly on trade, opening California's ports to foreign merchants (Dudek 2025).

During the Mexican Period, extensive land grants were issued throughout the interior, aiming to encourage settlement away from the coastal regions where Spanish colonization had been concentrated. The secularization of the missions after independence led to the division of former mission lands and the creation of numerous additional ranchos. Between 1834 and 1848, ranchos became dominant, with landowners primarily focusing on cattle ranching and dedicating large expanses to grazing. Cattle hides emerged as a key export from Southern California, serving as a valuable commodity for trade with the eastern United States, Mexico, and other regions. This era also saw an increase in the nonnative population, driven by the arrival of explorers, trappers, and ranchers linked to the land grant system. The growing population contributed to the spread of diseases new to Indigenous communities, who lacked immunity to these illnesses.

AMERICAN PERIOD (1848–PRESENT)

War in 1846 between Mexico and the United States precipitated the Battle of Chino, a clash between resident Californios and Americans in the San Bernardino area. The Mexican–American War ended with the Treaty of Guadalupe Hidalgo in 1848, ushering California into its American period.

California officially became a State with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. Territories. Horticulture and livestock, based primarily on cattle as the currency and staple of the rancho system, continued to dominate the Southern California economy through 1850s. The Gold Rush commenced in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides, but also as a source of meat and other goods. During the 1850s cattle boom, rancho vaqueros drove large herds from southern to northern California to feed that region's burgeoning mining and commercial boom. Cattle were at first driven along major trails or roads such as the Gila Trail or Southern Overland Trail, then were transported by trains when available. The cattle boom ended for Southern California as neighbor States and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Dudek 2025).

The construction of wagon roads and railroads across the Colorado and Mojave Deserts from the 1850s to the 1870s linked coastal California with the rest of the country. These transportation routes carried mail, prospectors, miners, entrepreneurs, merchants, immigrants, laborers, muleteers, settlers, and military personnel, as well as supplies, livestock, produce, timber, and minerals from desert mines. The development of permanent roadways along these trails and wagon roads coincided with the rise of automobile use at the turn of the twentieth century.

HISTORIC OVERVIEW OF SANTA CLARITA

Santa Clarita, located roughly 35 miles northwest of Los Angeles, was incorporated as a City in 1987. In the 1770s, during the Spanish period, the region became part of Rancho San Francisco, supporting Mission San Fernando Rey de España (Mission San Fernando). Local Indigenous peoples were gathered to construct the mission and worked on the ranch cultivating crops (Dudek 2025).

Political control shifted in 1822, when Mexico gained independence from Spain, making the region part of the Mexican Republic. With the secularization of missions in 1833, the Mexican government confiscated mission lands and appointed Lieutenant Antonio Del Valle to take inventory of Mission San Fernando in 1834. In 1838, Del Valle resigned his commission and petitioned for ownership of Rancho San Francisco, which was granted in 1839, giving him 48,829 acres. Del Valle died two years later, leaving behind extensive land and livestock but no will, resulting in legal disputes among family members until the land was divided (Dudek 2025).

Ygnacio Del Valle managed Rancho San Francisco until 1865, but severe drought left the property in debt, leading to its loss to financiers and eventual sale to oil speculators. This led to the area's first major oil discovery and the installation of an oil well near the Del Valle residence (Dudek 2025). Ownership of the land changed several times before Henry Mayo Newhall acquired it in 1875. In 1876, the town of Newhall was established, and the Southern Pacific Railroad (SPRR) Soledad Canyon Line was routed through the area. Construction of the San Fernando Railroad Tunnel, completed in 1876 by a diverse workforce, marked the completion of the line at Lang Station, celebrated with a Golden Spike ceremony. That year, the Newhall station was built, but sandstorms forced the relocation of the town site three miles south (Dudek 2025).

The completion of the railroad in 1876 spurred growth in local oil and mining industries, attracting settlers. Soledad Canyon, rich in sand and gravel, had been surveyed in 1853 for railroad potential, and copper was discovered, leading to the formation of the Soledad Mining Company in 1861. In 1868, the discovery of gold in Soledad Canyon brought more miners to the area. The Pioneer Oil Refinery, built in 1876 by California Star Oil Works (now Chevron), processed petroleum from Pico Canyon. The influx of settlers, especially sheep ranchers seeking new pastures after droughts elsewhere, contributed to gradual development (Dudek 2025).

Early twentieth-century maps show limited development along the railroad in the area of Santa Clarita. In 1907, Saugus School was built and construction began on the Elizabeth Tunnel for the Los Angeles Aqueduct. The Sterling Borax mine operated in Tick Canyon from 1908 to 1921, and the community grew with new stores, post offices, and churches. Hollywood figures like Gene Autry and William S. Hart brought the film industry to the area and established ranches. The opening of the Los Angeles Aqueduct in 1913 provided water from Owens Valley, supporting agriculture and ranching (Dudek 2025).

Civic growth accelerated in the 1920s, with the Newhall Chamber of Commerce founded in 1923 and the Newhall Community Hospital established four years later. In 1928, the catastrophic failure of the St. Francis Dam caused widespread destruction and the deaths of 411 people, leading to the retirement of William Mulholland from the Los Angeles Bureau of Water Works and Supply (Dudek 2025).

The Great Depression slowed development, and throughout the 1930s, Santa Clarita remained largely rural, with scattered ranches and farms. A second gold rush in local canyons and the creation of a Civilian Conservation Corps camp in Bear Canyon in 1933 helped buffer the economy. The Bermite Power Company, established in 1934, provided jobs that increased with World War II, including the first local housing tract for company workers (Dudek 2025).

Post-World War II, population growth surged. Santa Clarita's population nearly doubled from 4,000 in 1940 to 7,500 in 1950. The first tract housing community, Rancho Santa Clarita, was built in Seco Canyon in 1947, marking the first official use of the name. Changes to property tax rules by the County incentivized residential development, prompting landowners to sell for subdivisions, leading to denser housing and commercial growth in the 1950s and 1960s (Dudek 2025).

Between 1965 and 1967, I-5 was built, making Santa Clarita more accessible and accelerating its transformation into a "bedroom community." In 1967, the California Land Company began developing Valencia, a master-planned community later incorporated into the City. Other major developments included the California Institute of the Arts in 1961, Old Orchard Shopping Center in 1965, and Castaic Lake's groundbreaking in 1964 (completed in 1974) (Dudek 2025).

Growth continued in the 1970s, notably with the opening of Six Flags Magic Mountain in 1971, which became the valley's largest employer and a major tourist attraction. After several failed attempts, Santa Clarita was successfully incorporated in 1987, combining Canyon Country, Newhall, Saugus, and Valencia. Since incorporation, many neighborhoods have been annexed, making Santa Clarita the third largest city in Los Angeles County. As of 2020, Santa Clarita is a predominantly residential community with a population of 228,673 (U.S. Census Bureau 2024).

SOUTHERN PACIFIC RAILROAD

Founded in 1865, the SPRR was originally established to connect San Francisco and San Diego by rail. In the mid-1870s, the SPRR expanded its network through the Santa Clarita Valley, which led to the growth of several small towns along the railway. Between 1873 and 1876, the SPRR constructed the Soledad Canyon Line, linking Santa Clarita and Palmdale to facilitate the transportation of mining products from Soledad Canyon. Upon completion in 1876, a golden spike was driven at Lang Station—now recognized

as California Historic Landmark No. 590 (Dudek 2025). Although Lang Station was demolished in 1971, a monument marks the site, commemorating the September 5, 1876, event when Charles Crocker, then president of the SPRR, drove the gold spike to finalize the San Joaquin Valley Route—the first rail connection between Los Angeles, San Francisco, and the transcontinental lines (Dudek 2025).

The railroad connected the Santa Clarita Valley to the broader nation via the San Joaquin Valley Route, which linked Los Angeles and San Francisco and provided access to the northern segment of the first transcontinental railroad in Sacramento (Southern California Railway Museum 2025; Sapphos 2024:4–7). In 1883, the SPRR extended its tracks to New Orleans, Louisiana, establishing a transcontinental corridor across the southern United States through Arizona, New Mexico, and Texas. This new route contributed to a surge in Los Angeles County's population, with an increase of about 60,000 residents between 1890 and 1900. By the twentieth century, the SPRR had become a dominant force in western rail transportation, supporting regional economic growth by moving goods, people, and resources.

Santa Clarita experienced significant development in the early 1900s, fueled by oil discoveries and agricultural expansion. The region's geography provided an efficient rail route to both Los Angeles and San Francisco, where products could be transferred to other lines across the country. The Soledad Canyon Line opened new agricultural lands and offered farmers and local businesses a rapid transit option for their goods (Dudek 2025).

Historic maps and aerial photos indicate that the railroad segment in the project area (Section 24, Township 4 North, Range 15 West) was realigned to the north between 1955 and 1959. The original alignment, abandoned due to flooding, is marked as the "Old Railroad Grade" on subsequent topographic maps (Dudek 2025). The line continued to serve both passenger and freight trains until the 1970s, with the final passenger service ending in 1971 and the last freight train in 1979. In 1992, the Los Angeles County Transportation Commission acquired the Soledad Canyon Line and transferred its operation to the Southern California Regional Rail Authority (now Metrolink) (Dudek 2025). Metrolink established shared trackage rights in 1993 and began commuter rail service along the former SPRR Soledad Canyon Line (Dudek 2025). As of 2025, this line continues to serve as a commuter route operated by Metrolink.

4.5.1.5 Existing Cultural Resources

RECORDS SEARCH

On September 9, 2014, Dudek performed a records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC), located at the California State University, Fullerton campus in Fullerton, California. This initial records search was conducted for the Mancara Project and included the same project area as the currently proposed project (Dudek 2025). Updates to this original records search were completed by Dudek on March 20, 2024. The updated records search included a review of mapped prehistoric, historical, and built environment resources; California Department of Parks and Recreation (DPR) site forms; technical reports; archival resources; and ethnographic references.

In addition to official maps and records on file at the SCCIC, the following inventories, publications, and technical studies were consulted as part of the record search:

- Historical maps of the project area
- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- California Historic Property Data File

- California State Historical Landmarks
- California Points of Historical Interest
- Archaeological Determinations of Eligibility

Prior Cultural Resources Studies

The SCCIC records search data revealed that there are 46 previously conducted cultural resources studies within a one-mile radius of the project area, four of which overlap with a portion of the project area at minimum (Table 4.5-1).

Table 4.5-1. Previous Cultural Resources Studies within One Mile of the Project Area

SCCIC Report Number	Title of Study	Author	Year
LA-03659	*Parcel Map 12878*	Romani, Gwendolyn R.	1980
LA-04608	*Cultural Resources Archaeological Survey Oak Spring Canyon, California Tentative Tract Map No. 47803*	Tartaglia, Louis J.	1989
LA-06001	*Historical Documentation Report (brief) Oak Springs Canyon Project*	Reponen, Gerald	1989
LA-10560	*Final Confidential: Cultural Resources Study for the Upper Santa Clara River Watershed Arundo and Tamarisk Removal Program Long-term Implementation Plan, Program Environmental Impact Report/Environmental Assessment, Los Angeles County, California*	Hunt, Kevin, and Richard D. Schultz	2005
	*Cultural Resources Survey Report for the Mancara Project, City of Santa Clarita, Los Angeles County, California**	Wolf, Scott, Samantha Murray, and Micah J. Hale	2014

Source: Dudek (2025)

* This report was not submitted to the SCCIC (submission not required).

Previously Recorded Cultural Resources

The SCCIC records search data revealed that seven previously identified cultural resources are within a one-mile radius of the project area, none of which overlap with the project area (Table 4.5-2). One additional previously recorded historic-era resource, Mancara-01, was identified within the project area during a 2014 pedestrian survey conducted for the Mancara Project. Of the eight resources documented within the record search area, two are prehistoric sites, one is a prehistoric isolate, one is a multicomponent resource, three are historic-era sites, and the last is the Angeles National Forest, a California Registered Historical Landmark.

Table 4.5-2. Previously Recorded Cultural Resources within One Mile of the Project Area

Primary No.	Trinomial	Age	Description	Eligibility Status	Distance from Project Site
Mancara-01*	--	Historic	Historic-era residential site	Recommended not significant under CEQA and not eligible for listing in the CRHR	Within
P-19-001077	CA-LAN-1077	Prehistoric	Habitation site and midden	Not evaluated	0.60 mile
P-19-003768	CA-LAN-3768	Prehistoric	Lithic and groundstone scatter	Not evaluated	0.77 mile
P-19-004355	CA-LAN-4355/H	Multicomponent	Prehistoric artifact scatter; Historic cemetery	Not evaluated	0.85 mile

Primary No.	Trinomial	Age	Description	Eligibility Status	Distance from Project Site
P-19-004356	CA-LAN-4356H	Historic	Historic-era residential site	Not evaluated	0.90 mile
P-19-004605	CA-LAN-4605H	Historic	Historic-era residential site	Not evaluated	0.75 mile
P-19-100336	--	Prehistoric	Isolate: Lithic core	Not significant	0.90 mile
P-19-186535	--	Historic	Angeles National Forest	Registered California Historic Landmark	0.25 mile

Source: Dudek (2025)

* This site record was not submitted to the SCCIC.

Mancara-01

Mancara-01, first documented by Dudek in 2014, covers an area of about 115 × 160 feet and is situated on flat terrain, partially shaded by mature oak trees (Dudek 2025). The site is a historic residential site containing five main features: a concrete foundation, a collapsed chimney, a cobble rock ring, a small pond or fish feature, and a minor deposit of historic refuse:

1. **Feature 1:** The foundation consists of several concrete slabs in varying condition, forming a 10 × 10-foot rectangle. A raised concrete curb borders the southern edge. Scattered debris includes nails, wood, rubber, ceramics, and glass, but none are diagnostic.
2. **Feature 2:** This water feature or fishpond, made from concrete and river cobbles, measures about 10 × 10 feet and is 1.5 feet deep. It is located 25 feet southeast of the foundation, near the oak grove, and has three rounded sections with a possible central fountain.
3. **Feature 3:** The chimney, now collapsed, is approximately 26 feet long, 5 feet wide, and 3 feet high and is located 39 feet south of the foundation. Most of the structure has fallen to the south, and it was built with brick, mortar, plaster, and cement. The remains are divided into three main sections.
4. **Feature 4:** This circular cobble rock ring, five feet in diameter and made up of eight large cobbles, sits 20 feet west of the chimney. No charcoal or ash was found.
5. **Feature 5:** A small refuse deposit from the mid-twentieth century is located about 98 feet west of the foundation, along a patch of scrub vegetation in a shallow drainage area. It contains both intact and broken food and household containers.

The residence was identified in aerial photographs from 1928 and appears to have been demolished by 1974 (Dudek 2025). No archival records were found on the former residents of the property.

In 2014, Dudek conducted archaeological testing at Mancara-01 to assess the potential for significant subsurface deposits. Six shovel test pits (STPs) were excavated:

- **STPs 1, 3, and 4:** Terminated at 40 centimeters, found to be sterile with no cultural materials.
- **STP 2:** Reached bedrock at 70 centimeters, contained 121 glass fragments, 116 building fragments, 47 metal pieces, 10 ceramic fragments, four personal items, and four faunal bones.
- **STP 5:** Located within Feature 5, terminated at 50 centimeters, yielded 17 glass fragments, 11 metal pieces, and six cans, but no further cultural material.

The results indicated that Mancara-01 does not meet the criteria for designation as a historical resource and is considered not significant under CEQA, nor eligible for listing in the CRHR.

NATIVE AMERICAN COORDINATION

Dudek contacted the California Native American Heritage Commission (NAHC) by email on April 17, 2024, requesting a review of the Sacred Lands File (SLF). The NAHC responded on May 6, 2024, indicating that the results of the search were negative. The NAHC also provided a list of 23 Native American groups or representatives and recommended contacting each for any information they may have regarding cultural or tribal resources in the project area. Tribal consultation is described in detail in Section 4.18, *Tribal Cultural Resources*, of this EIR.

CULTURAL RESOURCES PEDESTRIAN SURVEY

Dudek archaeologists conducted an intensive pedestrian survey for the Mancara Project area in September 2014, which corresponds to the area of the current project. Updated surveys were carried out by Dudek staff on April 8 and 9 and November 21, 2024.

Survey transects were spaced at 15-meter intervals, running north–south in the southern portion and east–west in the northern portion of the project area. Archaeologists examined visible ground surfaces for prehistoric artifacts (such as stone tools and ceramics), soil changes indicating cultural deposits, structural features, and historic materials. Areas disturbed by natural or artificial causes were also inspected for subsurface finds.

Any cluster of three or more artifacts within a 25-square-meter area, or the presence of features like foundations, was classified as an archaeological site. Artifacts separated by 50 meters or more defined site boundaries. Newly identified sites received temporary numbers, while isolated finds (fewer than three artifacts in a 25-square-meter area) were recorded separately. Expected site types included prehistoric artifact scatters, historic refuse deposits, and railroad-related features.

BUILT ENVIRONMENT PEDESTRIAN SURVEY

Dudek architectural historians conducted an intensive-level built environment pedestrian survey of the project area on September 25, 2025. The survey included documenting the former SPRR Soledad Canyon Line with notes and photographs from the public right-of-way, specifically recording character-defining features, spatial relationships, and observed alterations, and examining any historic landscape features on the railroad.

Survey Results

The 2024 and 2025 cultural resources pedestrian surveys revisited the previously documented archaeological site (Mancara-01) and identified three additional historic-era archaeological resources (BSC-DF-S-005, BSC-DF-S-006, and BSC-RB-S-001) and one newly recorded historic-era built environment resource (the SPRR Soledad Canyon Line) within the project area (Table 4.5-3).

Table 4.5-3. Cultural Resources Identified Within the Project Area

Temporary No. or Resource Name	Age	Resource Type	Description	NRHP/CRHR Eligibility Status
Mancara-01	Historic	Site	Foundational remains of a historic-era residence with an associated refuse scatter	Not eligible
BSC-DF-S-005	Historic	Site	Remnants of a historic-era concrete well or cistern	Not eligible
BSC-DF-S-006	Historic	Site	Foundational remains of a historic-era residence	Not eligible

Temporary No. or Resource Name	Age	Resource Type	Description	NRHP/CRHR Eligibility Status
BSC-RB-S-001	Historic	Site	Earthen embankment and floodplain culvert (former alignment of the SPRR)	Not eligible
SPRR Soledad Canyon Line	Historic	Structure	Operational double-track railway	Not eligible

Archival research shows that most of the project area remained undeveloped throughout the twentieth century, except for limited grading, road construction, and small-scale agriculture. The project area's geomorphological context suggests moderate potential for subsurface archaeological deposits, especially given its proximity to the Santa Clara River, which may have been used by Indigenous peoples prior to European contact.

All three historic-era archaeological resources and the segment of the SPRR Soledad Canyon Line were evaluated. It was determined that the three archaeological resources (BSC-DF-S-005, BSC-DF-S-006, and BSC-RB-S-001) do not meet eligibility criteria to be considered significant or unique under CEQA and are recommended as ineligible for listing in the NRHP, CRHR, or City's List of Historic Resources. Although the SPRR Soledad Canyon Line is considered significant under NRHP/CRHR Criterion A/1 and the City's List of Historic Resources under Criterion A due to its association with the San Joaquin Valley Route and the economic development of Santa Clarita between 1876 and 1883, the segment lacks sufficient integrity to convey this significance and is therefore recommended ineligible for listing in the NRHP, CRHR, or City's List of Historic Resources. Finally, a reevaluation of Mancara-01 confirmed that the resource does not meet the criteria for designation as a historical resource and is considered not significant under CEQA, nor eligible for listing in the CRHR.

4.5.2 Regulatory Setting

4.5.2.1 Federal

NATIONAL HISTORICAL PRESERVATION ACT AND NATIONAL REGISTER OF HISTORIC PLACES

The National Historic Preservation Act (NHPA) established both the NRHP and the Advisory Council on Historic Preservation (ACHP). Under the NHPA, significant cultural resources, or historic properties, include prehistoric or historic districts, sites, buildings, structures, or objects listed in or eligible for the NRHP. These properties may also include artifacts, records, and remains associated with them, and can encompass properties of traditional religious or cultural importance to Native American Tribes or Native Hawaiian organizations. Some historic properties are further recognized as National Historic Landmarks, indicating their exceptional national significance.

The NRHP is the official Federal list of places considered worthy of preservation, managed by the National Park Service (NPS) within the U.S. Department of the Interior. It includes National Historic Landmarks and other historic sites overseen by NPS.

To be listed in or deemed eligible for the NRHP, a property must meet at least one of the following criteria (36 CFR § 60.4):

A. Associated with events that have made a significant contribution to the broad patterns of our history; or

B. Associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

Additionally, a property must retain historic integrity, meaning it can effectively convey its significance. Integrity is evaluated through seven aspects: location, design, materials, workmanship, setting, feeling, and association. Most eligible properties possess several, if not all, of these qualities.

4.5.2.2 State

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources. California Public Resources Code (PRC) §§ 21083.2 and 21084.1, PRC § 5024.1, and CEQA Guidelines § 15064.5 were used as the guidelines for the cultural resources study. PRC § 5024.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. The purpose of the CRHR is to maintain listings of the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from material impairment and substantial adverse change. The term "historical resources" includes a resource listed in, or determined to be eligible for listing in, the CRHR; a resource included in a local register of historical resources; and any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines § 15064.5(a)). The criteria for listing properties in the CRHR were expressly developed in accordance with previously established criteria developed for listing in the NRHP.

According to PRC § 5024.1(c)(1–4), a resource may be considered historically significant if it retains integrity and meets at least one of the following criteria. A property may be listed in the CRHR if the resource:

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

(2) Is associated with the lives of persons important in our past.

(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

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

Under CEQA, if an archaeological site is not a historical resource but meets the definition of a "unique archaeological resource" as defined in PRC § 21083.2, then it should be treated in accordance with the provisions of that section. A unique archaeological resource is defined as:

> An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
>
> (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
>
> (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
>
> (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Resources that neither meet any of these criteria for listing in the CRHR nor qualify as a unique archaeological resource under PRC § 21083.2 are viewed as not significant. Under CEQA, "[a] nonunique archaeological resource need be given no further consideration, other than the simple recording of its existence by the lead agency if it so elects" (PRC § 21083.2(h)).

Impacts that adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. Impacts to historical resources from the project are thus considered significant if the project physically destroys or damages all or part of a resource, changes the character of the use of the resource or physical feature within the setting of the resource that contributes to its significance, or introduces visual, atmospheric, or audible elements that diminish the integrity of significant features of the resource.

CALIFORNIA HISTORICAL LANDMARKS

California Historical Landmarks (CHLs) are buildings, structures, sites, or places that have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value and that have been determined to have Statewide historical significance by meeting at least one of the criteria listed below. The resource also must be approved for designation by the County Board of Supervisors (or the City or Town Council in whose jurisdiction it is located), be recommended by the State Historical Resources Commission, and be officially designated by the Director of the DPR. The specific standards now in use were first applied in the designation of CHL #770; CHLs #770 and above are automatically listed in the CRHR.

To be eligible for designation as a landmark, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type in the State or within a large geographic region (Northern, Central, or Southern California);
- It is associated with an individual or group having a profound influence on the history of California; or
- It is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer, or master builder.

CALIFORNIA POINTS OF HISTORICAL INTEREST

California Points of Historical Interest are sites, buildings, features, or events that are of local (County or City) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. Points of historical interest designated after December 1997 and recommended by the State Historical Resources Commission are also listed in the CRHR. No historic resource may be designated as both a landmark and a point. If a point is later granted status as a landmark, the point designation will be retired. In practice, the point designation program is most often used in localities that do not have a locally enacted cultural heritage or preservation ordinance.

To be eligible for designation as a point of historical interest, a resource must meet at least one of the following criteria:

- It is the first, last, only, or most significant of its type within the local geographic region (County or City);
- It is associated with an individual or group having a profound influence on the history of the local area; or

- It is a prototype of, or an outstanding example of, a period, style, architectural movement, or construction or is one of the more notable works or the best surviving work in the local region of a pioneer architect, designer, or master builder.

CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION

PRC § 5097.91 established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. PRC § 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

CALIFORNIA PUBLIC RECORDS ACT

California Government Code §§ 7927.000 and 7927.005 were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. California Government Code § 7927.000 explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." California Government Code § 7927.005specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the NAHC, another State agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American Tribe and a State or local agency."

CALIFORNIA HEALTH AND SAFETY CODE §§ 7050 AND 7052

California Health and Safety Code § 7050.5 provides that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the County Coroner must be notified. California Health and Safety Code § 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

CALIFORNIA PENAL CODE § 622.5

California Penal Code § 622.5 makes it a misdemeanor to injure or destroy objects of historic or archaeological interest located on public or private lands, but specifically excludes the landowner.

CALIFORNIA PUBLIC RESOURCES CODE § 5097

PRC § 5097.5 makes it a misdemeanor for the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands.

4.5.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Conservation and Open Space Element* establishes the policy framework for the designation and long-term preservation of open space within the planning area and addresses the benefits to cultural resources protection that open spaces provide (City of Santa Clarita 2011). Table 4.5-4 provides goals and policies within the General Plan that are relevant to the project.

Table 4.5-4. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 5	Protection of historical and culturally significant resources that contribute to community identity and a sense of history.
Objective CO 5.1	Protect sites identified as having local, state, or national significance as a cultural or historical resource.
Policy CO 5.1.1	For sites identified on the Cultural and Historical Resources Map review appropriate documentation prior to issuance of any permits for grading, demolition, alteration, and/or new development, to avoid significant adverse impacts. Such documentation may include cultural resource reports, environmental impact reports, or other information as determined to be adequate by the reviewing authority.
Policy CO 5.1.2	Review any proposed alterations to cultural and historic sites or other sites which are so designated, based on the guidelines contained in the Secretary of the Interior's Standards for the Treatment of Properties (Title 36, Code of Federal Regulations, Chapter 1, Part 68, also known as 36 CFR 68), or other adopted City guidelines.
Policy CO 5.1.3	As new information about other potentially significant historic and cultural sites becomes available, update the Cultural and Historical Resources Inventory and apply appropriate measures to all identified sites to protect their historical and cultural integrity.

SANTA CLARITA MUNICIPAL CODE

Santa Clarita Municipal Code (SCMC) Chapter 17.64 (Historic Preservation) seeks to preserve, protect, or relocate (where necessary) historic, cultural, and natural resources that have special historic or aesthetic character or interest. Specifically, SCMC § 17.64.030 (Commission Resolution Findings for Designating a Historic Resource) states:

> A building, structure, or object may be designated by the [Planning] Commission as a historic resource if it possesses sufficient character-defining features and integrity, and meets at least one (1) of the following criteria:
>
> A. Is associated with events that have made a significant contribution to the historical, archaeological, cultural, social, economic, aesthetic, engineering, or architectural development of the City, State or nation; or
>
> B. Is associated with persons significant in the history of the City, State or nation; or
>
> C. Embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship; or
>
> D. Has a unique location, singular physical characteristic(s), or is a landscape, view or vista representing an established and familiar visual feature of a neighborhood, community, or the City; or
>
> E. Has yielded, or has the potential to yield, information important to the history or prehistory of the City, State, or nation.

4.5.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to cultural resources if the project would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

c) Disturb any human remains, including those interred outside of dedicated cemeteries.

Each of these thresholds is discussed under Section 4.5.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.5.4 Impact Assessment Methodology

The methodology used to identify archaeological and historic-era built environment resources and analyze the potential impacts to newly discovered archaeological and built environment resources that could be impacted by construction of the project included a review of published literature and online databases, a cultural resources pedestrian survey conducted on April 8 and 9 and November 21, 2024, and a built environment pedestrian survey conducted on September 25, 2025. The impact assessment below is based on the results of the literature review and site-specific surveys.

4.5.5 Project-Specific Impacts and Mitigation Measures

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

An SCCIC records search identified seven previously recorded cultural resources within a one-mile radius of the project site, which included the remnants of two historic-era residential properties and the Angeles National Forest. As identified in Table 4.5-2, none of the historic-era cultural resources identified in the SCCIC records search are located within the project area. However, one previously recorded historic-era resource (Mancara-01), which consists of the foundational remains of a residential complex with an associated refuse scatter, was recorded within the project area during a pedestrian survey conducted in 2014 (Dudek 2025). Mancara-01 was determined to be ineligible as a historical resource, is recommended as not significant under CEQA, and was determined to be ineligible for listing in the CRHR. The updated cultural resource study concurs with the 2014 archaeological testing and recommends that the resource is ineligible for listing in the NRHP, CRHR, and City's List of Historic Resources.

The 2024 and 2025 cultural resources pedestrian surveys revisited the previously documented archaeological site (Mancara-01) and identified three additional historic-era archaeological resources (BSC-DF-S-005, BSC-DF-S-006, and BSC-RB-S-001) within the project area. All three historic-era archaeological resources were evaluated. It was determined that the three archaeological resources (BSC-DF-S-005, BSC-DF-S-006, and BSC-RB-S-001) do not meet eligibility criteria to be considered significant or unique under CEQA and are recommended as ineligible for listing in the NRHP, CRHR, or City's List of Historic Resources.

The 2024 and 2025 cultural resources pedestrian surveys also identified one new historic-era built environment resource—the SPRR Soledad Canyon Line within the project area. The SPRR Soledad Canyon Line consists of a 1-mile-long segment of double-track railway with standard gauge rails resting on a combination of timber and concrete ties and a raised bed of crushed stone. The SPRR Soledad Canyon Line segment contains associated infrastructure was determined to be significant under the NRHP/CRHR Criterion A/1 and the City's List of Historic Resources under Criterion A because it is

associated with the San Joaquin Valley Route and contributed to the City's economy between 1876 and 1883 (Dudek 2025). However, the Cultural Resources Report determined that the railroad segment that intersects the project site lacks sufficient integrity to convey its significance. As such, it is not eligible for listing in the NRHP, CRHR, or City's List of Historic Resources either individually or as a contributing element to an existing historic district or a potential linear historic district like the SPRR Soledad Canyon Line. The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact CR-1
The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5.
Mitigation Measures
Mitigation is not necessary. Impact CR-1 would be less than significant.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?

A CHRIS records search identified no cultural resources within the project area. However, one previously recorded historic-era resource was documented within the project area during a pedestrian survey conducted in 2014 (Dudek 2025). As a result of the archaeological testing that was conducted, Mancara-01 was determined to be insignificant, not a unique archaeological resource under CEQA, and ineligible for listing in the CRHR. A SLF search was also conducted of the project area, but the results were negative for Indigenous cultural resources.

The 2024 and 2025 cultural resources pedestrian surveys identified three historic-era archaeological resources (BSC-DF-S-005, BSCDF-S-006, and BSC-RB-S-001) within the project area. All three historic-era archaeological resources were determined not to meet the eligibility criteria to be considered significant or unique archaeological resources under CEQA and are recommended ineligible for listing in the NRHP, CRHR, and City's List of Historic Resources.

The potential for subsurface archaeological resources that have not been previously identified was characterized as part of Dudek's archival information and literature review. Dudek concluded that the project site's proximity to the Santa Clara River and the absence of previous development indicate a moderate potential for the inadvertent discovery of archaeological resources during project ground disturbance. Therefore, it is recommended that archaeological monitoring be implemented during initial ground disturbance for the project.

The archaeological materials that could exist within the project area may possess the necessary attributes to be considered eligible for the CRHR. If present, archaeological resources of any temporal or cultural association identified during ground-disturbing activities for the project could be used to answer important research questions, and, as such, would be considered eligible for listing in the CRHR under Criterion 4. If archaeological resources discovered during ground-disturbing activities meet any of the CRHR criteria and retain their integrity, they would be historical resources under CEQA.

The available evidence indicates that ground disturbance for the project could impact significant archaeological resources and that mitigation measures are necessary to reduce or avoid impacts to less-

than-significant levels. Upon implementation of MM CR-2.1, the project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5. Therefore, impacts would be *less than significant with mitigation*.

Impact CR-2	
The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5 during project construction.	
Mitigation Measures	
MM CR-2.1	***Monitoring and Reporting for Archaeological Resources**. Archaeological monitoring must occur during initial ground-disturbing activities. Before starting construction, the developer must retain an archaeological principal investigator, who meets the Secretary of the Interior's Professional Qualification Standards for Archaeology. The archaeological principal investigator must direct the monitoring activities and must be provided with a copy of the Cultural Resources Report and its appendices before monitoring. A monitoring scope of work must be developed and implemented to provide monitoring for initial ground-disturbing activities that are to occur within 50 feet of the previously recorded resources. Lower sensitivity areas require weekly spot checks. The frequency of archaeological monitoring may be adjusted at the discretion of the archaeological principal investigator based on inspection of exposed cultural material and the potential for soils to contain intact cultural deposits or significant archaeological material. The archaeological monitor, under the supervision of the archaeological principal investigator, may temporarily halt work to inspect areas for potential cultural material or deposits.* *If unanticipated archaeological deposits or features are discovered during construction activities, all construction work within 50 feet of the discovery must immediately stop until the archaeological principal investigator can assess the significance of the find and determine if an additional study is required. The archaeological principal investigator may recommend to the Director of Community Development, or designee, that adjustments to the work exclusion buffer be made to allow construction activities to continue. If necessary, temporary flagging may be installed around discoveries to avoid disturbance from construction equipment. If the archaeological principal investigator determines the discovery to be potentially significant under the California Environmental Quality Act or § 106 of the National Historic Preservation Act, the Director of Community Development may determine that an archaeological treatment plan, testing, and/or data recovery may be warranted before construction can proceed.* *The on-site archaeological monitor(s) must complete monitoring logs for each day they are present to observe ground disturbance at the project site. The qualified archaeological principal investigator must provide an archaeological monitoring report to the Director of Community Development within 60 days following completion of construction. This report must include cultural monitoring results (even if negative), including a summary of any findings or evaluation/data recovery efforts, and supporting documentation that demonstrates all mitigation measures defined in the environmental document were appropriately met. Archaeological monitoring logs and documentation of any newly identified or updated cultural resources must be included in the appendices. This report must also be submitted to the South Central Coastal Information Center once finalized.*
Impacts Following Mitigation	
With implementation of MM CR-2.1 to address the inadvertent discovery of unknown archaeological resources, construction impacts would be reduced to less than significant with mitigation.	

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

No human remains were identified within the project area. The SCCIC record search shows that a historic-era cemetery is located approximately 0.85 mile from the project site. Although no formal

cemeteries, other places of human interment, or burial grounds or sites are known to exist in the location of the project site, there is always a possibility that human remains may be encountered unexpectedly during construction. The project would be required to comply with California Health and Safety Code § 7050.5, which provides that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the County Coroner must be notified. Additionally, California Health and Safety Code § 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives. The project would also comply with PRC § 5097.98, which specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. As such, the project would not cause a significant disturbance to any human remains, including those interred outside of dedicated cemeteries. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact CR-3
The project would be required to comply with PRC § 5097.98, which specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. With implementation of this requirement, the project would not cause a significant impact to previously unidentified human remains, including those interred outside of dedicated cemeteries.
Mitigation Measures
Mitigation is not necessary. Impact CR-3 would be less than significant.

4.5.6 Cumulative Impacts

Implementation of the project could contribute to the cumulative degradation of significant cultural resources in the City. The destruction of cultural resources can have the potential for significant cumulative impacts that are inherently important to the descendants of native peoples and make the study of prehistoric and historic life unavailable for study by scientists. Given the moderate potential for the discovery of cultural resources within and in the immediate vicinity of the project area, and the potential for ground disturbance during construction to disturb archaeologically sensitive areas if unregulated, it is likely that significant prehistoric and historic resources are often not identified and are permanently lost. Because the inadvertent discovery of subsurface archaeological resources during project construction could occur, mitigation is in place to reduce these potential impacts. Based on the implementation of the recommended mitigation measure, potential cumulative impacts resulting from the project would be less than cumulatively considerable.

Impact CR-4 (Cumulative Impacts)
The project could result in the cumulative disturbance and destruction of cultural resources, including historic and archaeological resources, pursuant to CEQA Guidelines § 15064.5.
Mitigation Measures
Implement MM CR-2.1.
Impacts Following Mitigation
With implementation of MM CR-2.1, cumulative impacts to known and potentially unknown cultural resources would be reduced to less than significant with mitigation.

4.6 ENERGY

This section describes the existing conditions and regulatory setting for energy as it pertains to the project, evaluates potential environmental impacts related to energy that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; EIR Appendix H).

4.6.1 Existing Conditions

Energy use is typically associated with transportation, construction, and the operation of land uses. Transportation energy use is generally categorized by direct and indirect energy—direct energy relates to energy consumption used to operate a vehicle, and indirect energy relates to the long-term indirect energy consumption of equipment, such as maintenance activities. Energy is also consumed by construction and routine operation and maintenance of land use. Construction energy relates to a direct one-time energy expenditure primarily associated with the consumption of fuel used to operate construction equipment. Energy related to land use is normally associated with direct energy consumption for heating, ventilation, and air conditioning (HVAC) of buildings.

4.6.1.1 Regional Conditions

ELECTRICITY

Electricity is produced through the conversion of energy resources (e.g., fossil fuels, nuclear power, renewable power) and is consumed for various uses, including lighting, heating and cooling systems, and appliances, as well as alternative fuel vehicles and other industrial processes. The rate at which energy is consumed or generated is expressed in megawatts (MW) while total energy consumption or generation over time is quantified in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

In California, energy production, consumption, and related research are managed and regulated by the California Energy Commission (CEC) and California Public Utilities Commission (CPUC), respectively. Most of California's electricity is generated in-State, with imports from the Northwest and Southwest accounting for approximately 30% in 2023 (CEC 2023a). In 2024, California was the fourth-largest producer of electricity and the third-largest consumer of electricity in the nation. While California is the second-largest total energy consumer nationwide, it is ranked as the third-lowest for energy consumption on a per-capita basis.

PETROLEUM FUELS

Petroleum fuels are produced through the process of extraction and refinement of crude oil and include gasoline, diesel, and other high-energy-density fuels, which are primarily consumed by on- and off-road equipment as well as some industrial processes. Currently, the United States is the world's top producer of petroleum. In 2024, California ranked as the eighth-largest producer nationally of crude oil (U.S. Energy Information Administration 2025).

Statewide drilling operations in California are concentrated predominantly in Kern and Los Angeles Counties, with production areas connected to oil refineries by a network of crude oil pipelines. The crude oil pipelines extend from the Los Angeles area to San Francisco and the Central Valley, reinforcing California's high capacity for crude oil refinement. California also processes Alaskan and foreign crude oil, which is received at ports across Long Beach, Los Angeles, and the San Francisco Bay area.

In California, gasoline and diesel are the most widely used transportation fuels. Gasoline, the leading transportation fuel, primarily powers light-duty vehicles, including cars, pickup trucks, and sport utility vehicles. Diesel, the second-most used transportation fuel, is primarily consumed by heavy-duty vehicles, including public transit buses, long-haul trucks, and freight trains. Diesel is also used for construction, agriculture, and port operations.

NATURAL GAS

Natural gas is used across California for residential, commercial, and industrial purposes. Natural gas is a fossil fuel formed when layers of buried organic matter are exposed to intense heat and pressure over thousands of years. The energy is stored in the form of hydrocarbons and can be extracted in the form of natural gas, which can be combusted to generate electricity, enabling this stored energy to be transformed into usable power or to be used directly for heating, cooking, and other uses. Of all energy sources, natural gas provides the largest portion of the total in-State capacity and electricity generation in California (CEC 2025).

4.6.1.2 Local Setting

Energy sources for the City of Santa Clarita primarily include electricity provided by Southern California Edison (SCE) and natural gas provided by the Southern California Gas Company (SoCalGas). Energy resources consist largely of natural gas, nuclear, fossil fuels, hydropower, solar, and wind. The primary energy source is electricity used to operate buildings.

CLIMATE

The climate in Southern California is generally semi-arid and warm and is characterized by hot, dry summers and mild, wet winters. These climate conditions contribute to HVAC energy use and alternative transportation trends in the area. The project site is in the community of Canyon Country, in the eastern portion of the City. Santa Clarita experiences a Mediterranean climate consistent with the surrounding area. Due to varying precipitation between the flat and mountainous areas, proximity to dense forest lands, and exposure to Santa Ana winds, the region is susceptible to periodic wildfires. Based on climate summaries from the Newhall National Oceanic and Atmospheric Administration (NOAA) coop station, average annual temperatures in the project area generally range from a low of approximately 50 degrees Fahrenheit (°F) to a high of approximately 77°F. July and August are the warmest months, with average maximum temperatures of 92°F, and December is the coldest month, with an average minimum temperature of 40°F (Western Regional Climate Center 2025).

ENERGY SERVICE PROVIDERS

Southern California Edison

SCE is one of the largest electric utility providers in the United States, serving approximately 15 million customers. SCE's service territory covers approximately 50,000 square miles across Central, Coastal, and Southern California, excluding the City of Los Angeles and some other Cities. SCE has made a commitment to delivering reliable, clean, and affordable electricity in addition to prioritizing sustainability and supporting California's goal of achieving net-zero greenhouse gas (GHG) emissions by 2045. SCE would be the sole electricity provider for the project.

According to the 2022 Power Content Label, SCE's overall energy resources were supplied from approximately 33% of renewable energy resources (i.e., biomass and biowaste, geothermal, eligible hydroelectric, solar, and wind), 3% of large hydroelectric sources, 24% natural gas, and 8% nuclear. Solar accounts for 17% of SCE's power mix and is currently the largest renewable energy resource (SCE 2022).

Southern California Gas Company

SoCal Gas provides Los Angeles County, including the City of Santa Clarita, with natural gas service. SoCalGas's service territory covers approximately 20,000 square miles in Southern California and over 500 communities. According to the U.S. Energy Information Administration, California used approximately 2,056,267 million cubic feet of natural gas in 2022 (U.S. Energy Information Administration 2025). The California Energy Demand mid-energy demand scenario estimates that the demand for natural gas will have an annual growth rate of 0.03% in SoCalGas's service territory (Dudek 2026).

4.6.2 Regulatory Setting

4.6.2.1 Federal

ENERGY POLICY AND CONSERVATION ACT AND CORPORATE AVERAGE FUEL ECONOMY STANDARDS

The Energy Policy and Conservation Act was enacted in 1975 and established fuel economy standards for new light-duty vehicles sold in the United States. As a result of the act, the National Highway Traffic and Safety Administration is responsible for establishing and regularly updating vehicle standards.

Compliance with Federal fuel economy standards is determined based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States. The CAFE program, administered by the U.S. Environmental Protection Agency (EPA), was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. The National Highway Traffic Safety Administration (NHTSA), part of the U.S. Department of Transportation (DOT), is responsible for establishing additional vehicle standards and for revising existing standards. Based on the information generated under the CAFE program, the DOT is authorized to assess penalties for noncompliance.

The fuel economy standard has been 27.5 miles per gallon (mpg) for new passenger cars since 1990 and 20.7 mpg for new light trucks (gross vehicle weight of 8,500 pounds or less) since 1996. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. In October 2012, the EPA and NHTSA issued final rules to further reduce GHG emissions and improve CAFE standards for light-duty vehicles for model years 2017 and beyond. The goals of the 2012 program were to increase fuel economy to the equivalent of 54.5 mpg and to limit vehicle emissions to 163 grams of carbon dioxide (CO_2) per mile for the fleet of cars and light-duty trucks by the model year 2025.

ENERGY POLICY ACT

The Energy Policy Act addresses energy production in the United States (e.g., energy efficiency, renewable energy, oil and gas, coal, Tribal energy, nuclear matters and security), vehicles and motor fuels (e.g., ethanol, hydrogen, electricity, energy tax incentives), hydropower and geothermal energy, and climate change technology. This act guarantees loans to corporations that develop or use innovative technologies that do not produce GHG emissions. The Energy Policy Act also includes the Renewable Fuel Standard (RFS) as a provision, which increases the amount of biofuel that must be mixed with gasoline to be sold in the United States.

ENERGY INDEPENDENCE AND SECURITY ACT

The Energy Independence and Security Act of 2007 was enacted to improve vehicle fuel economy and help reduce dependence on foreign oil. Specifically, the act increases the supply of alternative fuel sources by setting a mandatory RFS, which requires fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduces the nation's demand for oil by setting a national fuel economy standard of 35 mpg by 2020, an increase in fuel economy standards of 40%. The Energy Independence and Security Act also sets energy efficiency standards for lighting and appliances.

4.6.2.2 State

WARREN-ALQUIST ACT

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the CEC. The act established a State policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields.

ASSEMBLY BILL 32

In October 2008, the California Air Resources Board (CARB) published its first Climate Change Scoping Plan. Updated every five years, the Scoping Plan presents the State's plan to achieve the GHG reductions in California required by Assembly Bill (AB) 32. The 2008 Scoping Plan presented the main strategies for achieving the target emission levels identified in AB 32 and included CARB-recommended GHG reductions for each emissions sector of the State's GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementing the California Low Carbon Fuel Standard (LCFS) program, implementing energy efficiency measures in buildings and appliances, establishing combined heat and power systems, and developing a renewable portfolio standard for electricity production.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the State's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. CARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors.

The first update of the Scoping Plan in 2014 set interim goals for 2030 through 2035 on the way to reaching the 2050 goals. The 2017 Scoping Plan incorporated strategies for achieving the 2030 GHG reduction target established in SB 32 (discussed below) and Executive Order (EO) B-30-15 (CARB 2017).

In 2022, CARB approved the *2022 Scoping Plan for Achieving Carbon Neutrality* (CARB 2022 Scoping Plan). The CARB 2022 Scoping Plan continues the path to achieve the SB 32 2030 target and expands upon earlier plans by targeting an 85% reduction in GHG below 1990 levels by 2045 (CARB 2022).

SENATE BILL 32 AND ASSEMBLY BILL 197

In 2016, Senate Bill (SB) 32 extended California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40% below 1990 levels by 2030 is intended to promote further GHG reductions in support of the State's ultimate goal of reducing GHG emissions by 80% below 1990 levels by 2050. SB 32 also directs CARB to update the Climate Change Scoping Plan to address this

interim 2030 emission-reduction target. Achievement of these goals will have the co-benefit of increasing energy efficiency and reducing California's dependency on fossil fuels. AB 197, signed at the same time as SB 32, established legislative oversight of CARB to increase its accountability.

CALIFORNIA ENERGY EFFICIENCY STRATEGIC PLAN

The CEC is responsible for preparing the *California Energy Efficiency Strategic Plan*, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The *California Energy Efficiency Strategic Plan*, last updated in 2011, calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs (CPUC 2011).

ASSEMBLY BILL 1007

The *State Alternative Fuels Plan* (AB 1007) (Chapter 371, Statutes of 2005) required the CEC to prepare a State plan to increase the use of alternative fuels in California. CEC prepared the *State Alternative Fuels Plan* in partnership with CARB and in consultation with other Federal, State, and local agencies (CEC and CARB 2007). The *State Alternative Fuels Plan* presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-State production. The plan assesses various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-State production of biofuels without causing significant degradation of public health and environmental quality.

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

The California Renewable Portfolio Standard (RPS) program (SB 1078; 2002) requires that 20% of the available energy supplies come from renewable energy sources by 2017. In 2006, SB 1078 accelerated the 20% mandate to 2010. These mandates apply directly to investor-owned utilities. On April 12, 2011, Governor Brown signed into law SB 2X, which modified the California RPS program to require that both public- and investor-owned utilities in California receive at least 33% of their electricity from renewable sources by the year 2020. SB 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25% of their energy supply from certified renewable sources by 2016.

SENATE BILL 350

The objectives of the Clean Energy and Pollution Reduction Act of 2015 (SB 350), signed October 7, 2015, are to 1) increase the procurement of electricity from renewable sources from 33% to 50% by the end of 2030; and 2) double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

SENATE BILL 100

The 100 Percent Clean Energy Act of 2018 (SB 100) updates the goals of California's RPS and SB 350, as discussed above, to the following: achieve a 50% renewable resources target by December 31, 2026, and achieve a 60% target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% procured to serve all State agencies by December 31, 2045.

EXECUTIVE ORDER S-01-07

The LCFS (EO S-01-07) (issued January 18, 2007) requires a reduction of at least 10% in the carbon intensity of California transportation fuels by 2020. Regulatory proceedings and implementation of the LCFS were directed to CARB. CARB released a draft version of the LCFS in October 2008, and the final regulation became effective in 2010.

In calculating Statewide emissions and targets, the 2017 update has assumed the LCFS to be extended to an 18% reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the LCFS to relax the 2020 carbon intensity reduction from 10% to 7.5% and to require a carbon intensity reduction of 20% by 2030.

ASSEMBLY BILL 1279

The California Climate Crisis Act was adopted in 2022 through AB 1279. This bill establishes the State's goal of reaching net-zero GHG emissions as quickly as possible, and no later than 2045, and subsequently sustaining net-negative GHG emissions. The act also requires that, by 2045, Statewide anthropogenic GHG emissions must be reduced by at least 85% below 1990 levels.

SENATE BILLS 605 AND 1383

Enacted in 2014, SB 605 directs CARB to develop a comprehensive plan for reducing short-lived climate pollutants (SLCPs) in California (Health and Safety Code § 39730). Enacted in 2016, SB 1383 further requires CARB to approve and begin implementing this plan by 2018 (Public Resources Code §§ 42652–43654). SB 1383 sets specific reduction targets for SLCPs: a 40% decrease from 2013 levels by 2030 for methane (CH_4) and hydrofluorocarbons (HFCs), and a 50% decrease for anthropogenic black carbon. The bill also outlines measures for reducing emissions from dairy and livestock operations, as well as landfills. In response, CARB adopted its SLCP Reduction Strategy in March 2017, which provides a Statewide framework for cutting emissions of black carbon, CH_4, and fluorinated gases.

CALIFORNIA CODE OF REGULATIONS TITLE 24 (CALIFORNIA BUILDING STANDARDS CODE)

Title 24 of the California Code of Regulations (CCR) is referred to as the California Building Standards Code, which consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, and accessibility for persons with physical and sensory disabilities. These standards are updated every three years. The most recent update, the 2025 California Building Standards, went into effect on January 1, 2026.

Part 6 – Building Energy Efficiency Standards/Energy Code

The Building Energy Efficiency Standards, or the California Energy Code (24 CCR Part 6), establishes energy efficiency standards for residential and nonresidential buildings to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. Compliance with Title 24 is enforced through the building permit process.

Part 11 – California Green Building Standards

The California Green Building Standards (CALGreen) Code (24 CCR Part 11) was developed to help the State achieve its GHG emissions reduction goals under AB 32 by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy,

water, and resource demand. The CALGreen Code establishes mandatory measures for new residential and nonresidential buildings, which include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

CALIFORNIA CODE OF REGULATIONS TITLE 20

Title 20 of the CCR establishes requirements for manufacturers to ensure that appliances comply with both Federal and State energy and water efficiency standards (20 CCR 1401–1410). The CEC certifies appliances based on evidence provided by manufacturers demonstrating compliance with these standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, freezers, room air conditioners, room air conditioning heat pumps, central air conditioners, spot air conditioners, vented gas space heaters, gas pool heaters, plumbing fittings and fixtures, fluorescent lamp ballasts, lamps, emergency lighting, traffic signal modules, dishwashers, clothes washers and dryers, cooking products, electric motors, low voltage dry-type distribution transformers, power supplies, televisions, consumer audio and video equipment, and battery charger systems. Title 20 outlines testing protocols for each appliance type, requiring them to meet specific standards for energy and water performance and design. Title 20 defines three categories of standards: Federal and State standards for Federally regulated appliances, State standards for Federally regulated appliances, and State standards for non-Federally regulated appliances.

4.6.2.3 Local

CITY OF SANTA CLARITA GREEN BUILDING STANDARDS

Santa Clarita Municipal Code (SCMC) § 25.01.010 (Adoption of the City Green Building Standards Code) regulates the planning, design, operation, construction, use, and occupancy of every new building or structure to ensure buildings have a more positive environmental impact and to encourage sustainable construction practices.

CITY OF SANTA CLARITA ENERGY CONSERVATION CODE

SCMC § 24.01.010 (Adoption of the City Energy Conservation Code) regulates the design, construction, alteration, installation, or repair of building envelopes, space conditioning systems, water heating systems, indoor lighting systems of buildings, outdoor lighting and signage, and certain equipment to enhance the efficiency and reduce energy use of buildings.

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for preservation of open spaces and for conservation measures within the planning area (City of Santa Clarita 2011). Table 4.6-1 lists the goals, objectives, and policies concerning energy conservation that are relevant to the project.

Table 4.6-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 8	Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
Policy CO 8.1.3	Revise codes and ordinances as needed to address energy conservation, including but not limited to the following: • Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24; • Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives; • Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation; • Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.
Policy CO 8.1.4	Provide information and education to the public about energy conservation and local strategies to address climate change.
Objective CO 8.3	Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.
Policy CO 8.3.1	Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.
Policy CO 8.3.2	Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.
Policy 8.3.3	Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions. Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or prewiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.
Policy CO 8.3.6	Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.
Policy CO 8.3.7	Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.
Policy CO 8.3.8	Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.
Policy CO 8.3.9	Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.
Policy CO 8.3.10	Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.

4.6.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to energy if the project would:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Each of these thresholds is discussed under Section 4.6.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.6.4 Impact Assessment Methodology

The following impact assessment is based, in part, on the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; EIR Appendix H). The assessment evaluates energy use during project construction and operation.

4.6.4.1 Construction-Related Impacts

Energy use during construction of the project would be associated with the use of off-road construction equipment, on-site hauling and vendor trucks, and worker vehicles. The consumption of large quantities of electricity is not anticipated during project construction because most construction equipment is diesel- or gas-powered. Temporary electric power (e.g., lighting and electronic equipment) would be provided by SCE. The consumption of natural gas is not anticipated during project construction. Petroleum consumption for the project was determined based on the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.30 (California Air Pollution Control Officers Association [CAPCOA] 2022) and CARB EMission FACtors (EMFAC) 2025 model (CARB 2025) outputs from the criteria air pollutant and GHG emissions calculations (see EIR Appendix H). Fuel consumption was estimated based on a conversion factor of 8.78 kilograms per metric ton of CO_2 per gallon for gasoline and 10.21 kilograms per metric ton of CO_2 per gallon for diesel (Dudek 2026). It was assumed that heavy-duty construction equipment and vendor trucks would use diesel fuel and that construction workers would travel to and from the project site in gasoline-powered vehicles.

4.6.4.2 Operational Impacts

Operation of the project would include electricity use for building operations, water demand, wastewater treatment, and petroleum consumption from on-road vehicles. The consumption of electricity during project operation is anticipated for building heating and cooling, lighting, and appliances (e.g., refrigeration, electronics, equipment, machinery), water usage, solid waste disposal, and electric vehicle (EV) trips. In accordance with Mitigation Measure (MM) GHG-2.1 and MM GHG-2.2, the project would be all-electric; therefore, no natural gas would be consumed (see Section 4.8, *Greenhouse Gas Emissions*). Petroleum consumption for the project would result from on-road vehicles. Transportation fuel-use estimates were calculated by applying average fuel usage rates per vehicle mile to estimated vehicle trips associated with the project.

4.6.5 Project-Specific Impacts and Mitigation Measures

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Implementation of the project would require energy use associated with construction and operation. Construction and operational energy usage are discussed in greater detail below.

CONSTRUCTION

Energy consumption would predominantly occur during construction, which would include fuel use associated with the on-site operation of construction equipment and vehicles traveling to and from the construction site. Table 4.6-2 summarizes the levels of energy consumption associated with each construction phase.[1] As depicted, the operation of off-road construction equipment would use an estimated total of 348,055 gallons of diesel, vendor trucks would use an estimated total of 22,152 gallons of diesel, and worker vehicles would use an estimated total of 62,229 gallons of gasoline.

Table 4.6-2. Construction Energy Consumption

Construction Phase	Off-Road Equipment (diesel)	Vendor Trucks (diesel)	Worker Vehicles (gasoline)
2027	68,292	496	2,474
2028	151,827	1,588	6,279
2029	48,732	5,152	13,817
2030	46,521	7,411	20,683
2031	28,547	6,702	16,742
2032	4,137	803	2,234
Total	**348,055**	**22,152**	**62,229**

Source: Dudek (2026)

Note: All measurements are in gallons.

The project would be subject to CARB's In-Use Off-Road Diesel Vehicle Regulation, which controls the operation of certain off-road diesel engines, vehicles, or equipment with greater than 25 horsepower. Under this regulation, construction equipment use and associated energy consumption for the project would be typical as compared to local and regional demand for energy resources and would not require the use of equipment that would wastefully or inefficiently consume energy. Energy use associated with the construction of the project would be temporary and would not be anticipated to result in the need for additional capacity for local energy providers. As a result, the construction of the project would not result in an inefficient, wasteful, or unnecessary consumption of energy. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

OPERATIONS

Energy consumption associated with the long-term operation of the project would be predominantly associated with the electricity required to operate the proposed residential units. Additionally, fuel consumption associated with vehicles traveling to and from the project site would be another predominant contributor to energy use during the long-term operation of the project. Table 4.6-3 summarizes the annual operational electricity demand of the project at build-out.

[1] Modeling and energy consumption estimates completed based on preliminary information from the project applicant that had construction beginning in September 2026 and buildout occurring in 2031. The construction schedule used in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA Guidelines.

Electricity Use

Electricity consumption for the project was based on default CalEEMod values. Additional electricity consumption would result from the incorporation of MM GHG-2.1 and MM GHG-2.2, which would require all-electric development and would not allow the use of wood or natural gas fireplaces (see Section 4.8, *Greenhouse Gas Emissions*). As noted in Table 4.6-3, the project is estimated to consume approximately 3,513,983 kWh of electricity per year. As required by 24 CCR § 150.1(c)14, rooftop solar would be included on each new residential unit, which would supply approximately 1,206,186 kWh of energy per year. After accounting for the energy generated by the proposed rooftop solar, electricity use would be reduced to 2,307,797 kWh per year.

Table 4.6-3. Operations Electricity Consumption at Build-Out (2032)

Electricity Demand	kWh/year
Retirement Community	2,661,438.6
Health Club	858,544.59
Total	**3,513,983**
Solar Photovoltaic (PV) kWh Generated Per Year	*1,206,186*
Remaining Electricity Use	**2,307,797**

Source: Dudek (2026)

Note: Electricity consumption assumes all-electric development per MM GHG-2.1 and MM GHG-2.2.

Fuel Use

Fuel use associated with vehicles traveling to and from the project site includes both gasoline and diesel consumption. As displayed in Table 4.6-4, the project is estimated to consume 226,693 gallons of fuel annually.

Table 4.6-4. Operations Fuel Consumption at Build-Out (2032)

Vehicle Type	Vehicle Metric Tons CO_2	Kilograms CO_2 per Gallon	Estimated Annual Fuel Consumption (gallons)
Gasoline	1,613.32	8.78	183,749
Diesel	438,46	10.21	42,944
Total			**226,693**

Source: Dudek (2026)

Note: MT = metric ton

The project does not propose uses or operations that would inherently result in excessive and wasteful energy consumption. The project would be required to comply with Title 24 standards, which prohibit inefficient, wasteful, and unnecessary energy usage. Additionally, the development of increasingly efficient automobile engines would result in increased energy efficiency and energy conservation. Operational energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. Therefore, impacts due to energy consumption during project operations would be *less than significant*, and mitigation is not necessary.

Impact EN-1
The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact EN-1 would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project would be subject to the California Building Energy Efficiency Standards (24 CCR Part 6). These Standards set energy efficiency requirements for residential and nonresidential buildings built in California to regulate energy demand and consumption throughout the State. The project would comply with these Standards. Additionally, the project would be subject to CALGreen (24 CCR Part 11), which sets mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential, high-rise residential, State-owned buildings, schools, and hospitals, in addition to certain residential and nonresidential additions and alterations. Energy consumption during project operations would be comparable to residential uses of a similar scale and intensity in California.

California's RPS program establishes targets for the State to transition its electricity grid to renewable energy. Other than the electricity generated by the rooftop solar installed on each residential unit, the majority of the electricity consumed by the project would be supplied by SCE. According to the CEC, the power supplied by SCE meets California's RPS targets, and at least 37.6% of the electricity provided to the project would come from renewable resources (CEC 2023).

The project would also align with the CARB 2022 Scoping Plan by installing electric appliances in the new residential buildings, as required by MM GHG-2.1 and MM GHG-2.2 (see Section 4.8, *Greenhouse Gas Emissions*). In addition, Goal CO 8 of the Conservation and Open Space Element states that development should be designed to improve energy efficiency and reduce energy and natural resource consumption (City of Santa Clarita 2011). Consistent with MM GHG-2.1 and MM GHG-2.2, the project would not include the installation of any natural gas infrastructure. The project would not conflict with any of the relevant energy-related policies or objectives listed in the City's General Plan. As a result, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact EN-2
The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.
Mitigation Measures
Mitigation is not necessary. Impact EN-2 would be less than significant.

4.6.6 Cumulative Impacts

The project would result in the consumption of energy resources during construction and operation. This energy consumption would occur within the larger context of energy consumption by land uses and mobile sources within the region and the State. For the purpose of this analysis, projects within the cumulative development scenario are identified in Chapter 3, *Environmental Setting*, and generally include past, present, and reasonably foreseeable development projects within the vicinity of the project site.

Residential, industrial, and commercial development within the project vicinity would contribute to energy consumption within the project area. As discussed in Section 4.6.5, *Project-Specific Impacts and Mitigation Measures*, the project would result in less-than-significant impacts related to short- and long-term wasteful, inefficient, or unnecessary energy consumption and would be consistent with State or local renewable energy and energy efficiency plans. Current and future development projects within the project vicinity would be subject to State and local energy efficiency building standards and standards associated with renewable energy infrastructure (e.g., rooftop solar panel capability, EV parking requirements). Lastly, the California vehicle fleet would be expected to continue to become more fuel efficient and rely on diversified fuel sources in accordance with AB 1007, EO B-48-18, CAFE program standards, and AB 2076.

Based on required compliance with existing energy efficiency standards, reasonably foreseeable future projects are not anticipated to result in significant short- or long-term wasteful, inefficient, or unnecessary energy consumption or conflict with a State or local renewable energy or energy efficiency plan. Nevertheless, reasonably foreseeable future projects would be subject to separate environmental review pursuant to CEQA to determine potential impacts related to energy use and reduce energy consumption as necessary. Therefore, the project would not contribute toward a cumulatively considerable impact related to energy, and impacts would be less than cumulatively considerable.

Impact EN-3 (Cumulative Impacts)
The project would not contribute to cumulative energy impacts.
Mitigation Measures
Mitigation is not necessary. Impact EN-3 would be less than significant.

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4.7 GEOLOGY AND SOILS

This section of the EIR describes the existing conditions and regulatory setting for geology and soils as it pertains to the project, evaluates potential environmental impacts to geology and soils that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. The following evaluation is based, in part, on the *Geotechnical Investigation Report, Proposed Residential Development, Belcaro at Sand Canyon, Vesting Tentative Tract Map 084497, City of Santa Clarita, California* (Geotechnical Investigation Report) (LGC Valley, Inc. [LGC] 2024; EIR Appendix F) and *Paleontological Resources Inventory Report for the Belcaro at Sand Canyon Project, City of Santa Clarita, Los Angeles County, California* (Paleontological Resources Inventory Report) (Dudek 2025; EIR Appendix K). The purpose of the Geotechnical Investigation Report is to provide design recommendations to address existing soil conditions at the project site, and the purpose of the Paleontological Resources Inventory Report is to identify the potential to disturb paleontological resources at the project site and to provide measures to reduce the potential to adversely affect paleontological resources during project activities.

4.7.1 Existing Conditions

4.7.1.1 Regional Geologic Setting

The project site is located within the Mint Canyon, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle in the City of Santa Clarita, which is situated within the east–west-trending Transverse Ranges Geomorphic Province of California that exhibits the east–west trend of mountain ranges, and intervening valleys, reflecting a parallel series of anticlines, synclines, and normal and thrust faults that characterize this province. Bedrock within this province shows significant deformation, such as folding and faulting. This structure and geomorphology are generally considered to be the result of south-directed compression caused by right-lateral, strike-slip movement on the "Big Bend" segment of the San Andreas Fault (LGC 2024).

The City is generally bounded on the north by the Los Padres and Angeles National Forests, on the south by the major ridgeline separating the Santa Clarita and San Fernando Valleys, on the east by the Angeles National Forest, and on the west by the Ventura County line. The City's general topography is characterized by rolling terrain, canyons, creeks, and the Santa Clara River. The river flows east–west for almost 100 miles from its headwaters near Acton to the Pacific Ocean, through a valley formed between the Santa Susana Mountains (City of Santa Clarita 2011).

4.7.1.2 Site-Specific Geologic Setting

The geologic structure of the project site is primarily defined by the Mint Canyon formation, where bedding strikes north-northeast and dips to the west generally from 15 to 40 degrees. The bedrock is internally massive and cemented, with bedding planes that are commonly poorly defined and gradational, though distinct transitions between grain sizes were observed.

The project site consists of gently sloping terrain that inclines northward, with approximately 70 feet of elevation change between Oak Spring Canyon Road to the south and the south bank of the Santa Clara River, which roughly defines the northern boundary of the project site.

According to the Paleontological Resources Inventory Report, the project site is mapped as being underlain by gravel and sand of major stream channels (Qg); alluvial gravel, sand, and clay of valley areas (Qa); low terrace remnants of alluvial gravel and sand (Qoa); and the Mint Canyon Formation (Tmc). Based on regional geologic maps and subsurface exploration, the project site is underlain by

artificial fill, floodplain deposits, recent alluvium, terrace deposits, and bedrock assigned to the Mint Canyon Formation. A brief description of each geologic unit follows (LGC 2024):

- **Artificial Fill (af):** The artificial fill is associated with the existing active Metrolink Antelope Valley railroad line and underlying the old railroad line that was abandoned. This fill within the project site associated with the abandoned railroad line is anticipated to be less than ten feet in thickness and is considered to be uncertified and must be entirely removed.
- **Flood Plain Deposits (Qfp):** The floodplain deposits are confined to the active stream channel, which is outside the limits of grading. Floodplain deposits are anticipated to be unconsolidated sands and gravels.
- **Recent Alluvium (Qal):** Recent alluvium covers most of the project site and consists of admixtures of brown sands, silts, and gravels with clays being fairly minor. The alluvium was encountered to the maximum explored depths of 51.5 feet for the majority of the residential development area. The alluvium was generally found to be medium dense to dense 5 to 10 feet below the existing grade.
- **Terrace Deposits (Qt):** Terrace deposits are typically elevated, nearly flat-lying older alluvial terraces. At the project site, terrace deposits cap the lower hilly areas. Most of the terrace deposits will be removed in the mass excavation of the project site; however, some deposits will remain near the tops of cut slopes.
- **Mint Canyon Formation (Tmc):** Mint Canyon Formation bedrock underlies the project site at depth and is exposed in the hills near and within the project site. The Mint Canyon Formation consists of light green silty to pebbly/cobbly sandstones interbedded with conglomerate and siltstone beds. The sandstones are generally massive, cemented, well indurated, and damp, with few widely spaced joints that are tight with no separation.

SEISMIC HAZARDS

Fault Rupture and Ground Shaking

The Alquist-Priolo Earthquake Fault Zoning Act requires the identification of known fault hazard areas on a map and prohibits the construction of specified building types within these fault hazard areas. The primary purpose of the act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. Pursuant to this law, the State Geologist established Special Studies Zones around active faults, as depicted on maps distributed to all Counties and Cities. Local agencies are required to regulate development within these Special Studies Zones and may be more restrictive than the State law based on local conditions. The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active faults were observed during reconnaissance of the project site; therefore, there are no known active or potentially active faults on-site (LGC 2024). The nearest Alquist-Priolo Earthquake Fault Zone is the San Andreas Fault located approximately 18 miles northeast of the project site (California Department of Conservation [CDOC] 2015).

The City contains and is in the vicinity of several known active and potentially active earthquake faults and fault zones. Active faults are those that have caused soil and strata displacement within the last 11,000 years (the Holocene epoch). Potentially active faults show evidence of surface displacement during the last two million years (the Quaternary period). There are no known active or potentially active faults on-site (LGC 2024). Although there are no active or potentially active faults on-site, the project site is in the proximity of active faults—the Soledad Fault, located approximately 1 mile northeast of the project site; the San Gabriel Fault, located approximately 3.5 miles southwest of the project site; and the San Fernando Fault, located approximately 9.8 miles southwest of the project site (CDOC 2015).

Liquefaction and Settlement Potential

Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction occurs when three general conditions exist: 1) shallow groundwater; 2) low-density non-cohesive (granular) soils; and 3) high-intensity ground motion. Liquefaction is typified by a buildup of pore-water pressure in the affected soil layer to a point where a total loss of shear strength occurs, causing the soil to behave as a liquid. Studies indicate that saturated, loose to medium-dense, near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential. The project site is located in a State of California Seismic Hazard Zone for liquefaction (LGC 2024). Historic high groundwater in the vicinity of the project site is greater than 25 feet below the existing ground surface south of the active railroad tracks and approximately 10 feet below grade to the north of the active railroad tracks. Additionally, groundwater was observed during the recent geotechnical site subsurface excavations at depths of 25 and 38 feet. Surface water was observed in the adjacent Oak Spring stream. Based on the depth to the historic high groundwater, the majority of the project site has a moderate to high potential for liquefaction (LGC 2024).

During a strong seismic event, seismically induced settlement can occur within loose to moderately dense, dry, or saturated granular soil. Settlement caused by ground shaking is often non-uniformly distributed, which can result in differential settlement. Based on the results of the liquefaction and dry sand settlement analysis conducted as part of the Geotechnical Investigation Report, the amount of total seismically induced settlement possible for site conditions is up to approximately 4 inches (LGC 2024).

Landslide and Slope Instability

The project site consists of gently sloping terrain that inclines northward, with approximately 70 feet of elevation change between Oak Spring Canyon Road to the south and the south bank of the Santa Clara River, which roughly defines the northern boundary of the project site. Local, steeper hilly terrain and some of its isolated low ridgelines exist mainly along the perimeter of the project site. Steeper hilly areas range in height from 30 to 100 feet above the valley floor (LGC 2024). Based on the findings of the Geotechnical Investigation Report, the slopes on the project site are considered stable (LGC 2024).

SOILS

Based on the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2025), the project site consists of the following soil types:

- **Hanford sandy loam, 0 to 2 percent slopes.** This well-drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy loam and fine sandy loam.
- **Hanford sandy loam, 2 to 9 percent slopes.** This well-drained soil has a very low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy loam, fine sandy loam, and gravelly loamy coarse sand.
- **Metz loamy sand, 0 to 2 percent slopes.** This somewhat excessively drained soil has a negligible runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loamy sand and stratified sand to loamy sand.
- **Metz loam, 2 to 5 percent slopes.** This somewhat excessively drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loam and stratified sand to loamy sand.

- **Oak Glen sandy loam, 0 to 2 percent slopes.** This well-drained soil has a very low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of sandy loam and fine sandy loam.
- **Oak Glen gravelly sandy loam, 2 to 9 percent slopes.** This well-drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of gravelly sandy loam and gravelly fine sandy loam.
- **Oak Glen loam, 0 to 2 percent slopes.** This well-drained soil has a low runoff class and a depth to restrictive feature of more than 80 inches. The typical soil profile consists of loam and fine sandy loam.
- **Riverwash.** This excessively drained soil has a negligible runoff class. The typical soil profile consists of sand and stratified coarse sand to sandy loam.
- **Sandy alluvial land.** This excessively drained soil has a very low runoff class. The typical soil profile consists of sand, stratified sand to loam, and stratified gravelly sand to gravelly loam.
- **Saugus loam, 30 to 50 percent slopes, eroded.** This well-drained soil has a high runoff class and a depth to restrictive feature of 40 to 60 inches to paralithic bedrock. The typical soil profile consists of gravelly sandy loam and gravelly fine sandy loam.

Soil Erosion

Highly erodible soils are those that are easily carried by water and, to a lesser extent, wind. Surface erosion is more commonly visible, but subsurface erosion can lead to damage to pipes, roads, foundations, and other structural elements. Soils at the project site generally consist of sand and loam components that are coarse and well-drained. As a result of existing conditions, erosion potential at the project site is low to moderate (NRCS 2025).

Expansive Soil

Expansive soils are largely comprised of clays, which expand in volume when water is absorbed and shrink as the soil dries. Expansion is measured by shrink-swell potential, which is the volume change in soil with a gain in moisture. If the shrink-swell potential is rated moderate to high, then damage to buildings, roads, structural foundations, and pipes can occur. Expansive clay problems can be surmounted by appropriate engineering design and construction techniques. Typically, soils with high shrink-swell potential are comprised of clay and clay materials. Soils at the project site generally consist of sand and loam components, and do not contain large amounts of clay or clay components (NRCS 2025). As a result, the potential for soil expansion at the project site is low.

Topsoil Resources

Topsoil refers to the uppermost, biologically active layer of soil that typically contains the highest concentrations of organic matter, nutrients, and beneficial microorganisms. This layer, generally the top six to 12 inches of the soil profile, plays a critical role in supporting plant growth, maintaining soil structure, and facilitating natural ecological processes such as nutrient cycling and water infiltration. The natural process of creating topsoil is very slow, making existing topsoil a valuable and finite natural resource. In agricultural areas, the quality and depth of topsoil are key determinants of land capability and productivity, and soil characteristics form part of the basis for Important Farmland classifications used by the CDOC. In undeveloped or natural areas, topsoil often includes a native seedbank that contributes to the reestablishment of vegetation following disturbance. When possible, preserving existing topsoil on-site during construction or development projects is a critical conservation practice (USDA 2022).

4.7.1.3 Paleontological Setting

Paleontological resources are the remains or traces of plants and animals that are preserved in Earth's crust, and per the Society of Vertebrate Paleontology (SVP) *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (SVP guidelines) (SVP 2010), are older than written history or older than approximately 5,000 years. They are limited, nonrenewable resources of scientific and educational value and are afforded protection under State laws and regulations (Dudek 2025).

According to the Paleontological Resources Inventory Report, the project site is mapped as being underlain by gravel and sand of major stream channels (Qg); alluvial gravel, sand, and clay of valley areas (Qa); low terrace remnants of alluvial gravel and sand (Qoa); and the Mint Canyon Formation (Tmc) (Figure 4.7-1). Based on regional geologic maps and subsurface exploration, the project site is underlain by artificial fill, floodplain deposits, recent alluvium, terrace deposits, and bedrock assigned to the Mint Canyon Formation. The paleontological sensitivity of each mapped geologic unit is described below (Dudek 2025; USGS 2016):

- **Gravel and sand of major stream channels (Qg).** This geologic unit is from the Holocene epoch and has a low paleontological sensitivity because it is too young to yield significant paleontological resources on the surface at shallow depths.
- **Alluvial gravel, sand, and clay of valley areas (Qa).** This geologic unit is from the Holocene epoch and has a low paleontological sensitivity because it is too young to yield significant paleontological resources on the surface at shallow depths.
- **Low terrace remnants of alluvial gravel and sand (Qoa).** This geologic unit is from the middle Miocene epoch and has a high paleontological sensitivity because alluvial deposits become older with depth, which can produce fossils.
- **Mint Canyon Formation (Tmc).** This geologic unit is from the Miocene epoch and has a high paleontological sensitivity due to the age of the formation. The Mint Canyon Formation has a long history of producing fossil floras and faunas, with 15 identifiable plant species recorded from the formation and 18 species documented from a different Mint Canyon fossil locality. Some of the Mint Canyon vertebrate fossils reported in the literature include turtles and tortoises, birds, rodents, rabbits, pronghorns, extinct elephant relatives, camels, rhinoceroses, several horse species, and carnivores.

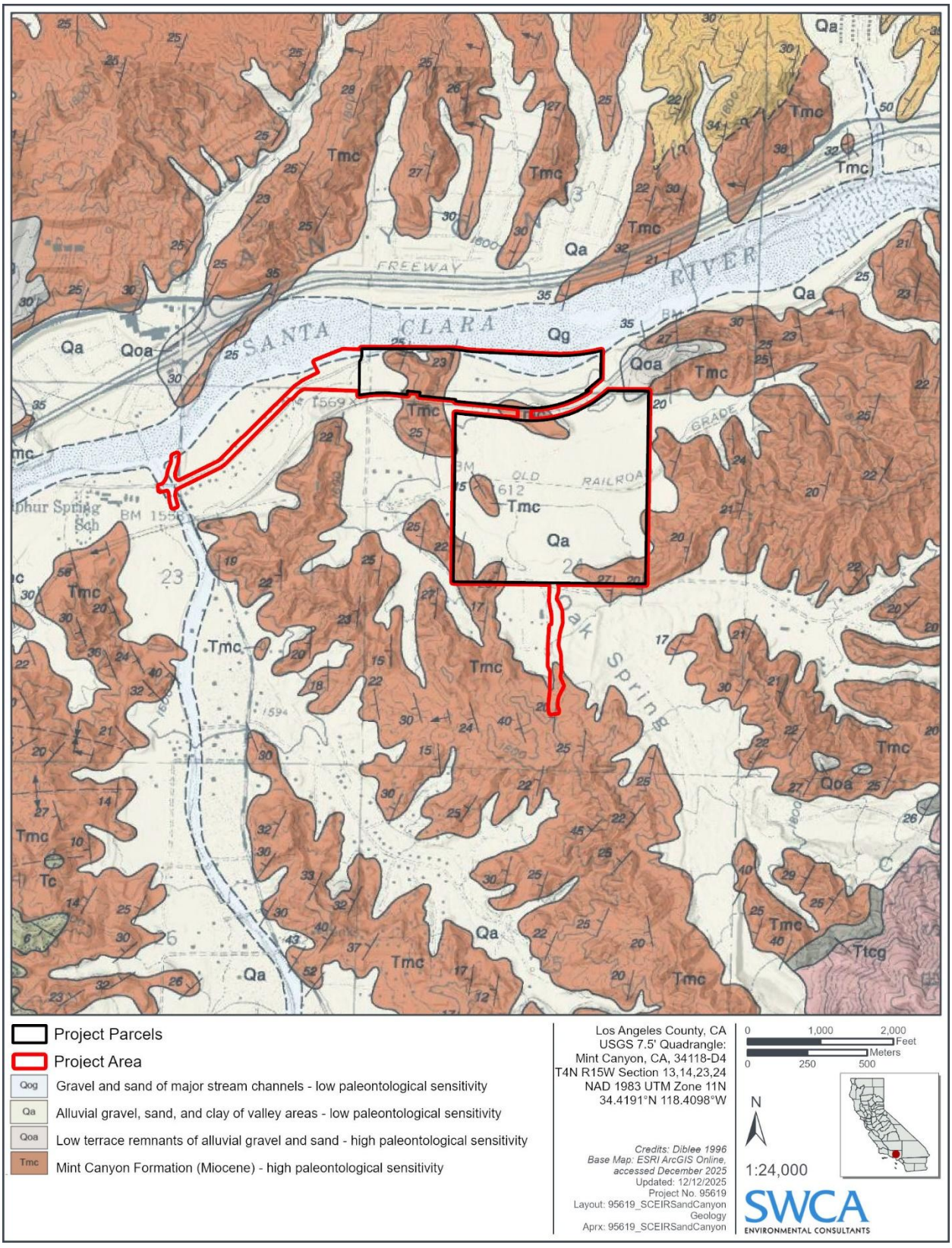


Figure 4.7-1. Paleontological sensitivity map.

4.7.2 Regulatory Setting

4.7.2.1 Federal

There are no specific Federal regulations addressing geology and soil issues relevant to the project.

4.7.2.2 State

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONING ACT

The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code [PRC] § 2621 et seq.) was created with the purpose of providing policies and criteria to assist State agencies, Counties, and Cities in prohibiting development for human occupancy across active faults. It is also the intent of the act to increase public safety by minimizing the loss of life due to earthquakes by facilitating seismic retrofitting to strengthen buildings against ground shaking. The act identified active faults, which are defined as faults that have ruptured in the past 11,000 years. The intent of the act is to ensure public safety by prohibiting the siting of most structures for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Counties and cities with earthquake fault zones are required to regulate development projects within these zones.

SEISMIC HAZARDS MAPPING ACT

The Seismic Hazards Mapping Act of 1990 (SHMA) (PRC §§ 2690–2699.6) authorizes the CDOC and California Geological Survey (CGS) to identify and map areas prone to seismic hazards, including amplified ground shaking, liquefaction, and earthquake-induced landslides. The purpose of the SHMA is to reduce the threat to public safety and minimize the loss of life and property by identifying and mitigating seismic hazards.

The SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). Following the creation of the maps, they are distributed to all affected State agencies, Counties, and Cities for their use in planning and controlling construction and development.

CALIFORNIA BUILDING STANDARDS CODE

As adopted by the Santa Clarita Municipal Code (SCMC), 24 California Code of Regulations (CCR) § 1613, which is part of the California Building Standards Code (CBSC), establishes building requirements for new development to withstand earthquake loads, including liquefaction. All structures, including nonstructural components that are permanently attached to structures and their supports and attachments, must be designed and constructed to resist the effects of earthquake motions.

CBSC § 1803 requires geotechnical investigations in accordance with CBSC § 1803.2 and reporting in accordance with CBSC § 1803.6. CBSC § 1803 requires geotechnical investigations be conducted as follows:

> **1803.3 Basis of Investigation.** Soil classification shall be based on observation and any necessary tests of the materials disclosed by borings, test pits or other subsurface exploration made in appropriate locations. Additional studies shall be made as necessary to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction and expansiveness.

1803.3.1 Scope of Investigation. The scope of the geotechnical investigation including the number and types of borings or soundings, the equipment used to drill or sample, the in-situ testing equipment and the laboratory testing program shall be determined by a registered design professional.

1803.4 Qualified Representative. The investigation procedure and apparatus shall be in accordance with generally accepted engineering practice. The registered design professional shall have a fully qualified representative on site during all boring or sampling operations.

1803.5.2 Questionable Soil. Where the classification, strength or compressibility of the soil is in doubt or where a load-bearing value superior to that specified in this code is claimed, the building official shall be permitted to require that a geotechnical investigation be conducted.

1803.5.3 Expansive Soil. In areas likely to have expansive soil, the building official shall require soil tests to determine where such soils do exist.

1803.5.4 Ground-Water Table. A subsurface soil investigation shall be performed to determine whether the existing ground-water table is above or within 5 feet (1524 mm [millimeters]) below the elevation of the lowest floor level where such floor is located below the finished ground level adjacent to the foundation.

1803.5.5 Deep Foundations. Where deep foundations will be used, a geotechnical investigation shall be conducted and shall include all of the following, unless sufficient data upon which to base the design and installation is otherwise available:

1. Recommended deep foundation types and installed capacities
2. Recommended center-to-center spacing of deep foundation elements
3. Driving criteria
4. Installation procedures
5. Field inspection and reporting procedures (to include procedures for verification of the installed bearing capacity where required)
6. Load test requirements
7. Suitability of deep foundation materials for the intended environment
8. Designation of bearing stratum or strata
9. Reductions for group action, where necessary

1803.6 Reporting. Where geotechnical investigations are required, a written report of the investigations shall be submitted to the building official by the permit applicant at the time of permit application. This geotechnical report shall include, but need not be limited to, the following information:

1. A plot showing the location of the soil investigations.
2. A complete record of the soil boring and penetration test logs and soil samples.
3. A record of the soil profile.
4. Elevation of the water table, if encountered.

5. Recommendations for foundation type and design criteria, including but not limited to: bearing capacity of natural or compacted soil; provisions to mitigate the effects of expansive soils; mitigation of the effects of liquefaction, differential settlement and varying soil strength; and the effects of adjacent loads.
6. Expected total and differential settlement.
7. Deep foundation information in accordance with Section 1803.5.5.
8. Special design and construction provisions for foundations of structures founded on expansive soils, as necessary.
9. Compacted fill material properties and testing in accordance with Section 1803.5.8.
10. Controlled low-strength material properties and testing in accordance with Section 1803.5.9.
11. The report shall consider the effects of seismic hazard in accordance with Section 1803.7.

CALIFORNIA PUBLIC RESOURCES CODE § 5097.5

Requirements for paleontological resource management are included in PRC § 5097.5, which states:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

This prohibits the removal, without permission, of any paleontological site or feature.

4.7.2.3 Local

SANTA CLARITA MUNICIPAL CODE

SCMC Chapter 17.86 (Import, Export, Excavations and Fills) regulates design and construction standards affecting import and export of earth materials, excavation, grading, earthwork construction, fills, ridgeline and hillside development, and slope setbacks. SCMC Chapter 18.02 (Amendments to Chapter 1, Division II, Scope and Administration, of the California Building Code) adopts the 2025 CBSC, including provisions of Chapter 16 (Structural Design) and Chapter 18 (Soils and Foundations) to mitigate the effects of earthquake ground motions. Compliance with these standards is demonstrated and verified through the City's grading plan review and permit process. The City Engineer may require geological and soil engineering reports, including seismic hazard zone studies, to verify site conditions and the sufficiency of proposed design and construction measures.

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the Santa Clarita Valley planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011a). The *City of Santa Clarita General Plan Land Use Element* addresses existing development patterns in the Santa Clarita Valley planning area and establishes a framework for focusing

future growth in a logical and orderly manner (City of Santa Clarita 2011b). The *City of Santa Clarita General Plan Safety Element* describes natural and human-made hazards that may affect existing and future residents and provides guidelines for protecting public health and safety (City of Santa Clarita 2022). Table 4.7-1 provides goals and policies within the General Plan that are relevant to the project.

Table 4.7-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 2	Conserve the Santa Clarita Valley's hillsides, canyons ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments.
Objective CO 2.1	Control soil erosion, waterway sedimentation, and airborne dust generation, and maintain the fertility of topsoil.
Policy CO 2.1.1	Review soil erosion and sedimentation control plans for development-related grading activities, where appropriate, to ensure mitigation of potential erosion by water and air.
Policy CO 2.1.2	Promote conservation of topsoil on development sites by stockpiling for later reuse, where feasible.
Policy CO 2.1.3	Promote soil enhancement and waste reduction through composting, where appropriate.
Objective CO 2.2	Preserve the Santa Clarita Valley's prominent ridgelines and limit hillside development to protect the valuable aesthetic and visual qualities intrinsic to the Santa Clarita Valley landscape.
Policy CO 2.2.3	Preserve designated natural ridgelines from development by ensuring a minimum distance for grading and development from these ridgelines of 50 feet or more if determined appropriate by the reviewing authority based on site conditions, to maintain the Santa Clarita Valley's distinctive community character and preserve the scenic setting.
Policy CO 2.2.4	Identify and preserve significant geological and topographic features through designating these areas as open space or by other means as appropriate.
Policy CO 2.2.5	Promote the use of adequate erosion control measures for all development in hillside areas, including single family homes and infrastructure improvements, both during and after construction.
Land Use Element	
Goal LU 3	Healthy and safe neighborhoods for all residents.
Objective LU 3.3	Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.
Policy LU 3.3.1	Identify areas subject to hazards from seismic activity, unstable soils, excessive noise, unhealthful air quality, or flooding, and avoid designating residential uses in these areas unless adequately mitigated.
Safety Element	
Goal S 1	Protection of public safety and property from hazardous geological conditions, including seismic rupture and ground shaking, soil instability, and related hazards.
Objective S 1.2	Regulate new development in areas subject to geological hazards to reduce risks to the public from seismic events or geological instability.
Policy S 1.2.3	Require soils and geotechnical reports for new construction in areas with potential hazards from faulting, landslides, liquefaction, or subsidence, and incorporate recommendations from these studies into the site design as appropriate.
Policy S 1.2.4	Enforce seismic design and building techniques in local building codes.

4.7.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to geology and soils if the project would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    ii) Strong seismic ground shaking.
    iii) Seismic-related ground failure, including liquefaction.
    iv) Landslides.
b) Result in substantial soil erosion or the loss of topsoil.
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.
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.
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Each of these thresholds is discussed under Section 4.7.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.7.4 Impact Assessment Methodology

The following evaluation is based, in part, on the Geotechnical Investigation Report (LGC 2024) and Paleontological Resources Inventory Report (Dudek 2025) prepared for the project. The documents identify existing site conditions and provide recommendations to address seismic hazards, soil stability, and paleontological sensitivity specific to the project site.

4.7.5 Project-Specific Impacts and Mitigation Measures

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no active faults were observed during reconnaissance of the project site; therefore, there are no known active or potentially active faults on-site (LGC 2024). The nearest Alquist-Priolo Earthquake Fault Zone is the San Andreas Fault, located approximately 18 miles northeast of the project site (CDOC 2015). The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an Alquist-Priolo earthquake fault; therefore, *no impacts* would occur.

Impact GEO-1
The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of an Alquist-Priolo earthquake fault.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

ii) Strong seismic ground shaking?

The project site is located in a seismically active region, and there is always potential for ground shaking to occur. Although there are no active or potentially active faults on-site, the project site is in the proximity of active faults that could cause ground shaking, including the Soledad Fault, located approximately 1 mile northeast of the project site; the San Gabriel Fault, located approximately 3.5 miles southwest of the project site; and the San Fernando Fault, located approximately 9.8 miles southwest of the project site (CDOC 2015). The project would result in the development of a gated senior community and associated site improvements, which have the potential to experience strong seismic ground shaking at some point(s) during the project lifetime. With compliance with the CBSC, impacts would be *less than significant*, and mitigation is not necessary.

Impact GEO-2
The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.
Mitigation Measures
Mitigation is not necessary. Impact GEO-2 would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

The project site is located in a State of California Seismic Hazard Zone for liquefaction and based on the depth to the historic high groundwater recorded at the project site, the majority of the project site has a moderate to high potential for liquefaction (LGC 2024). Proposed development would be required to comply with the CBSC, which requires buildings, building foundations, and any other associated structures to be constructed to withstand earthquake loads, including liquefaction. Mitigation Measure (MM) GEO-3.1 requires the implementation of all design recommendations included in the Geotechnical Investigation Report to ensure the project is designed and constructed to withstand the potential effects of liquefaction. Following implementation of MM GEO-3.1, the project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction; therefore, impacts would be *less than significant with mitigation*.

Impact GEO-3	
The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction.	
Mitigation Measures	
MM GEO-3.1	***Geotechnical Investigation Report Design and Construction Recommendations.*** *The permittee must implement all methods outlined in the* Geotechnical Investigation Report, Proposed Residential Development, Belcaro at Sand Canyon, Vesting Tentative Map 084497, City of Santa Clarita, California *(LGC Valley, Inc. 2024), which details design and construction requirements to address project-specific soil conditions. The methods must be approved by the City of Santa Clarita (City) Engineer before the City Engineer issues grading permits and must be included on all grading and construction plans.*
Impacts Following Mitigation	
With implementation of MM GEO-3.1, Impact GEO-3 would be reduced to less than significant.	

iv) Landslides?

The topography of the project site consists of gently sloping to steeply sloping terrain. *S*teeper hilly terrain, including some isolated low ridgelines, occurs primarily along the perimeter of the project site. These hills rise approximately 30 to 100 feet above the valley floor. However, based on the findings of the Geotechnical Investigation Report, the slopes on the project site are considered stable (LGC 2024). As a result, the project site would not be located in an area at risk of landslides. The project consists of excavation and ground-disturbing activities requiring a maximum 2:1 (horizontal to vertical) cut slope for remedial activities as well as general site development. Based on a review of the proposed design plan, stability fills at the project site are not necessary; however, any variations to the design plan may require stability fill at the project site. MM GEO-3.1 identifies the requirements for stability fill at the project site, which would ensure that project activities would be designed and constructed to withstand potential seismic-related ground failure, including landslides and would not cause unstable soils that could increase landslide risk at the project site. With implementation of MM GEO-3.1, the project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides; therefore, impacts would be *less than significant with mitigation.*

Impact GEO-4
The project would not cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.
Mitigation Measures
Implement MM GEO-3.1.
Impacts Following Mitigation
With implementation of MM GEO-3.1, Impact GEO-4 would be reduced to less than significant.

b) Would the project result in substantial soil erosion or the loss of topsoil?

The project site consists of approximately 193.8 acres of vacant land that is predominantly level, with sloped areas along the perimeter and at the northwestern portion of the project site. Soils on the project site generally consist of sand and loam components that are coarse and well-drained. Erosion is the process in which soil, rock, or other surface material is worn away and transported from its original location by natural forces such as wind, water, or ice. Erosion shapes landscapes and may result in unstable soil conditions, particularly in hillside development or development within or in proximity to sloped areas.

As a result of existing conditions, erosion potential at the project site is low to moderate (NRCS 2025). Construction activities would have the potential to temporarily increase erosion at the project site as a result of grading, trenching, and other ground disturbance. The project would be required to comply with SCMC Chapter 17.90 (National Pollutant Discharge Elimination System (NPDES) Compliance), which requires projects involving grading to comply with provisions of the National Pollutant Discharge Elimination System (NPDES). The project would disturb more than 1 acre of soil and would be required to obtain an NPDES Construction General Permit from the Los Angeles Regional Water Quality Control Board (RWQCB). The Construction General Permit requires construction sites that disturb 1 acre or more of land to implement stormwater controls and to develop a stormwater pollution prevention plan (SWPPP) with best management practices (BMPs) to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff. Based on required compliance with existing regulations, construction of the project would not result in substantial soil erosion. Following construction activities, the project site would be constructed with buildings, landscaping, roads, sidewalks, and other hardscapes that would significantly reduce the potential for long-term soil erosion to occur at the project site.

The project site is currently undeveloped and predominantly undisturbed and consists of naturally occurring topsoil. As discussed in Section 4.2, *Agriculture Resources*, the project site does not contain Important Farmland as defined by PRC § 21060.1; therefore, the project site does not contain valuable topsoil related to agriculture. Further, soil disturbance and associated loss of topsoil would be limited to development areas and would be avoided to the extent feasible in designated open space areas, which would cover 106.8 acres of the 193.8-acre project site. Therefore, the majority of the project site would remain as open space, which would allow for natural topsoil and associated valuable resources to be maintained in perpetuity at the project site.

Based on required compliance with existing regulations and the nature or the project, temporary ground-disturbing activities would not result in substantial erosion or substantial loss of topsoil; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact GEO-5
The project would not result in substantial soil erosion or the loss of topsoil.
Mitigation Measures
Mitigation is not necessary. Impact GEO-5 would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The project site is currently undeveloped and generally consists of gently to steeply sloping topography and soils with sand and loam components. Based on the findings of the Geotechnical Investigation Report, there is potential for liquefaction and settlement to occur at the project site; however, the slopes on the project site are considered stable, and the potential for landslide is low (LGC 2024). Further, the project site is not in an area with potential for subsidence to occur (USGS 2025). Implementation of the project would result in construction activities and new development on the project site, which would result in ground disturbance throughout the project site that could stress unstable soil conditions, including liquefaction and settlement potential. The project would be required to be constructed in accordance with the MM GEO-3.1, which requires the that all design recommendations included in the Geotechnical Investigation Report be implemented to ensure the project is designed and constructed to withstand potential ground-failure and reduce the potential to stress unstable soil conditions at the project site. With implementation of MM GEO-3.1, the project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse; therefore, impacts would be *less than significant with mitigation*.

Impact GEO-6
The project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
Mitigation Measures
Implement MM GEO-3.1.
Impacts Following Mitigation
With implementation of MM GEO-3.1, Impact GEO-6 would be reduced to less than significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

As discussed in Section 4.7.1.2, *Existing Conditions*, the potential for soil expansion at the project site is low, and the project would not be located on expansive soil. Further, the project would be required to be constructed in accordance with the most recent CBSC and design recommendations from the Geotechnical Investigation Report (MM GEO-3.1), which would further reduce already less-than-significant impacts related to risk to life and property from soil expansion. The project would not create substantial direct or indirect risks to life or property; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact GEO-7
The project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), and would not create substantial direct or indirect risks to life or property.
Mitigation Measures
Mitigation is not necessary. Impact GEO-7 would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The project would connect to existing wastewater infrastructure and does not include the construction of any septic tanks or alternative wastewater systems. Therefore, *no impacts* would occur.

Impact GEO-8
The project does not include the construction of any septic tanks or alternative wastewater systems.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

According to the Paleontological Resources Inventory Report, the project site is mapped as being underlain by gravel and sand of major stream channels (Qg); alluvial gravel, sand, and clay of valley areas (Qa); low terrace remnants of alluvial gravel and sand (Qoa); and the Mint Canyon Formation (Tmc) (Dudek 2025). Based on regional geologic maps and subsurface exploration, the project site is underlain by artificial fill, floodplain deposits, recent alluvium, terrace deposits, and bedrock assigned to the Mint Canyon Formation (LGC 2024).

No paleontological resources were identified within the project site as a result of the institutional records search, desktop geological review, and paleontological survey; however, there are geologic units with

high paleontological sensitivity at the project site, including Holocene deposits at depth, low terrace remnants of alluvial gravel and sand (Qoa), and the Mint Canyon Formation (Tmc). As a result, the project site has high potential to produce paleontological resources during planned construction activities in areas underlain by Holocene deposits at depth, Pleistocene deposits, and the Mint Canyon Formation.

In the event that intact paleontological resources are discovered on the project site, ground-disturbing activities associated with construction of the project, such as grading and trenching, have the potential to destroy a unique paleontological resource or site (Dudek 2025). MM GEO-9.1 requires the preparation and implementation of a paleontological resources mitigation and monitoring program (PRMMP), in accordance with the SVP guidelines, which outlines requirements for preconstruction meeting attendance and worker environmental awareness training and also requires paleontological monitoring during all ground-disturbing activities (including augering) below a depth of five feet below the ground surface in areas underlain by geologic units with high paleontological sensitivity. With implementation of MM GEO-9.1, the project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; therefore, impacts would be *less than significant with mitigation*.

Impact GEO-9	
The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	
Mitigation Measures	
MM GEO-9.1	***Paleontological Resources Mitigation and Monitoring Program and Paleontological Monitoring.*** *Before starting grading, the permittee must retain a qualified paleontologist per the Society of Vertebrate Paleontology (SVP)* Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources *(SVP 2010 guidelines). Before the permittee commences grading operations, the paleontologist must prepare a paleontological resources mitigation and monitoring program (PRMMP) for the project that is consistent with the 2010 SVP guidelines and outlines requirements for preconstruction meeting attendance and worker environmental awareness training, where paleontological monitoring is required within the project site based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microinvertebrate and microvertebrate fossils), reporting, and collections management.* *A qualified paleontological monitor must be on-site during ground-disturbing activities (including augering) below a depth of five feet below the ground surface in areas underlain by Holocene alluvial deposits and Holocene gravel and sand of major stream channels to determine if they are old enough to preserve scientifically significant paleontological resources. Full-time paleontological monitoring is required in areas underlain by late Pleistocene deposits and the Mint Canyon Formation. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor must temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the paleontological monitor will allow grading to recommence in the area of the find. Costs associated with laboratory work and curation fees must be paid by the permittee.*
Impacts Following Mitigation	
With implementation of MM GEO-9.1, Impact GEO-9 would be reduced to less than significant.	

4.7.6 Cumulative Impacts

Cumulative impacts related to geology and soils would occur if project-related impacts, when combined with other reasonably foreseeable future projects, as identified in Chapter 3, *Environmental Setting*, would cumulatively increase the potential for geologic hazards, such as ground shaking; increase soil impacts, such as erosion; or cumulatively increase the risk of impacts to paleontological resources.

Any structure built in the project region is naturally at risk of damage during major seismic events. The project would be required to comply with CBSC requirements and would also include the implementation of MM GEO-3.1, which requires the project to be designed and constructed in accordance with the recommendations included in the Geotechnical Investigation Report to reduce project-specific impacts related to seismic hazards (LGC 2024). Further, all discretionary future development within the project region would be subject to the CBSC, which requires buildings, building foundations, and any other associated structures to be constructed to withstand earthquake loads, including seismic-related ground failure. Compliance with these existing regulations and implementation of MM GEO-3.1 would ensure the project's potential impacts were not cumulatively considerable when considered in combination with other similar projects.

Any structure built in the project region is naturally at risk of increasing erosion and loss of topsoil. The project as well as other reasonably foreseeable future projects would be required to comply with SCMC Chapter 17.90 (National Pollutant Discharge Elimination System (NPDES) Compliance), which requires projects involving grading to comply with provisions of the NPDES and the preparation of a project-specific SWPPP with BMPs. Compliance with existing regulations would ensure the project's potential impacts were not cumulatively considerable when considered in combination with other similar projects.

With adherence to the applicable regulations, as discussed above, the projects' contribution to geotechnical or soils-related hazards would not be cumulatively considerable. However, in specific consideration of paleontological resources, future and nearby development projects in the area with the potential for substantial excavation would be subject to environmental review. These development projects could result in incremental impacts to paleontological resources that, when viewed together, could be considered cumulatively considerable.

As addressed in the direct impact analysis, the project has the potential to disturb geological units with high paleontological sensitivity. Reasonably foreseeable future projects that require grading, trenching, and other ground-disturbing activities within the project region would also have the potential to uncover and/or disturb geological units with high paleontological sensitivity and/or associated paleontological resources. If not mitigated, the potential for the loss, alteration, and destruction of the paleontological resources at the project site would be considered to significantly contribute to cumulative paleontological resource impacts. Project-specific impacts related to paleontological resources would be reduced through implementation of a PRMMP and paleontological monitoring, as required by MM GEO-9.1. Implementation of MM GEO-9.1 would reduce the potential for adverse effects on fossil resources individually and cumulatively and would preserve and maximize the potential of these resources to contribute to the body of scientific knowledge.

Based on the analysis provided above, project-specific impacts related to geology and soil resources would be reduced to less than significant, and impacts related to the project would be less than cumulatively considerable.

Impact GEO-10
The project would not result in cumulatively considerable impacts related to geology and soils.
Mitigation Measures
Implement MM GEO-3.1 and MM GEO-9.1.
Impacts Following Mitigation
With implementation of MM GEO-3.1 and MM GEO-9.1, cumulative impacts would be less than significant.

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4.8 GREENHOUSE GAS EMISSIONS

This section of the EIR describes the existing conditions and regulatory setting for greenhouse gases (GHGs) and global climate change as it pertains to the project, evaluates potential environmental impacts related to emissions of GHGs that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; EIR Appendix H).

4.8.1 Existing Conditions

Global climate change refers to the changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of GHGs that keep the Earth's surface warm by trapping heat in the Earth's atmosphere, in much the same way as glass traps heat in a greenhouse. The Earth's climate change is accelerated as a result of human activities, primarily the combustion of fossil fuels, which alter the chemical composition of the atmosphere through the buildup of GHGs. GHGs are released by the combustion of fossil fuels, land clearing, agriculture, and other activities, and lead to an increase in the greenhouse effect. While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased scrutiny and actions devoted to GHG emissions reduction and climate change research and policy.

Regarding the adverse effects of global warming, as reported by the Southern California Association of Governments (SCAG): "Global warming poses a serious threat to the economic well-being, public health and natural environment in Southern California and beyond. The potential adverse impacts of global warming include, among others, a reduction in the quantity and quality of water supply, a rise in sea levels, damage to marine and other ecosystems, and an increase in the incidence of infectious diseases" (SCAG 2007). Over the past few decades, the energy intensity of the National and State economies has been declining due to the shift to a more service-oriented economy. California ranked fifth lowest among the States in carbon dioxide (CO_2) emissions from fossil fuel consumption per unit of gross State product. However, in terms of total CO_2 emissions, "California is second only to Texas in the nation and is the 16th largest source of climate change emissions in the world, exceeding most nations. The SCAG region, with close to half of the state's population and economic activities, is a major contributor to the global warming problem" (SCAG 2007).

Observed impacts of climate change on biological systems—including humans, wildlife, and vegetation—affect terrestrial, marine, and freshwater ecosystems. Similar to global trends, species are responding to warming with shifts in elevation and latitude, changes in the timing of key life cycle events, and alterations in species abundance and community composition. While humans generally have a greater capacity to adapt to climate change compared to plants and animals in natural ecosystems, climate change still poses significant risks to public health. Rising temperatures and changing precipitation patterns can influence the spread of vector-borne diseases and alter disease dynamics in California, as well as increase the variability of heat-related illnesses and fatalities. Additionally, the area burned by wildfires each year has grown since 1950.

The California Natural Resources Agency (CNRA) has published four California Climate Change Assessments (in 2006, 2009, 2012, and 2018). These assessments address trends such as accelerated warming, more frequent and intense heat waves, increased river flows, rising sea levels, more severe

droughts and wildfires, intensified storms and extreme weather events, reduced snowpack and precipitation, and ocean acidification. To support local and regional governments in planning for climate adaptation, *California's Fourth Climate Change Assessment* (CNRA 2018) includes reports for nine regions, including the Los Angeles Region—which covers Los Angeles County and the City of Santa Clarita. Key climate projections for the Los Angeles Region (CNRA 2018) include:

- Continued future warming is projected across the Los Angeles Region, with average maximum temperatures projected to increase by approximately 4 degrees Fahrenheit (°F) to 5°F by the mid-century and 5°F to 8°F by the end of the century.
- Extreme temperatures are also expected to increase. The hottest day of the year may be up to 10°F warmer for many locations across the Los Angeles Region by the late century under certain model scenarios. The number of extremely hot days is also expected to increase across the region.
- Despite small changes in average precipitation, dry and wet extremes are both expected to increase. By the late twenty-first century, the wettest day of the year is expected to increase across most of the Los Angeles Region, with some locations experiencing 25% to 30% increases under certain model scenarios. Increased frequency and severity of atmospheric river events are also projected to occur for this region.
- Sea levels are projected to continue to rise in the future, but there is a large range based on emissions scenarios and uncertainty in feedbacks in the climate system. Roughly 1 foot to 2 feet of sea level rise is projected by the mid-century, and the most extreme projections lead to 8 feet to 10 feet of sea level rise by the end of the century.
- Projections indicate that the number of wildfires may increase over Southern California, but there remains uncertainty in quantifying future changes of burned area over the Los Angeles region.

4.8.1.1 Overview of Greenhouse Gas Emissions

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the GHGs that contribute to this phenomenon. Various gases in the Earth's atmosphere, classified as atmospheric GHG emissions, play a critical role in determining the Earth's surface temperature. Solar radiation enters the Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. The sections below describe the prominent GHGs, including CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6), that contribute to the greenhouse effect.

The magnitude of the impact on global warming differs among the GHGs. The effect each GHG has on climate change is measured as a combination of the volume of its emissions and its global warming potential (GWP). GWP is one type of simplified index based upon radiative properties used to estimate the potential future impacts of emissions of different gases upon the climate system, expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of pounds or tons of CO_2 equivalents (CO_2e). GWP is based on a number of factors, including the radiative efficiency (heat-absorbing ability) of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO_2. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that period. HFCs, PFCs, and SF_6 have a greater GWP than CO_2. In other words, these other GHGs have a greater contribution to global warming than CO_2 on a per-mass basis. However, CO_2 has the

greatest impact on global warming because of the relatively large quantities of CO_2 emitted into the atmosphere. A summary of the atmospheric lifetime and GWP of selected gases is presented in Table 4.8-1. As shown in Table 4.8-1, GWPs range from 1 to 23,500.

The IPCC has released three assessment reports (AR4, AR5, and AR6) with updated GWPs; however, the California Air Resources Board (CARB) reports the Statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards. By applying the GWP ratios, the project-related equivalent mass of CO_2 (denoted as CO_2e emissions) can be shown in metric tons per year.

Table 4.8-1. Global Warming Potentials

Greenhouse Gas	GWP Values for 100-year Time Horizon		
	AR4*	AR5	AR6
Carbon dioxide (CO_2)	1	1	1
Methane (CH_4)	25	28	Fossil origin – 29.8 Non-fossil origin – 27.2
Nitrous oxide (N_2O)	298	265	273
Select hydrofluorocarbons (HFCs)	124–14,800	4–12,400	–
Sulfur hexafluoride (SF_6)	22,800	23,500	–

Sources: IPCC (2007, 2014, 2023)

* For consistency with the U.S. Environmental Protection Agency (EPA) and its inventory of GHG reporting (EPA 2024), this EIR represents values from AR4 (IPCC 2007).

CARBON DIOXIDE

CO_2 is a colorless, odorless gas that is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels, such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses, such as mineral production, metal production, and the use of petroleum-based products, can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.

METHANE

CH_4 is a colorless, odorless gas that is flammable under most circumstances. It is the major component of natural gas, about 87% by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. CH_4 is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources, such as wildfires. The atmospheric lifetime of CH_4 is approximately 12 years.

NITROUS OXIDE

N_2O is a clear, colorless gas with a slightly sweet odor that is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil

and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.

HYDROFLUOROCARBONS, PERFLUOROCARBONS, AND SULFUR HEXAFLUORIDE

HFCs are primarily used as substitutes for ozone-depleting substances regulated under the Montreal Protocol, an international treaty that was approved on January 1, 1989, and was designated to protect the ozone layer by phasing out the production of several groups of halogenated hydrocarbons believed to be responsible for ozone depletion. PFCs and SF_6 are emitted from various industrial processes, including aluminum smelting, semiconductor manufacturing, electric power transmission and distribution, and magnesium casting. There is no primary aluminum or magnesium production in California; however, the rapid growth in the semiconductor industry leads to greater use of PFCs.

4.8.1.2 Greenhouse Gas Emissions Inventories

UNITED STATES GHG EMISSIONS

Per the U.S. Environmental Protection Agency's (EPA's) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2023* (EPA 2025), total U.S. GHG emissions have decreased by 5% from 1990 to 2023, down from a high of 15.2% above 1990 levels in 2007. The largest source of GHG emissions from human activities in the United States is from the burning of fossil fuels for electricity, heat, and transportation. The latest national GHG emissions are for calendar year 2023, in which total gross U.S. GHG emissions were reported at 6,197.3 million metric tons (MMT) CO_2e. From 2022 to 2023, gross emissions decreased by 2.3% (146.8 MMT CO_2e). Net emissions (including sinks) were 5,257.4 MMT CO_2e in 2023. Overall, net emissions have decreased by 4.4% from 1990 to 2023.

STATEWIDE GHG EMISSIONS

According to California's 2000–2023 GHG emissions inventory, California emitted 360.4 MMT CO_2e in 2023 (CARB 2025a), a 3.1% decrease from 2021. The sources of GHG emissions in California include transportation, industrial uses, electric power production from both in-State and out-of-State sources, commercial and residential uses, agriculture, high GWP substances, and recycling and waste. The California GHG emission source categories (as defined in CARB's 2008 Scoping Plan [CARB 2008]) and their relative contributions in 2022 are presented in Table 4.8-2. Based on the data presented in the 2022 Statewide GHG inventory, GHG emissions fell below 1990 levels, consistent with Assembly Bill (AB) 32 (CARB 2024). The declining trend in GHG emissions, coupled with programs that will continue to provide additional GHG reductions going forward, demonstrates that California will continue to reduce emissions below the 2020 target of 431 metric tons CO_2e ($MTCO_2e$) (CARB 2024).

Table 4.8-2. California Greenhouse Gas Inventory

Parameter	MMT CO_2e				
	2019	**2020**	**2021**	**2022**	**2023**
Transportation	166.1	135.2	145.1	139.9	133.7
	40.6%	37.6%	39.0%	37.7%	37.1%
Electric power	58.8	59.5	62.3	59.8	57.3
	14.4%	16.5%	16.7%	16.1%	15.9%
Industrial	88.2	73.6	74.2	72.7	66.3
	21.5%	20.5%	20.0%	19.6%	18.6%
Commercial and residential	43.8	39.0	38.8	39.5	43.3
	10.7%	10.8%	10.4%	10.6%	12.0%
Agriculture	31.8	31.4	30.4	29.8	29.2
	7.8%	8.7%	8.2%	8.0%	8.1%
High GWP	20.6	21.3	21.3	21.3	21.3
	5.0%	5.9%	5.7%	5.7%	5.9%
Total Net Emissions	**409.3**	**360.0**	**372.1**	**363.0**	**360.4**

Source: CARB (2025a)

4.8.2 Regulatory Setting

4.8.2.1 Federal

The Supreme Court of the United States (SCOTUS) ruled in *Massachusetts v. Environmental Protection Agency*, 127 S.Ct. 1438 (2007), that CO_2 and other GHGs are pollutants under the Federal Clean Air Act (CAA) that the EPA must regulate if it determines they pose an endangerment to public health or welfare. SCOTUS did not mandate that the EPA enact regulations to reduce GHG emissions. Instead, SCOTUS found that the EPA could avoid taking action if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

In 2009, the EPA issued a proposed finding that GHGs contribute to air pollution that may endanger public health or welfare. The proposed rule was published in the *Federal Register* under Docket ID No. EPA-HQ-OAR-2009-0171. The EPA stated that high atmospheric levels of GHGs "are the unambiguous result of human emissions and are very likely the cause of the observed increase in average temperatures and other climatic changes." The EPA further found that "atmospheric concentrations of GHGs endanger public health and welfare within the meaning of § 202 of the Clean Air Act." The final rule was effective on January 14, 2010 (EPA 2026). While these findings alone do not impose any requirements on industry or other entities, this action is a prerequisite to regulatory actions by the EPA, including, but not limited to, GHG emissions standards for light-duty vehicles.

Title 40 of the Code of Federal Regulations (CFR) Parts 60 and 63 codify the final rules and include the first Federal air standards for natural gas wells that are hydraulically fractured, along with requirements for several other sources of pollution in the oil and gas industry that currently are not regulated at the Federal level.

4.8.2.2 State

ENERGY INDEPENDENCE AND SECURITY ACT

The Energy Independence and Security Act of 2007 facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard that requires fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- Requiring approximately 25% greater efficiency for lightbulbs by phasing out incandescent lightbulbs between 2012 and 2014; requiring approximately 200% greater efficiency with lightbulbs, or similar energy savings, by 2020.
- While superseded by the EPA and National Highway Traffic Safety Administration, 1) establishing miles-per-gallon targets for cars and light trucks, and 2) directing the National Highway Traffic Safety Administration to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of the Energy Independence and Security Act address energy savings in government and public institutions, promote research for alternative energy and carbon capture, support international energy programs, and encourage the creation of "green jobs."

EXECUTIVE ORDERS S-3-05, B-30-15, AND B-55-18

In 2005, Executive Order (EO) S-3-05 established Statewide GHG emissions reduction targets, as well as a process to ensure the targets are met. The order directed the Secretary of the California Environmental Protection Agency (CalEPA) to report every two years on the State's progress toward meeting the governor's GHG emission reduction targets. The Statewide GHG targets established by EO S-3-05 are as follows:

- By 2010, reduce to 2000 emission levels
- By 2020, reduce to 1990 emission levels
- By 2050, reduce to 80 percent below 1990 levels

In 2015, EO B-30-15 established an additional Statewide policy goal to reduce GHG emissions 40% below their 1990 levels by 2030. Reducing GHG emissions by 40% below 1990 levels in 2030 and by 80% below 1990 levels by 2050 (consistent with EO S-3-05) aligns with scientifically established levels needed in the United States to limit global warming below 2 degrees Celsius.

The California Legislature adopted equivalent 2020 and 2030 Statewide targets in the California Global Warming Solutions Act of 2006 (also known as AB 32) and Senate Bill (SB) 32, respectively, both of which are discussed below. However, the legislature has not yet adopted a target for the 2050 horizon year. As a result of EO S-3-05, the California Action Team (CAT), led by the Secretary of CalEPA, was formed. The CAT is made of representatives from a number of State agencies and was formed to implement global warming emission reduction programs and to report on the progress made toward

meeting Statewide targets established under EO S-3-05. The CAT reported several recommendations and strategies for reducing GHG emissions and reaching the targets established in EO S-3-05.

The CAT stated that "smart" land use is an umbrella term for strategies that integrate transportation and land use decisions. Such strategies generally encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors. These strategies develop more efficient land use patterns within each jurisdiction or region to match population increases, workforce, and socioeconomic needs for the full spectrum of the population. "Intelligent transportation systems" is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and the movement of people, goods, and services.

In 2018, EO B-55-18 established a new Statewide goal to achieve carbon neutrality as soon as possible, but no later than 2045, and achieve and maintain net negative emissions thereafter. Based on EO B-55-18, CARB would work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal, as well as ensuring future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

ASSEMBLY BILL 32

The California Global Warming Solutions Act of 2006 (AB 32) commits the State to achieving the following:

- By 2010, reduce to 2000 GHG emission levels
- By 2020, reduce to 1990 levels

To achieve these goals, which are consistent with the California CAT GHG targets for 2010 and 2020, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce Statewide GHG emissions from stationary sources consistent with the CAT strategies, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved. In order to achieve the reductions, AB 32 requires CARB to adopt rules and regulations in an open, public process that achieves the maximum technologically feasible and cost-effective GHG reductions.

SENATE BILL 32 AND ASSEMBLY BILL 197

SB 32 established the 2030 emissions reduction target set by EO B-30-15, mandating that CARB ensures Statewide GHG emissions are cut to 40% below 1990 levels by 2030. AB 197 created the Joint Legislative Committee on Climate Change Policies—composed of at least three senators and three assembly members—to provide ongoing oversight of the State's climate policies. Additionally, AB 197 added two nonvoting legislative members to CARB's Board; requires CARB to publicly share and update (at least annually on its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants (TACs) from reporting facilities; and directs CARB to specify certain information about GHG reduction measures when revising the Scoping Plan.

California Air Resources Board Climate Change Scoping Plan

AB 32 requires CARB to develop and update a scoping plan every five years to achieve the most feasible and cost-effective GHG emission reductions (Health and Safety Code § 38561). The initial plan, approved in 2008, set strategies such as regulations, market-based programs, and voluntary measures to meet the 2020 GHG limit and support long-term climate goals.

The first update in 2014 confirmed progress toward the 2020 target and recommended establishing a 2030 interim goal, emphasizing technologies like energy efficiency, electrification, and clean energy. The 2017 update expanded on previous strategies and introduced new approaches to reach the 2030 target, including renewable energy mandates, stricter fuel standards, and continued use of cap-and-trade (CARB 2017).

In 2022, CARB adopted a more ambitious scoping plan aiming for carbon neutrality by 2045 and a new 2030 GHG reduction target of 48% below 1990 levels, surpassing the statutory 40% reduction requirement (CARB 2022). This plan broadens its focus to include carbon capture and storage, both through technological and nature-based solutions. The CARB 2022 Scoping Plan also provides guidance for local governments, emphasizing the importance of CEQA review for new developments. Appendix D of the CARB 2022 Scoping Plan outlines non-binding recommendations for residential and mixed-use projects, such as including electric vehicle (EV) charging, infill locations, preserving natural lands, transit access, affordable housing, and all-electric appliances (CARB 2022). Projects meeting all these criteria are considered aligned with State climate goals and generally result in less-than-significant GHG impacts under CEQA.

Lead agencies may also use alternative approaches to assess project consistency with State climate goals, such as achieving net-zero emissions or following thresholds set by air districts. However, CARB acknowledges that net-zero emissions may not be feasible for all projects.

CALIFORNIA RENEWABLES PORTFOLIO STANDARD

The California Renewable Portfolio Standard (RPS) program (SB 1078; 2002) requires that 20% of the available energy supplies come from renewable energy sources by 2017. In 2006, SB 1078 accelerated the 20% mandate to 2010. These mandates apply directly to investor-owned utilities. On April 12, 2011, Governor Brown signed into law SB 2X, which modified the California RPS program to require that both public- and investor-owned utilities in California receive at least 33% of their electricity from renewable sources by the year 2020. SB 2X also requires regulated sellers of electricity to meet an interim milestone of procuring 25% of their energy supply from certified renewable sources by 2016.

SENATE BILL 350

The objectives of the Clean Energy and Pollution Reduction Act of 2015 (SB 350) are to 1) increase the procurement of electricity from renewable sources from 33% to 50% by the end of 2030; and 2) double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

SENATE BILL 100

The 100 Percent Clean Energy Act of 2018 (SB 100) updates the goals of California's RPS and SB 350, as discussed above, to the following: achieve a 50% renewable resources target by December 31, 2026, and achieve a 60% target by December 31, 2030. SB 100 also requires that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% procured to serve all State agencies by December 31, 2045.

ASSEMBLY BILL 1493 AND EXECUTIVE ORDER B-16-12

AB 1493 requires the development and adoption of regulations to achieve the maximum feasible reduction in GHG emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. Although setting emission standards on

automobiles is solely the responsibility of the EPA, the Federal CAA allows California to set State-specific emission standards on automobiles, if the State first obtains a waiver from the EPA.

EO B-16-12, issued in 2012, directed State agencies under the governor's authority to actively support and accelerate the widespread adoption of Zero Emission Vehicles. The order instructed CARB, the California Energy Commission (CEC), the California Public Utilities Commission, and other relevant agencies to collaborate with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to set benchmarks for achieving goals in 2015, 2020, and 2025. Statewide, EO B-16-12 established a target of reducing transportation-related GHG emissions to 80% below 1990 levels by 2050. This directive excluded vehicles with specialized performance requirements essential for public safety and welfare.

SENATE BILL 375

SB 375 requires each of California's 18 major Metropolitan Planning Organizations (MPO) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) to address land use allocation in that MPOs Regional Transportation Plan (RTP). CARB, in consultation with the MPOs, establishes regional reduction targets for GHGs emitted by passenger cars and light trucks for the years 2020 and 2035.The MPO for each region must then develop a SCS that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region. If the SCS is unable to achieve the regional GHG emissions reductions targets, then the MPO is required to prepare an APS that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

As required under SB 375, CARB is required to update regional GHG emission targets every eight years, but can be updated every four years if advancements in emission technologies affect the reduction strategies to achieve the targets. CARB formally adopted the last update in 2018. As part of this update, CARB adopted a passenger vehicle–related GHG reduction target of 19% by 2035 for the SCAG region, which is more stringent than the previous reduction target of 13% by 2035.

CALIFORNIA CODE OF REGULATIONS TITLE 24 (CALIFORNIA BUILDING STANDARDS CODE)

Title 24 of the California Code of Regulations (CCR) includes the California Building Standards Code, which consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, and accessibility for persons with physical and sensory disabilities. These standards are updated every three years. The most recent update, the 2025 California Building Standards, went into effect on January 1, 2026.

Part 6 – Building Energy Efficiency Standards/Energy Code

The Building Energy Efficiency Standards, or California Energy Code (24 CCR Part 6), establishes energy efficiency standards for residential and nonresidential buildings to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the CEC. The most recent 2025 Energy Code has a strong emphasis on heat pumps for space and water heating. The code expands the use of photovoltaic and battery storage systems, as well as other demand-flexible technologies, to work alongside heat pumps and improve building responsiveness to climate change. Enhanced ventilation standards further support indoor air quality. These updates contribute to California's goal of reaching net-zero carbon footprint by 2045. The code also provides flexible compliance options through mandatory measures, performance standards tailored to

local climate zones and building types, and prescriptive packages for simplified compliance. Buildings whose permit applications are applied for on or after January 1, 2026, must comply with the 2025 Energy Code.

Part 11 – California Green Building Standards

The California Green Building Standards (CALGreen) Code (24 CCR Part 11) was developed to help the State achieve its GHG emissions reduction goals under AB 32 by codifying standards for reducing building-related energy, water, and resource demand, which in turn reduces GHG emissions from energy, water, and resource demand. The CALGreen Code establishes mandatory measures for new residential and nonresidential buildings, which include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality.

CALIFORNIA CODE OF REGULATIONS TITLE 20

Title 20 of the CCR establishes requirements for manufacturers to ensure that appliances comply with both Federal and State energy and water efficiency standards (20 CCR 1401–1410). The CEC certifies appliances based on evidence provided by manufacturers demonstrating compliance with these standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, freezers, room air conditioners, room air conditioning heat pumps, central air conditioners, spot air conditioners, vented gas space heaters, gas pool heaters, plumbing fittings and fixtures, fluorescent lamp ballasts, lamps, emergency lighting, traffic signal modules, dishwashers, clothes washers and dryers, cooking products, electric motors, low voltage dry-type distribution transformers, power supplies, televisions, consumer audio and video equipment, and battery charger systems. Title 20 outlines testing protocols for each appliance type, requiring them to meet specific standards for energy and water performance and design. Title 20 defines three categories of standards: Federal and State standards for Federally regulated appliances, State standards for Federally regulated appliances, and State standards for non-Federally regulated appliances.

EXECUTIVE ORDER S-01-07

The California Low Carbon Fuel Standard (LCFS) (EO S-01-07) requires a reduction of at least 10% in the carbon intensity of California transportation fuels by 2020. Regulatory proceedings and implementation of the LCFS were directed to CARB. CARB released a draft version of the LCFS in October 2008. The final regulation was approved by the Office of Administrative Law and filed with the Secretary of State on January 12, 2010; the LCFS became effective on the same day. In 2025, CARB amended the LCFS to increase the carbon intensity reduction target for transportation fuels to 30% by 2030 and 90% by 2045 (CARB 2025b).

ASSEMBLY BILL 1279

In 2022, the California Legislature adopted the California Climate Crisis Act (AB 1279), which establishes the State's goal of reaching net-zero GHG emissions as quickly as possible, and no later than 2045, and subsequently sustaining net negative GHG emissions. The act also stipulates that, by 2045, Statewide anthropogenic GHG emissions must be reduced by at least 85% below 1990 levels. AB 1279 directs CARB to collaborate with State agencies to update the scoping plan every five years, recommend and implement measures to meet these policy goals, and advance a variety of carbon dioxide removal and carbon capture, utilization, and storage technologies.

SENATE BILLS 605 AND 1383

Enacted in 2014, SB 605 directs CARB to develop a comprehensive plan for reducing short-lived climate pollutants (SLCPs) in California (Health and Safety Code § 39730). Enacted in 2016, SB 1383 further requires CARB to approve and begin implementing this plan by January 1, 2018 (Public Resources Code §§ 42652–43654). SB 1383 sets specific reduction targets for SLCPs—a 40% decrease from 2013 levels by 2030 for CH_4 and HFCs, and a 50% decrease for anthropogenic black carbon. The bill also outlines measures for reducing emissions from dairy and livestock operations, as well as landfills. In response, CARB adopted its SLCP Reduction Strategy in March 2017, which provides a Statewide framework for cutting emissions of black carbon, CH_4, and fluorinated gases.

4.8.2.3 Regional

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District's (SCAQMD's) Policy on Global Warming and Stratospheric Ozone Depletion guides the SCAQMD's consideration of global climate and ozone-layer impacts in rulemaking and in preparing revisions to the Air Quality Management Plan (AQMP). The policy has since been supplemented by additional climate change and decarbonization strategies in more recent AQMP updates. The policy and its implementing rules include the following elements:

- Phasing out the use and associated emissions of chlorofluorocarbons, methyl chloroform, carbon tetrachloride, and halons.
- Phasing out large-quantity uses and associated emissions of hydrochlorofluorocarbons, with current rules focusing on recovery, recycling, and leak prevention for refrigerants.
- Maintaining and updating recycling and emission-reduction regulations for hydrochlorofluorocarbons and other high-GWP refrigerants (including SCAQMD Regulation XIV rules such as Rules 1411 and 1415 and subsequent amendments).
- Maintaining emissions inventory and control strategies for ozone-depleting substances such as methyl bromide, now integrated into broader climate and toxics control programs.
- Supporting Statewide GHG emission reduction goals and integrating those goals into regional planning and AQMP climate and decarbonization chapters.

In 2008, the SCAQMD Governing Board adopted an interim GHG significance threshold of 10,000 MTCO2e per year for stationary-source and industrial projects where SCAQMD is the lead agency. That interim threshold continues to be the operative numerical benchmark in SCAQMD's CEQA guidance for SCAQMD-led stationary and industrial projects, while no binding numerical GHG significance threshold has been formally adopted by SCAQMD for land use development projects such as City- or County-led commercial or residential developments.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development, and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the Federal and State air quality requirements, including applicable Federal, State, and air district laws and regulations. As the Federally designated MPO for the six-County Southern California region, SCAG is required by law to ensure that transportation activities conform to, and are supportive of, the goals of regional and State air quality plans

to attain the National Ambient Air Quality Standards. In addition, SCAG is a co-producer, with SCAQMD, of the transportation strategy and transportation control measure sections of the AQMP. The development of the AQMP relies on population and transportation growth projections contained in SCAG's RTP/SCS.

On September 3, 2020, SCAG's Regional Council adopted an updated RTP/SCS—*Connect SoCal: A Plan for Navigating to a Brighter Future, The Southern California Association of Governments' 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (SCAG 2024), known as the Connect SoCal 2024 RTP/SCS, which covers the period from 2020 through 2045. As with the 2016–2040 RTP/SCS, the purpose of the Connect SoCal 2024 RTP/SCS is to meet the mobility needs of the six-County SCAG region over the subject planning period through a roadmap identifying sensible ways to expand transportation options, improve air quality, and bolster Southern California's long-term economic viability. On October 30, 2020, CARB accepted SCAG's determination that the SCS met the applicable State GHG emissions targets. The goals and policies of the Connect SoCal 2024 RTP/SCS are similar to, and consistent with, those of the 2016–2040 RTP/SCS. In addition, CARB's new target requiring a 19% reduction in per-capita GHG emissions has been included in the Connect SoCal 2024 RTP/SCS, to fulfill SB 375 compliance with respect to meeting the State's GHG emission reduction goals.

4.8.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for local responses to climate change due to GHG emissions (City of Santa Clarita 2011). Table 4.8-3 provides goals, objectives, and policies regarding GHGs that would be relevant to the project.

Table 4.8-3. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 8	Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
Objective CO 8.1	Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.
Policy CO 8.1.2	Participate in the preparation of a regional Sustainable Communities Strategy (SCS) Plan to meet regional targets for greenhouse gas emission reductions, as required by SB 375.
Policy CO 8.1.3	Revise codes and ordinances as needed to address energy conservation, including but not limited to the following: • Strengthen building codes for new construction and renovation to achieve a higher level of energy efficiency, with a goal of exceeding energy efficiency beyond that required by Title 24; • Adopt a Green Building Program to encourage green building practices and materials, along with appropriate ordinances and incentives; • Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, promote effective use of daylight, and optimize opportunities for on-site solar generation; • Encourage mitigation of the "heat island" effect through use of cool roofs, light-colored paving, and shading to reduce energy consumption for air conditioning.
Objective CO 8.2	Reduce energy and materials consumption and greenhouse gas emissions in public uses and facilities.
Policy CO 8.2.6	Promote use of solar lighting in parks and along paseos and trails, where practical.

Goal/Objective/ Policy	Description
Objective CO 8.3	Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.
Policy CO 8.3.1	Evaluate site plans proposed for new development based on energy efficiency pursuant to LEED (Leadership in Energy and Environmental Design) standards for New Construction and Neighborhood Development, including the following: a) location efficiency; b) environmental preservation; c) compact, complete, and connected neighborhoods; and d) resource efficiency, including use of recycled materials and water.
Policy CO 8.3.2	Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.
Policy CO 8.3.4	Encourage new residential development to include on-site solar photovoltaic systems, or prewiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.
Policy CO 8.3.7	Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.
Policy CO 8.3.8	Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.
Policy CO 8.3.9	Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.
Policy CO 8.3.10	Provide incentives and technical assistance for installation of energy-efficient improvements in existing and new buildings.
Policy CO 8.3.11	Consider allowing carbon off-sets for large development projects, if appropriate, which may include funding off-site projects or purchase of credits for other forms of mitigation, provided that any such mitigation shall be measurable and enforceable.
Policy CO 8.3.12	Reduce extensive heat gain from paved surfaces through development standards wherever feasible.
Objective CO 8.4	Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.
Policy CO 8.4.1	Encourage and promote the location of enclosed materials recovery facilities (MRF) within the Santa Clarita Valley.
Policy CO 8.4.2	Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.
Policy CO 8.4.3	Allow and encourage composting of greenwaste, where appropriate.
Policy CO 8.4.4	Promote commercial and industrial recycling, including recycling of construction and demolition debris.
Policy CO 8.4.5	Develop and implement standards for refuse and recycling receptacles and enclosures to accommodate recycling in all development.

4.8.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to GHG emissions if the project would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Each of these thresholds is discussed under Section 4.8.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.8.4 Impact Assessment Methodology

The following impact discussion is based, in part, on the *Air Quality, Greenhouse Gas Emissions, and Energy Technical Report for Belcaro at Sand Canyon Project* (Dudek 2026; see EIR Appendix H).

The methodology used to evaluate impacts related to GHG emissions described in this section focuses on consistency with Statewide, regional, and local plans that have been adopted for the purposes of reducing and mitigating GHG emissions. This approach is appropriate for analyzing GHG impacts for the Governor's Office of Land Use and Climate Innovation (formerly the Governor's Office of Planning and Research). Project-generated GHG emissions would be considered to have a potentially significant impact on the environment that could conflict with applicable GHG-reduction efforts if project-generated GHG emissions would conflict with applicable GHG-reduction plans. Neither the State of California, the SCAQMD, nor the City has adopted applicable emission-based thresholds of significance for GHG emissions under CEQA.

Emissions associated with the construction and operation of the project have been calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.30 (Dudek 2026). Emissions modeling was conducted based on project-specific information provided, including estimated construction schedules, equipment use, and vehicle trips. Other operational data were based on CalEEMod default values by land use type and quantity when project-specific information was not provided. Modeling assumptions and output files are included in EIR Appendix H.

Given that neither CARB, the SCAQMD, nor the City have adopted a numerical threshold of significance for GHG emissions within the City or region, this analysis relies solely on an evaluation of whether the project is consistent with applicable plans, policies, or regulations adopted for the purposed of reducing the emissions of GHGs, as provided in Section 4.8.2, *Regulatory Setting*, including the CARB 2022 Scoping Plan, Connect SoCal 2024 RTP/SCS, and City's General Plan.

4.8.5 Project-Specific Impacts and Mitigation Measures

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

SHORT-TERM CONSTRUCTION GHG EMISSIONS

The project is anticipated to be constructed over a five-year period, commencing in 2027 and ending with a full operational buildout in 2032.

Estimated increases in GHG emissions associated with the construction of the project are summarized in Table 4.8-4.[1] Based on the modeling conducted, construction-related GHG emissions would total approximately 4,380.15 MT CO_2e without mitigation. Amortized over a 30-year period, the construction-related GHG emissions would total approximately 146 $MTCO_2e$ per year. While it is anticipated that the project would likely have a longer lifespan, 30 years has been estimated to provide a more conservative

[1] CalEEMod modeling for construction emissions was completed based on preliminary information from the project applicant that had estimated construction beginning in September 2026 and full operational buildout occurring in 2031. The construction schedule used in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years.

analysis. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted.

Table 4.8-4. Estimated Annual Greenhouse Gas Emissions During Construction

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2027	726.96
2028	1,628.25
2029	677.72
2030	764.00
2031	512.41
2032	70.82
Total	**4,380.15**
Construction Emissions Amortized Over 30 Years	*146.00*

Source: Dudek (2026)

Note: Columns may not add up due to rounding.

LONG-TERM OPERATIONAL GHG EMISSIONS

Operational GHG emissions associated with the project would primarily be generated from vehicle trips by residents and visitors entering and exiting the project site. According to the *Transportation Assessment for Belcaro at Sand Canyon*, the project is expected to generate 1,596 daily vehicle trips (Gibson Transportation Consulting Inc. [Gibson]; EIR Appendix I). Operation of the project would also generate GHG emissions through landscape maintenance equipment operation, energy use, solid waste disposal, and generation of electricity associated with water supply, treatment, distribution, and wastewater treatment. Estimated operational GHG emissions for the project at full buildout would total 2,867.32 $MTCO_2e$ per year, as shown in Table 4.8-5.[2]

Table 4.8-5. Estimated Annual Greenhouse Gas Emissions During Project Operations

Project Phase	GHG Emissions (MT CO_2e/year)
Mobile	2,078.99
Area	17.05
Energy	418.69
Water	42.38
Waste	308.26
Refrigerant	1.96
Full Buildout Operational Emissions	**2,867.32**

Source: Dudek (2026)

Note: Columns may not add up due to rounding.

[2] CalEEMod modeling for operational emissions was completed based on preliminary information from the project applicant that had estimated full operational buildout occurring in 2031. Although the full buildout year has since been revised to occur one year later, the emissions estimates have not been updated, as the earlier modeling year yields higher emissions. Because emissions are expected to decrease over time due to mobile fleet turnover and progressively more stringent regulations, the estimates presented in Table 4.8-5 represent a conservative assessment.

ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS

GHG emissions generated during construction of the project would only occur when construction is active, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Due to the potential persistence of GHGs in the environment, impacts are based on the estimated annual project-generated GHG emissions consisting of a combination of operational GHG emissions with construction GHG emissions, which have been amortized over the estimated life of the project (Table 4.8-6).

Table 4.8-6. Estimated Annual Greenhouse Gas Emissions

Project Phase	GHG Emissions (MT CO_2e/year)
Full Buildout Operational Emissions	2867.32
Construction Emissions Amortized Over 30 Years	146
Total Annual Emissions	**3,013.32**

Source: Dudek (2026)

Note: There is no numerical threshold for GHGs that has been adopted or formalized by CARB, the SCAQMD, or the City for CEQA analysis purposes.

This analysis relies solely on an evaluation of whether the project is consistent with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs, including the CARB 2022 Scoping Plan, Connect SoCal 2024 RTP/SCS, and City's General Plan. Refer to Impact GHG-2 below for an analysis of the project's consistency with these plans. Consequently, the negligible GHG emissions generated by the project would be considered *less than significant*, and mitigation is not necessary.

Impact GHG-1
The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
Mitigation Measures
Mitigation is not necessary. Impact GHG-1 would be less than significant.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Relevant plans and policies to reduce GHG emissions include the CARB 2022 Scoping Plan, Connect SoCal 2024 RTP/SCS, and City's General Plan. The evaluation of the project's consistency with these plans for reducing GHG emissions considers the project holistically. This approach is consistent with these plans and policies, which also consider projects holistically (i.e., the plans and policies generally do not segregate impacts by construction and operation).

CARB 2022 SCOPING PLAN

The CARB 2022 Scoping Plan provides a framework for achieving California's GHG emission reduction targets (CARB 2022). The CARB 2022 Scoping Plan update outlines a strategy for reducing GHG emissions to 40% below 1990 levels by 2030 under SB 32 and 85% below 1990 levels by 2045 under AB 1279 (CARB 2022). As shown in Table 4.8-7, the project would not conflict with a majority of climate change policies and measures under the CARB 2022 Scoping Plan for residential/mixed-use projects. One project attribute that would conflict with the CARB 2022 Scoping Plan is the installation of natural gas infrastructure in the new residential units. This would contradict the Scoping Plan's goals for building decarbonization and California's overall climate and health goals. Therefore, the project would result in a *potentially significant* impact concerning potential conflict with measures outlined in CARB 2022 Scoping Plan.

Table 4.8-7. Project Consistency with Applicable CARB 2022 Scoping Plan Measures

Measure Description	Project Consistency
Provide EV charging infrastructure at least in accordance with CALGreen Tier 2 standards.	**Consistent.** The project would meet the EV charging infrastructure standards required by the most recent CALGreen Code standards.
Is located on infill sites that are surrounded by and reuses or redevelop previously undeveloped or underutilized land presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	**Consistent.** The project site is bordered by the Santa Clara River to the north (and farther north, State Route 14), existing single-family development to the west, Sand Canyon Country Club to the south, and undeveloped land to the east. The project would develop this underutilized land to provide needed housing for seniors while preserving open space and connecting the residents to the surrounding community and natural lands. The project would be served through new connections to existing utilities in the public right-of-way. The project would require internal construction of roads for local access, customary extension of water services and facilities, and construction of new sewer lines and stormwater and drainage infrastructure, consistent with existing sewer and stormwater/drainage infrastructure in the area.
Do not result in the loss or conversion of the State's natural and working lands.	**Consistent.** The City's General Plan land use and zoning designations for the project site is Urban Residential 1 (UR1) (2.0 dwelling units/acre [du/ac]) and Non-Urban 5 (NU5) (1.0 du/ac). Accordingly, the project site has been envisioned for development. Additionally, the project would preserve approximately 55% of the project site as open space that will feature both active and passive recreational amenities.
Consists of transit supportive densities (minimum of 20 residential dwelling units/acre); or In proximity to existing transit (within ½ mile); or Satisfies more detailed and stringent criteria specified in the region's Sustainable Communities Strategy.	**Consistent.** The project site is located within 0.5 mile of the Santa Clarita Transit stop at Soledad Canyon and Sand Canyon Road (Gibson 2026).
Result in no net loss of existing affordable units.	**Consistent.** The project site does not contain any existing residences; thus, it would not displace any existing housing or people or necessitate construction of replacement housing elsewhere.
Use all electric appliances, without any natural gas connections, and would not use propane or other fossil fuels for space heating, water.	**Potentially inconsistent.** The inclusion of natural gas infrastructure in new residential developments would directly contradict the CARB 2022 Scoping Plan's goals and undermine California's broader climate and health objectives.

CONNECT SOCAL 2024 RTP/SCS

The Connect SoCal 2024 RTP/SCS is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG emission reduction goals and Federal CAA requirements (SCAG 2024). The Connect SoCal 2024 RTP/SCS outlines goals concerning EV charging and reducing vehicle miles traveled (VMT) per capita. The project would comply with CALGreen Code 2022, which requires single-family homes to provide a minimum of one parking space reserved for EV charging, when building permits are issued. The project would also comply with Connect SoCal 2024 RTP/SCS's VMT reduction goals by generating 36% fewer trips in the senior community than traditional single-family homes, resulting in 47% lower home-based VMT (Gibson 2026). As shown in Table 4.8-8, the project would not conflict with any of the relevant GHG goals or policies listed in the Connect SoCal 2024 RTP/SCS. Therefore, the project would result in a *less than significant* impact concerning GHG reduction goals identified in the Connect SoCal 2024 RTP/SCS.

Table 4.8-8. Project Consistency with Applicable Connect SoCal 2024 RTP/SCS Goals and Policies

Goal/Policy Description	Project Consistency
Produce and preserve diverse housing types in an effort to improve affordability, accessibility and opportunities for all households.	**Consistent**. The project would produce housing dedicated to the senior community.
Conserve the region's resources.	**Consistent**. The project would be located on land designated for urban development but would preserve over 55% of the acreage as open space that would be reserved for passive and active recreation.
Improve access to jobs and educational resources.	**Consistent**. The development of the project would provide construction job opportunities within the City.

CITY OF SANTA CLARITA GENERAL PLAN

Goal CO 8 of the Conservation and Open Space Element states that development should be designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce GHG emissions (City of Santa Clarita 2011). As shown in Table 4.8-9, the project would not conflict with any of the relevant GHG policies or objectives listed in the City's General Plan. Therefore, the project would result in a *less than significant* impact concerning GHG policies and objectives within the City's General Plan.

Table 4.8-9. Project Consistency with Applicable General Plan Goals and Policies

Goal/Policy Description	Project Consistency
Conservation and Open Space Element	
Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.	**Consistent**. The project would be designed to the latest Title 24 standards, which incorporate energy efficiency and renewable energy production/readiness which would lead to reduced natural resource consumption and GHG emissions.
Policy CO 8.3.2: Promote construction of energy efficient buildings through requirements for LEED certification or through comparable alternative requirements as adopted by local ordinance.	**Consistent**. The project would be built to meet the state's Green Building Standards at the time of development in accordance with § 25.01.010 (Adoption of the City Green Building Standards Code) of the City's building code.
Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or prewiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.	**Consistent**. The residential component of the project would install solar photovoltaic systems on all single-family senior housing as required by Title 24, which would exceed the City's measure.

Goal/Policy Description	Project Consistency
Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.	**Consistent**. The project would include trees and landscaping that would provide shade to reduce heating and cooling energy loads.
Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.	**Consistent**. The project would include energy-efficient appliances, high-efficiency lighting, and solar panels. The project will be built to meet the City's Green Building Standards.
Policy CO 8.3.9: Limit excessive lighting levels, and encourage a reduction of lighting when businesses are closed to a level required for security.	**Consistent**. The project would include high-efficiency lighting, and outdoor lighting would be used minimally to illuminate the project site for safety and security.

CONCLUSION

As discussed above, the project would be consistent with the City's General Plan and the Connect SoCal 2024 RTP/SCS. However, the project could potentially conflict with the CARB 2022 Scoping Plan if natural gas infrastructure were included in the proposed development, which would conflict with the State's building decarbonization goals. Accordingly, the project would incorporate Mitigation Measure (MM) GHG-2.1, which prohibits the use of wood burning devices and wood stoves in the development, and MM GHG-2.2, which would require an all-electric development. Together, these measures would align the project with the CARB 2022 Scoping Plan's building decarbonization goals. With the incorporation of MM GHG-2.1 and MM GHG-2.2, the project would not conflict with the State's building decarbonization goals or the CARB 2022 Scoping Plan, and impacts would be *less than significant with mitigation*.

Impact GHG-2	
The project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	
Mitigation Measures	
MM GHG-2.1	***No Wood-Burning Fireplaces or Stoves and No Natural Gas Fireplaces.*** *Only electric fireplaces may be installed in residential units. Project residential units are prohibited from having wood-burning or natural gas fireplaces or wood-burning stoves.*
MM GHG-2.2	***Require All-Electric Development.*** *Only all-electric appliances and end uses (including heating, ventilation, and air conditioning; water heating; and induction cooking) are permitted within the project. Swimming pool and spa equipment and water heating must also use electricity or solar instead of natural gas.*
Impacts Following Mitigation	
Upon implementation of MM GHG-2.1 and MM GHG-2.2, which address the project's conflicts with the State's building decarbonization goals and the CARB 2022 Scoping Plan, impacts would be reduced to less than significant.	

4.8.6 Cumulative Impacts

The geographic scope considered in the cumulative impact analysis for GHG emissions is global. Adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant.

The analysis of a project's GHG emissions is inherently a cumulative impact analysis because impacts of climate change are experienced on a global scale, regardless of the location of GHG emission sources. The GHG emissions from an individual development project are not typically going to have a noticeable impact on the global climate, but individual projects contribute to the significant cumulative problem of global warming and climate change.

Consistent with the inherent consideration of GHG emissions as a cumulative contribution to a global environmental condition, the analysis presented above in Section 4.8.5, *Project-Specific Impacts and Mitigation Measures*, considers the potential for the project to contribute considerably to the cumulative impact of global climate change. It has been determined that, without additional measures, the project may be inconsistent with CARB's goals for building decarbonization and California's overall climate and health goals. However, with the incorporation of MM GHG-2.1 and MM GHG-2.2, the project would be consistent with regional plans related to GHG reductions. As such, with implementation of MM GHG-2.1 and MM GHG-2.2, the project's contribution to the cumulative impact of GHG emissions and global climate change would be less than cumulatively considerable.

Impact GHG-3 (Cumulative Impacts)
The project could contribute significantly to cumulative impacts associated with GHG emissions.
Mitigation Measures
Implement MM GHG-2.1 and MM GHG-2.2.
Impacts Following Mitigation
With implementation of MM GHG-2.1 and MM GHG-2.2 to reduce project-specific impacts, impacts would be less than significant.

4.9 HAZARDS AND HAZARDOUS MATERIALS

This section of the EIR describes the existing conditions and regulatory setting for hazards and hazardous materials as it affects the project, evaluates potential environmental impacts to hazards and hazardous materials that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. The analysis in this section is based on a desktop environmental database search prepared by SWCA, as well as the *Santa Clarita APNs 2840-001-118, 2840-015-025, -031, -032, -033, -034, -035, -045, and -047, Phase I Environmental Site Assessment* (Phase I ESA) (Stantec 2025a; EIR Appendix L) and *North of Oak Spring Canyon Road, APN: 2840-001-118, 2840-015-031, 032, 033, 034, 035, 045 and 047 (approximately 193 acres) Santa Clarita, California Phase II Environmental Site Assessment* (Phase II ESA) (Stantec 2025b; EIR Appendix M).

4.9.1 Existing Conditions

4.9.1.1 Existing and Past Uses of the Project Site

The project site consists of 193.8 acres of vacant, undeveloped land. The 208-acre project area, which includes the project site and the area proposed for off-site improvements, is bound by Sand Canyon Country Club to the south, generally undeveloped land to the east, and low-density residential development to the west. The project site is largely undeveloped, although some portions show signs of past agricultural activity, such as disking and plowing. The project site is intersected by several dirt roads and aboveground utilities, and an active railway runs east–west near the northern portion of the project site. The off-site improvements would generally be located within public rights-of-way (ROWs), which consist of existing developed roadways.

The project area is located in the Sand Canyon area within the Santa Clarita Valley. Soledad Canyon extends approximately 23 miles between the Cities of Santa Clarita and Palmdale, bordered by the Sierra Pelona Mountains to the northwest and the San Gabriel Mountains to the southeast. The canyon follows the course of the Santa Clara River and is well known for its abundant sand and gravel resources. Extraction of these materials, as well as minerals such as iron, titanium, and copper, has occurred since the 1930s, although settlements in the region date back to the mid-1800s. Soledad Canyon was initially explored in 1853 during the Williamson Road Survey as a potential railway corridor to Los Angeles. This survey led to the discovery of a copper vein, which prompted Los Angeles merchant Don Manuel Ravenna to establish the Soledad Mining Company. The area subsequently attracted additional small-scale miners seeking copper, and later, gold deposits were discovered in the 1870s. Following 1850, Soledad Canyon also developed as a center for livestock grazing. Ranchers affected by drought in other parts of Southern California moved their herds to new pastures west of the San Gabriel Mountains. The 1880 census for Soledad Township indicates that sheep grazing occurred throughout the township (Dudek 2025a).

4.9.1.2 Recorded Hazardous Materials Sites

Government Code § 65962.5 requires the California Environmental Protection Agency (CalEPA) to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the State. This list is not one document but rather a series of data resource lists from responsible organizations, including the California Department of Toxic Substances Control (DTSC), California Department of Health Services, State Water Resources Control Board (State Water Board), and California Integrated Waste Management Board (CalEPA 2025a). The DTSC EnviroStor is the data management system that tracks cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination. The DTSC EnviroStor also lists hazardous waste

facilities subject to corrective action pursuant to § 25187.5 of the Health and Safety Code (HSC) (DTSC 2025). The State Water Board GeoTracker database is the data management system that identifies hazardous materials sites that impact, or have the potential to impact, groundwater quality in the State, including leaking underground storage tank (LUST) sites, solid waste disposal sites with waste constituents above hazardous waste levels, active cease and desist orders, and cleanup and abatement orders that concern the discharge of wastes that are hazardous materials (State Water Board 2025). Based on a desktop query of the databases above performed on September 29, 2025, neither the project site nor the project area is included on any of the § 65962.5 lists identified above (DTSC 2025; State Water Board 2025).

4.9.1.3 Existing Hazardous Site Concerns

In conformance with the requirements of ASTM International (ASTM), the Phase I ESA assessed potentially recognized environmental conditions (RECs), historical recognized environmental conditions (HRECs), and controlled recognized environmental conditions (CRECs) in connection with the project site. The Phase I ESA and Phase II ESA focused on the 193.8-acre project site. In addition, there could be environmental concerns and risks associated with the portions of the project area that are beyond the 193.8-acre project site, which are included in the existing hazardous site conditions described below.

RECOGNIZED ENVIRONMENTAL CONDITIONS

ASTM (2021) defines "recognized environmental conditions" as:

1. the presence of hazardous substances or petroleum products in, on, or at the project site due to a release to the environment;
2. the likely presence of hazardous substances or petroleum products in, on, or at the project site due to a release or likely release to the environment; or
3. the presence of hazardous substances or petroleum products in, on, or at the project site under conditions that pose a material threat of a future release to the environment.

The following RECs associated with the project site were identified in the Phase I ESA (Stantec 2025a):

- **Railroad Tracks.** According to historical aerial photographs and topographic maps, an east–west-trending old railroad grade ran through the center of the southern portion of the project site until 1950 when a replacement railroad track was constructed. This replacement track is currently operating and separates the northern and southern portions of the project site. Due to the potential for residual chemicals associated with herbicide/pesticide application along the tracks, the former and current railroad tracks are considered a REC to the project site.

As discussed further under Section 4.9.5, *Project-Specific Impacts and Mitigation Measures*, shallow soil sampling was conducted at the project site in the vicinity of the former and current railroad tracks to evaluate if any residual arsenic and/or lead remain in the soil at concentrations above the residential screening level.

ENVIRONMENTAL CONCERNS AND RISKS

In addition to investigating RECs, HRECs, and CRECs associated with the project site as required by ASTM standards, environmental concerns were identified that could have an impact on development of the project from a business standpoint but are not identified as posing a material threat of a future release to the environment. The following environmental concerns were identified during a site reconnaissance

on March 14, 2025, which could be considered impediments to the proposed redevelopment of the project site (Stantec 2025a):

- **Wellheads.** An irrigation well and a groundwater monitoring well are located on the project site in APN 2840-001-118. The use and status of the groundwater monitoring wellhead is unknown, as this wellhead was not identified on the California Geologic Energy Management (CalGEM) Online well finder database during the local/regional environmental records search. Additionally, the use and status of the irrigation well is also currently unknown; a request to the Los Angeles County Health Department Drinking Water Program was made to identify data for the well, but a response has yet to be received as of May 15, 2026. Therefore, the wells are considered a business environmental concern with respect to redevelopment of the project site but are not considered a REC, as they do not pose a material threat of a future release to the environment.
- **Solid Waste.** Uncontrolled solid waste (debris and trash), including potentially asbestos-containing asphalt shingles, was observed in various locations across the project site. The presence of potential asbestos-containing materials is considered a business environmental concern with respect to redevelopment of the project site but is not considered a REC, as it does not pose a material threat of a future release to the environment.

The site reconnaissance was limited to the boundary of the project site and did not extend into the project area proposed for off-site improvements beyond the 193.8-acre project site. The environmental concerns identified above are potential impediments to development but are not identified as RECs. The only REC identified on the project site is associated with the former and current railroad tracks. Additionally, as detailed further below under Section 4.9.5, only arsenic-impacted soils on the project site are located immediately adjacent to the former railroad track; therefore, the off-site development portion of the project area is not anticipated to contain arsenic-impacted soil as the former railroad track is not in proximity to the off-site improvements. However, there could be environmental concerns and risks associated with the project area.

PIPELINES

The U.S. Department of Transportation National Pipeline Mapping System was reviewed to determine if significant pipelines are in the vicinity of the project area. A 51.03-mile gas transmission pipeline runs through a portion of the project site but does not extend through any of the proposed off-site improvement areas throughout the project area. No utilities or natural gas utilities were observed as part of the work conducted for the Phase I ESA or Phase II ESA. The presence of the gas transmission pipeline on the project site could impede the development of the project in the vicinity of the underground pipeline during project excavation. Pipelines are located underground in ROWs, which provide sufficient space to perform pipeline maintenance and inspections, as well as a clear zone where encroachments can be monitored and prevented (U.S. Department of Transportation 2025). As such, the presence of the gas transmission pipeline is not considered a REC. Additionally, no oil or gas wells are located within the project area.

FIRE HAZARD SEVERITY ZONE

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zone (FHSZ) Viewer, the entire project area is located within a Very High FHSZ (CAL FIRE 2025). Naturally vegetated open spaces, such as the project area, often provide extensive vegetative fuels and ideal conditions for wildfire spread. The *Fire Protection Plan: Belcaro at Sand Canyon* (Fire Protection Plan) analyzed the fire history of the project site by utilizing the CAL FIRE Fire and Resource Assessment Program (FRAP) database (Dudek 2025b). The analysis found that 172 fires have burned within five miles of the project site since the beginning of the historical fire data record (1878); it is

expected that, on average, there will be wildland fires within five miles of the project site at a minimum of every year and at a maximum every seven years as observed in the fire history record (Dudek 2025b). Additional information regarding the existing project site conditions related to wildfire is provided in the Fire Protection Plan (Dudek 2025b) and in Section 4.20, *Wildfire*.

SURFACE WATER FLOW

The Santa Clara River is north of the project area and subject to very large flows that are conveyed west through Ventura County to the Pacific Ocean. Lost Canyon Road is presently an at-grade crossing with Oak Springs Canyon Creek and is flooded during major rain events. According to the Federal Emergency Management Agency's (FEMA's) Flood Insurance Rate Map (FIRM) No. 06037C0845G, dated June 2, 2021, most of the project area, including the off-site improvement areas, is within FEMA Flood Zone X, which is defined as "areas determined to be outside the 0.2-percent-annual-chance floodplain" or not within a 100-year flood zone. However, several areas within the project site have been mapped as FEMA Flood Zone A and Zone AE, which are defined as "areas with a 1% annual chance of flooding" (FEMA 2021). Based on the topography, surface water on the project site infiltrates the ground surface or flows overland following topography toward the north–northwest (Stantec 2025a). Additional information regarding the existing project site hydrology is provided in Section 4.10, *Hydrology and Water Quality*.

METHANE

Extensive areas of Southern California are underlain by areas with high concentrations of methane; the occurrence of methane under the ground surface is typically related to subsurface methane gas produced from naturally occurring petroleum fields. Regarding surface vapors, the project site is not located within 300 feet of an oil or gas well or within 1,000 feet of a methane-producing site (Stantec 2025a).

4.9.1.4 Schools

Table 4.9-1 provides a list of existing school facilities that are near the project area (less than one mile). The nearest school to the project area is the Gorman Learning Center Santa Clarita Resource Center.

Table 4.9-1. Existing Schools in the Project Area Vicinity

School	Address	Distance and Direction from the Project Area
Gorman Learning Center Santa Clarita Resource Center	16530 Lost Canyon Road Canyon Country, CA 91387	0.11 mile west
Sulphur Springs Elementary	16628 Lost Canyon Road Canyon Country, CA 91387	0.13 mile west
Mitchell Community Elementary School	16821 Goodvale Road Canyon Country, CA 91387	0.62 mile northwest

4.9.1.5 Airports

The project site is not located within two miles of a public airport or public use airport. The nearest airport to the project site is Agua Dulce Airpark, approximately 6.7 miles northeast of the project area.

4.9.1.6 Disaster Routes

According to the County of Los Angeles Department of Public Works (County Public Works) Disaster Route maps, the nearest primary disaster routes include the Antelope Valley Highway (State Route [SR-] 14), approximately 0.2 mile north of the project site, and the Golden State Freeway (Interstate [I-] 5), approximately 8 miles southwest of the project site (County of Los Angeles 2010). The County Public Works Disaster Route map also indicates that Sand Canyon Road, south of Soledad Canyon Road, is a secondary disaster route.

The *City of Santa Clarita General Plan Safety Element* identifies a limited number of regional evacuation corridors serving the Santa Clarita Valley, including I-5, SR-14, and SR-126, which function as the primary routes for evacuation during emergencies such as wildfire or earthquake (City of Santa Clarita 2022). The Safety Element notes that because the Valley relies on these few major corridors, local surface streets may also function as alternate evacuation routes if freeway access is disrupted. The project site would be served by the existing local roadway network that connects to these broader regional corridors, and development would be required to comply with applicable City requirements related to emergency access and evacuation planning (City of Santa Clarita 2022). Additionally, emergency response and evacuation plans that have been adopted by the City include the County of Los Angeles Operational Area Emergency Operations Plan (OAEOP), which facilitates multiagency and multijurisdictional coordination during emergency operations, public information functions, resource management, and recovery efforts (County of Los Angeles 2023).

4.9.2 Regulatory Setting

4.9.2.1 Federal

RESOURCE CONSERVATION AND RECOVERY ACT OF 1976

The Resource Conservation and Recovery Act of 1976 (RCRA) establishes the framework for a national system of solid waste control. The RCRA is a program administered by the U.S. Environmental Protection Agency (EPA) for the regulation of the generation, transportation, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which affirmed and extended the "cradle to grave" system of regulating hazardous wastes. Among other things, the use of certain techniques for the disposal of some hazardous wastes was specifically prohibited by the Hazardous and Solid Waste Act (EPA 2024).

TOXIC SUBSTANCES CONTROL ACT OF 1976

The Toxic Substances Control Act of 1976 (TSCA) authorizes the EPA to require reporting, recordkeeping, testing requirements, and restrictions related to chemical substances and/or mixtures. Food, drugs, cosmetics, and pesticides are generally excluded from the TSCA. The EPA focuses on six primary substances under the TSCA: polychlorinated biphenyls (PCBs), asbestos, radon, lead, formaldehyde, and mercury. The TSCA requirements most often affect the regulation of PCBs, asbestos, and lead in Federal facilities. For example, under the TSCA, asbestos regulations require that only properly trained and certified persons perform asbestos abatement activities in public or commercial buildings (EPA 2025).

HAZARDOUS MATERIAL TRANSPORTATION UNIFORM SAFETY ACT OF 1990

The Hazardous Material Transportation Uniform Safety Act was amended in 1990 to clarify conflicting Federal, State, and local regulations. The amendment requires the Secretary of Transportation to issue regulations for the safe transport of hazardous material in domestic and foreign commerce. The Secretary also retains the authority to designate hazardous materials as hazardous when they pose an uncontrolled threat to health, safety, or property. The act also includes provisions to encourage uniformity among different State and local highway routing regulations, to develop criteria for issuance of Federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials.

FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION – PROCESS SAFETY MANAGEMENT STANDARD

The Federal Occupational Safety and Health Administration (OSHA) issued the Process Safety Management of Highly Hazardous Chemicals standard (29 Code of Federal Regulations [CFR] §§ 1910.119 and 1926.64) to identify requirements for the management of hazards during the use of hazardous chemicals for general industry and construction activities. This standard includes requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Requirements of this standard include providing employees with information about hazardous chemicals, training employees on the operation of equipment that use hazardous materials, and employer requirements to perform a process hazard analysis.

ASBESTOS HAZARD EMERGENCY RESPONSE ACT OF 1986

The Asbestos Hazard Emergency Response Act of 1986 (AHERA) requires the EPA to evaluate the extent of danger to human health posed by asbestos in public and commercial buildings and the means to respond to any identified danger. The AHERA establishes regulations for inspections, abatement activity, appropriate response actions, implementation of response actions, operations and maintenance programs, periodic surveillance of asbestos, transport and disposal, and management plans required for schools. The AHERA also creates accreditation programs for inspectors, management plan developers, and abatement contractors.

CLEAN AIR ACT OF 1963

Regulations under the Federal Clean Air Act of 1963 are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store minimum quantities (called threshold quantities) or greater of listed regulated substances to develop a risk management plan, including hazard assessments and response programs, to prevent and respond to accidental releases of listed chemicals.

4.9.2.2 State

CALIFORNIA GOVERNMENT CODE § 65962.5

Government Code § 65962.5 requires the CalEPA to compile and annually update lists of hazardous waste sites and land designated as hazardous waste sites throughout the State (Cortese List). The Cortese List is a series of data resource lists from responsible organizations, including the DTSC, California Department of Health Services, State Water Board, and California Integrated Waste Management Board (CalEPA 2025a). Before lead agencies accept applications for any development project as complete, the applicant must consult these lists to determine if the subject site is included on the Cortese List. The project site is not included in a § 65962.5 list (CalEPA 2025a; DTSC 2025; State Water Board 2025).

HAZARDOUS WASTE CONTROL LAW

HSC Division 20, Chapter 6.5, codifies the Hazardous Waste Control law, which states that generators of hazardous waste must employ technology and management practices for the safe handling, treatment, recycling, and destruction of their hazardous wastes prior to disposal. The law also creates the Hazardous Waste Management Council, which is responsible for making recommendations for a system that ensures financial liability for persons injured or otherwise affected by hazardous wastes that are treated or disposed of within their community. It is the overall intent of this law to grant those powers necessary to secure and maintain interim and final authorization for the State hazardous waste program in accordance with the requirements of 42 United States Code (USC) § 6926, and to implement such program in lieu of the Federal program. The Hazardous Waste Control Law empowers DTSC to administer the State's hazardous waste program and implement the Federal program in California.

ENVIRONMENTAL HEALTH STANDARDS FOR THE MANAGEMENT OF HAZARDOUS WASTE

The regulations in place for the management of hazardous waste, implemented by and affecting the DTSC, are codified in 22 California Code of Regulations (CCR) Division 4.5. The DTSC is a department of the CalEPA, which is the primary agency in California that regulates hazardous waste, cleans up existing contamination, and looks for ways to reduce the hazardous waste produced in California. The DTSC regulates hazardous waste in California primarily under the authority of the RCRA and the HSC.

A material is considered hazardous if it appears on a list of hazardous materials prepared by a Federal, State, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the CCR as follows:

> A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed. (22 CCR § 66261.10)

Title 22 of the CCR identifies several regulations pertaining to the management of hazardous materials, and the following may be applicable to construction and/or operation of the project:

- 22 CCR § 66261.20 classifies hazardous waste as a substance that is ignitable, corrosive, reactive, or toxic.
- 22 CCR § 66262.11 provides a method of determination for hazardous materials to ensure generators properly handle, store, transport, and/or dispose of hazardous materials accordingly.
- 22 CCR §§ 66262.30–66262.35 requires proper packaging, labeling, marking, placarding, and accumulation timing of hazardous materials that are to be transported.
- 22 CCR § 66262.70 states that waste pesticide, including pesticide containers or inner liners from pesticide containers, that meets the definition of hazardous waste, generated as part of a commercial farming operation, is not required to be managed in compliance with the standards in this chapter.
- 22 CCR §§ 66263.30–66262.32 requires that, in the event of a discharge of hazardous waste during transportation, the transporter must take immediate action to protect human and environmental health, must clean up spilled hazardous waste discharge, and properly report the incident.

- 22 CCR § 66268 identifies land disposal restrictions for hazardous wastes, treatment standards for wastes, prohibitions on storage and land disposal, and potential incineration requirements.

CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Under the California Division of Occupational Safety and Health Administration (Cal/OSHA), 8 CCR Subchapter 2, employers must disclose potential workplace hazards and develop site-specific health and safety plans for workers and the workplace. In addition, workers who may potentially be exposed to hazardous materials in their workplace must be notified of exposure so that they are aware of workplace hazards.

LICENSE TO TRANSPORT HAZARDOUS MATERIALS, CALIFORNIA VEHICLE CODE § 32000.5, ET SEQ.

The California Department of Transportation (Caltrans) regulates hazardous materials transportation on all interstate roads. Within California, the State agencies with primary responsibility for enforcing Federal and State regulations and for responding to transportation emergencies are the California Highway Patrol and Caltrans. Together, Federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials.

CALIFORNIA WATER CODE

The Water Code authorizes the State Water Board to implement provisions of the Clean Water Act, including the authority to regulate waste disposal and require cleanup of discharges of hazardous materials and other pollutants. In regard to construction dewatering discharge analysis and treatment, groundwater may be encountered during deeper excavation. Under the Water Code, discharge of any such groundwater to surface waters, or any point sources hydrologically connected to surface waters, such as storm drains, is prohibited unless conducted in compliance with a Waste Discharge Requirement (WDR) permit. In addition to the Water Code, these permits implement and are in compliance with the Federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) program. In accordance with these legal requirements, dewatering, treatment, and disposal of groundwater encountered during construction activities would be conducted in accordance with the Los Angeles Regional Water Quality Control Board (LARWQCB) and with the City's Urban Stormwater Mitigation Plan through SCMC § 10.04.070 (Construction Activity Stormwater Measures) and SCMC Chapter 17.95 (Stormwater Mitigation Plan). Compliance with an appropriate WDR permit would include monitoring, treatment if appropriate, and proper disposal of any encountered groundwater in accordance with applicable water quality standards. If, for example, extracted groundwater contains total petroleum hydrocarbon or other petroleum breakdown compounds in concentrations exceeding water quality standards, compliance with legal requirements would mandate treatment to meet published State water quality standards prior to discharge into a storm drain system.

4.9.2.3 Regional

LOS ANGELES REGIONAL WATER QUALITY CONTROL BOARD

The LARWQCB regulates discharges from municipal separate storm sewer systems (MS4s) through the Los Angeles County and Ventura County MS4 Permits (Order No. R4-2021-0105). These permits are issued under the NPDES Program and cover the City of Santa Clarita and 84 other municipalities within Los Angeles County. The City is ultimately responsible for administration and reporting requirements in the MS4 permit citywide. The Los Angeles County MS4 Permit contains provisions for implementation

and enforcement of the City's Urban Stormwater Mitigation Plan through SCMC § 10.04.070 (Construction Activity Stormwater Measures) and SCMC Chapter 17.95 (Stormwater Mitigation Plan), which identify requirements for pre- and postconstruction stormwater activities, respectively, for development projects to comply with the NPDES and MS4 permits. A Notice of Intent (NOI) and report of waste discharge must be submitted to the LARWQCB to comply with this general permit.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The South Coast Air Quality Management District (SCAQMD) enforces air quality rules and regulations through a variety of means, including inspections, educational and training programs, and fines. Specific SCAQMD rules applicable to the project construction may include, but are not limited to, the following (SCAQMD 2025):

- **Rule 401 – Visible Emissions** prohibits discharge into the atmosphere from any single source of emission any air contaminant for more than three minutes in one hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.
- **Rule 402 – Nuisance** prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to individuals or to the public; that endanger the comfort, repose, health, or safety of individuals or the public; or that cause or may cause injury or damage to business or property. The rule does not apply to odors that result from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- **Rule 403 – Fugitive Dust** is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.
- **Rule 1113 – Architectural Coatings** prohibits application or soliciting application of any architectural coating within the SCAQMD, with a volatile organic compound (VOC) content in excess of the values specified in a table incorporated in the rule.
- **Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil** sets requirements to control the emission of VOCs during the excavating, grading, handling, and/or treating of VOC-contaminated soil. Prior to these activities, an approved mitigation plan must be obtained from SCAQMD.
- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities** specifies work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- **Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants** requires notification, monitoring, and recordkeeping for earthmoving activities of soil with applicable toxic air contaminant(s) of greater than 50 cubic yards at a site that has been designated and notified by 1) EPA as a Superfund National Priorities List site; 2) DTSC as a Brownfield or Cleanup Program site; 3) the State Water Board or RWQCB as a Site Cleanup Program site; or 4) a county, local, or State regulatory agency as a Hazardous Material Release site, as defined in HSC § 25260) the Executive Officer pursuant to Subdivision (i).

LOS ANGELES COUNTY CERTIFIED UNIFIED PROGRAM AGENCY

The primary local agency with responsibility for implementing Federal and State laws and regulations pertaining to hazardous materials management is the Los Angeles County Fire Department (LACoFD) Health Hazardous Materials Division. The LACoFD is the Certified Unified Program Agency (CUPA) for the City. A CUPA is a local agency that has been certified by CalEPA to implement the six State environmental programs within the local agency's jurisdiction (CalEPA 2025b). The six consolidated programs are as follows:

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

As the CUPA for the City, the LACoFD, Health Hazardous Materials Division protects public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, enforcement, site mitigation oversight, and emergency response. In addition, the LACoFD may consult with other agencies (e.g., DTSC and LARWQCB) if the nature of the contamination warrants the involvement of these agencies.

LOS ANGELES COUNTY FIRE DEPARTMENT SITE MITIGATION UNIT

The Site Mitigation Unit of the LACoFD Health Hazardous Materials Division provides corrective action and voluntary oversight for remediation of contaminated sites and approval of closure plans within the jurisdiction of the Los Angeles County CUPA. This service is provided to ensure the protection of public health and the environment, and to facilitate completion of site cleanup by the property owner intending to obtain site closure with agency oversight in the CUPA jurisdiction: the RWQCB and DTSC. The DTSC has determined that Los Angeles County CUPA is qualified at the Tier 2 level (highest tier) to implement and enforce environmental assessment and corrective action conducted pursuant to HSC §§ 25200.3(c)(3), 25187, 25187.1, 25200.10, and 2500.14 and in accordance with the requirement of 22 CCR §§ 68400.11, et seq. (DTSC 2008).

4.9.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Safety Element* (City of Santa Clarita 2022) includes policies related to the City's response to hazardous materials and represents the long-range emergency response plan for the City. Additionally, the *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011a) and *City of Santa Clarita General Plan Circulation Element* (City of Santa Clarita 2011b) include relevant polices related to hazards. Table 4.9-2 lists the goals and policies relevant to the project.

Table 4.9-2. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Safety Element	
Goal S 4	Protection of public safety and property from hazardous materials.
Objective S 4.1	Identify sites that are contaminated with chemicals and other hazardous materials and promote clean-up efforts.
Policy S 4.1.2	Coordinate with other agencies to address contamination of soils and groundwater from hazardous materials on various sites and require that contamination be cleaned up to the satisfaction of the City and other responsible agencies prior to issuance of any permits for new development.
Land Use Element	
Goal LU 3	Healthy and safe neighborhoods for all residents.
Objective LU 3.3	Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.
Policy LU 3.3.2	In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
Circulation Element	
Goal C 2	A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.
Objective C 2.5	Consider the needs for emergency access in transportation planning.
Policy C 2.5.2	Ensure that new development is provided with adequate emergency and/or secondary access for purposes of evacuation and emergency response; require two points of ingress and egress for every subdivision or phase thereof, except as otherwise approved for small business subdivisions where physical constraints preclude a second access point.

2021 SANTA CLARITA LOCAL HAZARD MITIGATION PLAN

The *2021 Santa Clarita Local Hazard Mitigation Plan* (LHMP) is a comprehensive strategy developed in coordination with City staff, residents, public agencies, non-profits, and private-sector partners that is updated every five years (City of Santa Clarita 2021). The LHMP identifies both natural and human-caused hazards that could affect Santa Clarita, including earthquakes, wildfires, floods, and hazardous materials incidents. The LHMP assesses the risks associated with these hazards and outlines measures to mitigate potential impacts to life and property.

Key mitigation strategies include infrastructure improvements, public education efforts, enhanced emergency preparedness, and ongoing coordination with regional and State agencies. Community input was incorporated through surveys and public meetings. The 2021 update was reviewed by the California Governor's Office of Emergency Services and FEMA and formally adopted by the City Council. The purpose of the LHMP is to proactively reduce disaster vulnerabilities and strengthen the City's overall resilience to future hazards (City of Santa Clarita 2021).

4.9.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to hazards and hazardous materials if the project would:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

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.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

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

Each of these thresholds is discussed under Section 4.9.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.9.4 Impact Assessment Methodology

The project's potential impacts associated with hazards and hazardous materials were evaluated based on the Phase I ESA[1] (Stantec 2025a; see EIR Appendix L) and Phase II ESA (Stantec 2025b; see EIR Appendix M). SWCA also conducted a desktop DTSC EnviroStor and State Water Board GeoTracker environmental database search on September 29, 2025, of properties in the vicinity of the project area (DTSC 2025; State Water Board 2025).

4.9.5 Project-Specific Impacts and Mitigation Measures

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

CONSTRUCTION

During project earthwork, grading, and building construction, hazardous materials such as fuel and oils associated with construction equipment, as well as coatings, paints, adhesives, and caustic or acidic cleaners, could be routinely used on-site. Grading for the project would require approximately 800,000 cubic yards of cut and 300,000 cubic yards of fill. Construction would result in 3,300,000 cubic yards of over-excavation, which has an expected shrinkage of 15%, reducing the total amount of cut by approximately 500,000 cubic yards. As such, the grading would be balanced on-site, and no import or export of soils would be required for the project construction. However, as discussed further below, approximately 1,817 cubic yards of arsenic-impacted soil in the vicinity of the former (non-operational)

[1] The site reconnaissance for the Phase I ESA was completed in August 2023. However, the report was updated by Stantec several times in 2025 to provide additional technical information.

railroad track on the project site would be excavated and disposed of with the implementation of a Remedial Action Plan (RAP); this export would occur prior to the start of project construction.

Construction contractors would be required to comply with applicable Federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials (Section 4.9.2, *Regulatory Setting*), and all potentially hazardous materials used during construction would be required to be handled and disposed of in accordance with manufacturers' specifications and instructions. Construction crews would be required to comply with CCR Title 22, which regulates the use, storage, and transport of hazardous materials. Based on required compliance with existing regulations regarding hazardous material use, transport, and disposal, future construction activities are not anticipated to result in significant hazard to the public due to routine transport, use, or disposal of hazardous materials.

The Phase I ESA identified one REC—an old railroad track (not currently operating) and a replacement railroad track (currently operating), which are both located within the project site. Due to the potential for residual chemicals associated with herbicide application along railroad tracks, the former and current railroad tracks are considered a REC to the project site. The Phase I ESA recommended the collection of shallow soil samples within 30 feet of the former and current railroad tracks to evaluate whether arsenic and lead associated with herbicide application remain in the project site soils at concentrations of concern for residential redevelopment and earth-moving activities. Therefore, as documented in the Phase I and Phase II ESAs, Stantec conducted shallow soil sampling of 30 soil borings located within 30 feet of the former and current railroad tracks to evaluate the subsurface for potential residual arsenic and lead impacts that may be encountered during proposed redevelopment activities. During the shallow soil sampling, lead was detected at concentrations below the regulatory residential screening level; however, arsenic was reported at concentrations that exceeded the regulatory residential screening level in the vicinity of the former railroad easement.

The presence of arsenic within the project site and the required removal of contaminated soils to an off-site location have the potential to create a hazard to construction workers at the project site during construction activities, future residents of the project, and the public. Implementation of MM HAZ-1.1 would mitigate the hazard to construction workers, the public, and future residents of the project as the soil at the project site would be cleaned and soil concentrations would be reduced to below the residential screening level. Construction workers, future residents of the project and the public would therefore not be exposed to arsenic-impacted soils with implementation of MM HAZ-1.1.

During a site reconnaissance conducted on March 14, 2025, two environmental concerns associated with the redevelopment of the project site—well heads and uncontrolled solid waste (including potentially asbestos-containing asphalt shingles)—were identified (Stantec 2025a). An irrigation well and a groundwater monitoring well are located on the project site north of the railroad tracks and south of the Santa Clara River, and uncontrolled solid waste, described as trash and debris, was observed throughout the project site, primarily along the undeveloped roads on the western side of the property and north of the railroad track. Although the solid waste located on the project site was not identified as a hazardous material in the Phase I ESA under Title 22 of the CCR, as a precaution, the on-site solid waste will be disposed of in accordance with DTSC's transfer and disposal of hazardous waste regulations. Hazardous waste haulers are required to comply with regulations that establish numerous standards, including criteria for handling, documenting, and labeling the shipment of hazardous waste.

In addition to the proposed development on the project site, the project also consists of off-site improvements. The project area, which includes the project site and all off-site improvements, would total approximately 208 acres. These off-site improvements throughout the project area do not contain a residential component but instead are limited to infrastructure and roadway extensions. As discussed

above, the arsenic-impacted soil on the 193.8-acre project site is located immediately adjacent to the former railroad track and is associated with the historic use of herbicides. However, the off-site improvements proposed throughout the project area are not located within the vicinity of the former railroad track. The closest proposed off-site improvement to the former railroad track is approximately 0.22 mile away. Therefore, it is not expected that arsenic-contaminated soils associated with the former railroad track would be located within the project area. Additionally, MM HAZ-1.2 requires the preparation of a Soil Management Plan (SMP), which would provide construction standards during the event that any not previously identified impacted soil is discovered during earth-moving activities. With the implementation of construction-related mitigation measures, impacts would be *less than significant with mitigation*.

Impact HAZ-1	
The project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during project construction. Construction workers, future residents of the project, and the public could be exposed to hazardous materials associated with arsenic-impacted soil present within the project site.	
Mitigation Measures	
MM HAZ-1.1	*Before the City Engineer issues a grading permit and the project contractor commences earthwork activities, the project contractor must be required to prepare and implement a Remedial Action Plan (RAP) for the removal and off-site transportation of arsenic-contaminated soils. The RAP must be prepared in accordance with all applicable laws that govern the transportation and disposal of hazardous materials and waste. The RAP must be approved by the City's Director. The RAP must:* *a. Describe the methodology to identify and manage (reuse or off-site disposal) contaminated soil during soil excavation and/or construction;* *b. Provide protocols for confirmation sampling, segregation and stockpiling, profiling, backfilling, disposal, guidelines for imported soil, and backfill approval from the California Department of Toxic Substance Control (DTSC) Information Advisory on Clean Imported Fill Material;* *c. Provide the requirement that there shall be no reuse of excavated soil deemed inappropriate for reuse as defined in the project-specific Soil Management Plan (SMP);* *d. Require the excavation and disposal of the 1,817 cubic yards of arsenic-impacted soil exceeding residential screening levels; and* *e. Comply with South Coast Air Quality Management District (SCAQMD) Rule 1466 to minimize off-site fugitive dust emissions.*
MM HAZ-1.2	*Before the City Engineer issues a grading permit and the project contractor commences earthwork activities associated with the project, the project contractor must prepare and a Soil Management Plan (SMP) for the removal of contaminated soils at the project site and their transportation off-site. The SMP must address all project activities associated with on- and off-site improvements. All project improvements must be addressed by a SMP. At the discretion of the City's Director, multiple SMPs may be developed to allow for different contractors for each of the project elements and potential differences in construction timing.* *The SMP(s) must be prepared in accordance with applicable laws that govern the transportation and disposal of hazardous materials and waste. The SMP(s) must be approved by the City's Director. The SMP(s) must:* *a. Describe the methodology to identify and manage (reuse or off-site disposal) contaminated soil during soil excavation and/or construction;*

Impact HAZ-1
b. Provide protocols for confirmation sampling, segregation and stockpiling, profiling, backfilling, disposal, guidelines for imported soil, and backfill approval from the California Department of Toxic Substance Control (DTSC) Information Advisory on Clean Imported Fill Material; and *c. Address the potential for any unrecognized or previously unidentified impacted soil that may be encountered during any future earth-moving activities.* *The SMP(s) must be implemented before and during soil excavation associated with the project.*
Impacts Following Mitigation
With implementation of MM HAZ-1.1 and MM HAZ-1.2, construction impacts associated with the routine transport, use, or disposal of hazardous materials would be less than significant.

OPERATION

Upon project completion, the project site would include the development of 341 age-restricted, detached single-family homes; a recreation center; public and private hiking trails; a trailhead; and an emergency staging area. The project area consists of approximately 208 acres, including the project site, the proposed off-site improvements, the extension of Lost Canyon Road, and the development of the proposed J Street.

Residential uses, recreation centers, and hiking trails do not require the use of large quantities of hazardous materials or the use of any unique acutely hazardous materials. Any future uses within the project site that may require the use of small quantities of hazardous materials (e.g., fuels, oils, solvents, lubricants, paints) would be required to comply with all applicable laws governing the handling and disposal of hazardous waste. In addition, individual residential units within the project site are anticipated to use, transport, and store small quantities of cleaning solutions, solvents, paints, oils, lubricants, etc., during project operation. The use of small quantities of household hazardous substances would not create significant hazards to the public. Additionally, as mentioned above, arsenic associated with the herbicide application along the former railroad track was discovered. However, there are no elevated concentrations of arsenic associated with the current railroad track. Additionally, with the implementation of the RAP and SMP, soil concentrations at the project site would be below the residential screening level.

As discussed above under Impact HAZ-1, the off-site improvements are not anticipated to contain arsenic-contaminated soils associated with the former railroad track as they are not located within the vicinity of the former railroad track. Additionally, the SMP required by MM HAZ-1.2 would address the potential for discovery of impacted soil during grading/excavation that was not previously identified during the Phase I ESA and Phase II ESA. Therefore, operational hazards associated with the routine movement and disposal of small quantities of household hazardous substances throughout the project site would be *less than significant*, and mitigation is not necessary.

Impact HAZ-2
The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during project operation.
Mitigation Measures
Mitigation is not necessary. Impact HAZ-2 would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

CONSTRUCTION

As discussed above, project construction (e.g., earthwork, grading, building construction) would likely require the use of hazardous materials, including fuel and oils associated with construction equipment, coatings and paints, adhesives, and caustic or acidic cleaners, which would require proper handling, management, and potentially waste disposal. The use, handling, storage, and disposal of these materials could result in hazardous materials releases and, subsequently, the exposure of people and the environment to hazardous materials. However, as previously discussed, all potentially hazardous materials used during construction would be handled, used, and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing associated risks. In addition, as described in Section 4.9.2, *Regulatory Setting*, various regulations establish specific guidelines regarding risk planning and accident prevention, protection from exposure to specific chemicals, and the proper storage of hazardous materials. The project would be required to be in full compliance with all applicable Federal, State, and local requirements concerning the use, storage, and management of hazardous materials. General construction and OSHA regulations require the on-site availability of Safety Data Sheets for all potentially hazardous materials. Additionally, spill containment kits would be maintained on-site during construction to respond to the release of potentially hazardous construction-related chemicals.

All soil-disturbing activities during construction would require appropriate regulatory protocols and management. Excavated soil would be handled in accordance with EPA and CalEPA requirements and by licensed contractors, and implementation of MM HAZ-1.1 and MM HAZ-1.2 would require the preparation of a RAP and SMP.

Extensive areas of Southern California are underlain by areas with high concentrations of methane; the occurrence of methane under the ground surface is typically related to subsurface methane gas produced from naturally occurring petroleum fields. As mentioned above, the project site is not located within 300 feet of an oil or gas well or within 1,000 feet of a methane-producing site (Stantec 2025a).

Management of hazardous sites in Santa Clarita is under the regulatory authority of the DTSC. Hazardous waste haulers are required to comply with regulations that establish numerous standards, including criteria for handling, documenting, and labeling the shipment of hazardous waste. Therefore, project construction would not exacerbate the risk of spill and/or accident conditions involving the release of hazardous materials into the environment. With the implementation of MM HAZ-1.1 and MM HAZ-1.2, impacts during construction would be *less than significant with mitigation*.

Impact HAZ-3
Project construction occurring within the 208-acre project area (project parcels and roadway improvements) would not result in the release of hazardous materials into the environment.
Mitigation Measures
Implement MM HAZ-1.1 and MM HAZ-1.2.

Impact HAZ-3
Impacts Following Mitigation
With implementation of MM HAZ-1.1 and MM HAZ-1.2, construction impacts associated with the release of hazardous materials into the environment would be less than significant.

OPERATION

Upon project completion, project operation would require the use and storage of hazardous materials typically associated with residences, recreation centers, and hiking trails. The use of hazardous materials typically used for building and grounds maintenance, including cleaning solvents and pesticides for landscaping, would occur. However, all potentially hazardous materials used during project operation would be handled, used, and disposed of in accordance with manufacturers' specifications and instructions, thereby reducing associated risks. Project operation would be required to be in full compliance with all applicable laws governing the use, storage, and management of hazardous materials to reduce the risk of release of hazardous materials into the environment.

Project operation would not exacerbate the risk of upset and accident conditions involving the release of hazardous materials into the environment; therefore, operational impacts related to the release of hazardous materials into the environment would be *less than significant*, and mitigation is not necessary.

Impact HAZ-4
Project operation would not result in potentially significant impacts related to upset or accident conditions involving the release of hazardous materials.
Mitigation Measures
Mitigation is not necessary. Impact HAZ-4 would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

CONSTRUCTION

The nearest schools to the project area include the Gorman Learning Center Santa Clarita Resource Center, approximately 0.11 mile west of the project area; Sulphur Springs Elementary School, approximately 0.13 mile west of the project area; and Mitchell Community Elementary School, approximately 0.62 mile northwest of the project area. Based on the list of cumulative development projects in the project vicinity (see Chapter 3, *Environmental Setting*), no proposed new school facilities are located within 0.25 mile of the project area.

Project construction would involve the use of hazardous materials common to urban construction projects and residential and open space operations. All activities involving the handling, use, storage, transport, and disposal of hazardous materials and wastes would occur in compliance with applicable Federal, State, and local requirements. However, as discussed in Impacts HAZ-1 through HAZ-4, project construction could create a significant hazard to the public or the environment associated with arsenic-contaminated soil, well heads, and uncontrolled solid waste present within the project site through the required removal

of contaminated soils to an off-site location. As such, project construction could result in potential hazardous emissions or the handling of hazardous materials and waste within 0.25 mile of an existing school; therefore, impacts would be *less than significant with mitigation*.

Impact HAZ-5
The project could introduce hazardous materials within 0.25 mile of an existing or proposed school during construction.
Mitigation Measures
Implement MM HAZ-1.1 and MM HAZ-1.2.
Impacts Following Mitigation
With implementation of MM HAZ-1.1 and MM HAZ-1.2, construction impacts associated with the emission of hazardous materials in the vicinity of existing or proposed schools would be less than significant.

OPERATION

As stated in Impacts HAZ-1 through HAZ-4, project operation would not exacerbate the use, handling, and disposal of hazardous materials or increase the risk of spill and accident conditions involving the release of hazardous materials into the environment. Operational impacts associated with potential hazardous emissions or the handling of hazardous materials and waste within 0.25 mile of an existing school would be *less than significant*, and mitigation is not necessary.

Impact HAZ-6
The project would not introduce hazardous materials within 0.25 mile of an existing or proposed school during project operation.
Mitigation Measures
Mitigation is not necessary. Impact HAZ-6 would be less than significant.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The environmental records review conducted for the Phase I ESA concluded that the project area is not identified on any of the hazardous materials lists compiled pursuant to Government Code § 65962.5 (Stantec 2025a).

Additionally, there are no active hazardous materials sites located within the vicinity of the project area. There is one open case for the Robinson Ranch Golf Course (27734 Sand Canyon Road) on the State Water Board GeoTracker database, but it has been inactive as of October 29, 2001 (State Water Board 2025). No records for this listing are available on GeoTracker and, according to an email from the LARWQCB dated May 22, 2023, the hard copies for the remediation case are missing.

The environmental records search identified no RECs, CRECs, HRECs, or de minimis conditions at or near the project site (Stantec 2025a). Therefore, project construction and operation would not create a significant hazard to the public or the environment as it relates to hazardous materials sites compiled pursuant to Government Code § 65962.5, and *no impacts* would occur.

Impact HAZ-7
The project would not create a significant hazard to the public or the environment as it relates to hazardous materials sites compiled pursuant to Government Code § 65962.5 during project construction and operation.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area.

The project area is not located within 2 miles of a public airport or public use airport. The nearest airport to the project area is Auga Dulce Airpark, located approximately 7 miles northeast of the project area. Therefore, the project would not result in an airport-related safety hazard during either project construction or operation, and *no impacts* would occur.

Impact HAZ-8
The project would not result in an airport-related safety hazard during either project construction or operation.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project area is not located along a designated Disaster Route as defined by County Public Works. The nearest designated Disaster Routes to the project area include the Antelope Valley Highway (SR-14), approximately 0.2 mile north, and the Golden State Freeway (I-5), approximately 8 miles southwest (County of Los Angeles 2010). The County Public Works Disaster Route map also indicates that Sand Canyon Road, south of Soledad Canyon Road, is a secondary disaster route. Additionally, the *City of Santa Clarita General Plan Safety Element* identifies a limited number of regional evacuation corridors serving the Santa Clarita Valley, including I-5, SR-14, and SR-126, which function as the primary routes for evacuation during emergencies such as wildfire or earthquake. The Safety Element notes that because the Valley relies on these few major corridors, local surface streets may also function as alternate evacuation routes if freeway access is disrupted (City of Santa Clarita 2022).

CONSTRUCTION

While all construction activities, including the staging of construction equipment, would be situated entirely within the project area, it is possible that project construction and the need for unique construction-period access may occur in adjacent street ROWs during certain periods of the day. Proposed construction activities may require traffic controls along nearby roadways and may slow traffic due to heavy vehicles and machinery traveling along nearby roadways. However, any traffic controls and vehicle and equipment movement would be temporary in nature and would not result in long-term impacts. The project would provide adequate emergency ingress and egress, and emergency access as construction activities would be required to comply applicable construction requirements of the PRC to prevent ignition and spread of a wildfire during construction activities, such as PRC § 4290, which regulates road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements during construction.

The City's existing emergency response system would be sufficient to address emergency evacuation scenarios in the event of natural or human-caused incidents in the project area that result in a need to evacuate project construction employees. As stated above, the LACoFD provides fire, emergency, medical, and rescue services for the project area. The project area's circulation and access would conform with City and LACoFD requirements to ensure that adequate emergency access is provided throughout the project area during construction. Additionally, construction activities would require a peak of 92 construction workers on-site per day during the five-year construction period, resulting in only a minor increase of potential population requiring evacuation in the project area as compared to existing conditions. As such, the designated Disaster Routes discussed above would not be impacted in such a way that the project would interfere with the County or City's Emergency Response Plan. Therefore, construction of the project would not impede any emergency response or evacuation plans such as the City's Land Use, Safety, and Circulation Elements; City's 2021 LHMP; County's OAEOP; and *2025 County of Los Angeles All-Hazards Mitigation Plan* (AHMP) (County of Los Angeles 2025). Therefore, construction impacts associated with emergency response and emergency evacuation plans would be *less than significant*.

OPERATION

Upon project completion, project operation would comply with LACoFD access requirements and would not include features that would impede access to and around the project area. Thus, the project would not cause an impediment along the designated Disaster Routes or impair implementation of any adopted emergency response or emergency evacuation plans. Buildout of the residential land uses on the project site would increase the number of vehicles needing to access SR-14 and other surrounding roadways in the event of an evacuation. The *Transportation Assessment for Belcaro at Sand Canyon, Santa Clarita, California* determined that there are three routes to move project and background traffic out of the area during an emergency evacuation: Northern Route – Sand Canyon Road to SR-14 and Soledad Canyon Road, Western Route – Lost Canyon Road to SR-14 at Via Princessa, and Southern Route – Placerita Canyon Road to SR-14 (Gibson Transportation Consulting, Inc. 2026). Travel time studies indicate that the intersection of Sand Canyon Road and Lost Canyon Road will have sufficient capacity to accommodate evacuation volumes (see Section 4.17, *Transportation*, and Section 4.20, *Wildfire*). Increased evacuation time would not impact an adopted emergency evacuation plan because existing plans do not set a numerical evacuation time threshold. Though traffic volume and evacuation time length would increase, the project would not block or reroute existing roadways or evacuation routes or propose actions in conflict with emergency response and evacuation plan goals and objectives within the City's Land Use, Safety, and Circulation Elements; City's 2021 LHMP; County's OAEOP; and County's 2025 AHMP. Additionally, the project would be required to comply with City requirements and other applicable engineering standards for driveways and access roads to reduce potential hazards related to

roadway design. Therefore, vehicle traffic contributed by the project during emergency evacuations would not be significant enough to impair an evacuation plan. Therefore, operational impacts associated with emergency response and emergency evacuation plans would be *less than significant*, and mitigation is not necessary.

Impact HAZ-9
The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan during either project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact HAZ-9 would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

As detailed further in Section 4.20, *Wildfire*, the project area is located in a Very High FHSZ. As discussed therein, development within a Very High FHSZ is required to meet the building construction requirements specified in the SCMC, including all applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance, and fuel modification plans. As identified in Section 4.20, *Wildfire*, code-exceeding Project Design Features PDF-WF-1 through PDF-WF-10 would be implemented to ensure project construction and operation would not result in significant impacts to the existing surrounding community and future residents of the project. Additionally, the City's 2021 LHMP provides context and planning for hazard identification, risk, and mitigation strategies for wildfires, earthquakes, energy disruption, drought, severe weather events, pandemics, human-made hazards such as cyber-attacks and terrorism, the release of hazardous materials, landslides, and flooding. Therefore, with compliance with County of Los Angeles Fire Code standards and implementation of the aforementioned mitigation measures, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. As such, impacts related to wildland fires would be *less than significant.*

Impact HAZ-10
The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.
Mitigation Measures
Mitigation is not necessary. Impact HAZ-10 would be less than significant.

4.9.6 Cumulative Impacts

Cumulative hazardous materials effects could occur if activities in the project area and other past, existing, and proposed development, together, could significantly increase risks in the regional vicinity of the project area. However, most hazardous materials activities in the project area would likely involve relatively small quantities of hazardous materials both in interior and exterior settings. Any health or safety effects of routine hazardous materials use would be limited to the specific individuals using the materials and anyone in the immediate vicinity of the use. No interaction would occur between these routine activities and similar activities at different sites either during project construction or operation.

Cumulative health and safety impacts could occur if project-related outdoor or off-site hazards were to interact or combine with those of other existing and proposed development. This could only occur through the following mechanisms: transport of hazardous materials and waste to or from the project site; inadvertent release of hazardous materials to the sanitary sewer, storm drain, or non-hazardous waste landfill; and potential accidents that require hazardous materials emergency response capabilities.

The project as well as other past, present, and future projects would be required to adhere to existing regulatory requirements for the appropriate handling, storage, and disposal of hazardous materials that are designed to minimize exposure and protect human health and the environment. Specific hazards associated with proposed development projects would be identified through discretionary review processes and/or required environmental review and mitigated accordingly. Hazards associated with the presence of toxic substances or other hazardous substances would be tested, handled, transported, and disposed of in accordance with existing Federal and State regulations. In most cases, compliance with existing regulations, including building code requirements, DTSC regulations, and City-issued permit conditions would minimize cumulative impacts associated with hazards and hazardous materials.

Cumulative increases in the transportation of hazardous materials and waste would cause a less-than-significant impact because the probability of a hazardous materials accident is relatively low, and the adherence to existing transportation and packaging regulatory requirements minimizes the consequences of potential accidents. In addition, all projects in the area would be required to comply with the same laws and regulations as the project. This includes Federal, State, and local regulatory requirements for transporting hazardous materials or cargo (including fuel and other materials used in all motor vehicles) on public roads or disposing of hazardous materials.

Future development associated with the project would be required to be designed, constructed, and operated in compliance with all applicable building code requirements and State and local regulations pertaining to the transport, use, and disposal of hazardous materials. Therefore, the contribution of the project toward cumulative effects related to hazards and hazardous materials would be less than cumulatively considerable.

Impact HAZ-11 (Cumulative Impacts)
The project would not result in any cumulatively considerable impacts associated with hazards or hazardous materials.
Mitigation Measures
Implement MM HAZ-1.1 and MM HAZ-1.2.
Impacts Following Mitigation
With implementation of MM HAZ-1.1 and MM HAZ-1.2, potential cumulative impacts associated with hazards and hazardous materials would be less than significant.

4.10 HYDROLOGY AND WATER QUALITY

This section of the EIR describes the existing conditions and regulatory setting for hydrology and water quality as it pertains to the project, evaluates potential environmental impacts to hydrology and water quality that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Belcaro Hydrology, Hydraulics, Water Quality Technical Report* (Hydrology Technical Report) (Pacific Advanced Civil Engineering, Inc. [PACE] 2025; EIR Appendix D) and the *Belcaro Oak Springs Canyon Creek Hydraulic Design Report Addendum* (Hydrology Technical Report Addendum) (PACE 2026; EIR Appendix E).

4.10.1 Existing Conditions

4.10.1.1 Regional Hydrology

SURFACE WATER

Throughout the Santa Clarita Valley, numerous natural streams and creeks act as storm drain channels, directing surface runoff into the Santa Clara River. The river originates in the San Gabriel Mountains and flows to the Pacific Ocean, draining a watershed that covers 1,643 square miles. About 90% of this watershed is mountainous, while the remainder includes valley floors, floodplains, and coastal plains (Ventura County Public Works 2025). Intense rain events, combined with alluvial soils, limited vegetation, erosion, and steep slopes, can lead to significant debris-filled flash floods. The Santa Clara River and its tributaries transport large volumes of runoff from the valley, foothills, and mountains to the Pacific Ocean. The drainage system—comprising both natural streams and constructed storm drain infrastructure—has historically been sufficient to manage the area's typical annual rainfall (ranging from 8–22 inches). Since 1960, rapid urbanization in the Santa Clarita Valley has resulted in increased stormwater volumes, primarily due to more impervious surfaces such as parking lots, rooftops, and streets. To address the changes in drainage patterns caused by development, flood control facilities have been built throughout the City. In some areas, streams have been converted to soft-bottom channels with concrete sides to accommodate development within the Santa Clara River's floodplain (City of Santa Clarita 2011a).

The project site is located immediately south of the Santa Clara River and is within the Santa Clara River Watershed. The stretch of the Santa Clara River adjacent to the project site falls under the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB) and is not currently listed for sediment or pH impairment on the Clean Water Act (CWA) § 303(d) List of Impaired Waters (CWA § 303(d) list) (33 United States Code [USC] § 1313(d)). However, the river is affected regionally by urban and natural runoff, which introduces pollutants such as chlorpyrifos, coliform bacteria, diazinon, toxicity, and chloride (State Water Resources Control Board [State Water Board] 2022). These contaminants impact the river's beneficial uses, including groundwater recharge, recreational activities (both water contact and non-contact), freshwater replenishment, and wildlife habitat (LARWQCB 2020). Responsibility for maintaining the surface water quality of the Santa Clara River is shared by the County of Los Angeles (County) and the City, primarily through National Pollutant Discharge Elimination System (NPDES) permits issued by the LARWQCB, as well as other initiatives like public outreach programs.

GROUNDWATER

Groundwater is concentrated within natural hydrogeological units known as basins. Within each basin, subsurface areas called aquifers collect, store, and allow for the extraction of groundwater, and multiple aquifers may exist within a single basin. In the Santa Clarita Valley, the two principal groundwater basins are the Santa Clara River Valley Groundwater Basin (East Subbasin) and the Acton Valley Groundwater Basin. The East Subbasin covers the upper Santa Clara River Valley and contains two main aquifer systems: the Alluvium (also referred to as the Alluvial Aquifer) and the Saugus Formation. The Alluvial Aquifer generally lies beneath the Santa Clara River and its tributaries, while the Saugus Formation extends beneath much of the Upper Santa Clara River area. Groundwater in the East Subbasin typically moves east to west, following the path of the Santa Clara River, and serves as the only local groundwater source for urban water supply in the City (City of Santa Clarita 2011a). Most groundwater infiltration occurs as winter-storm flow, since up to 80% of annual precipitation falls between November and March. The East Subbasin is also replenished by percolation from agricultural and urban irrigation, septic systems, and treated effluent from water reclamation plants. The unchanneled Santa Clara River and its tributaries also provide significant opportunities for groundwater recharge.

The project site is underlain by the East Subbasin (California Department of Water Resources 2025). Groundwater quality in this basin is measured against standards set by the LARWQCB, with monitoring carried out by the Santa Clarita Valley Water Agency (SCVWA). Constituents found in groundwater include total dissolved solids, chloride, nitrate, and sulfate. Long-term monitoring indicates that groundwater quality generally meets drinking water standards, though levels of some constituents fluctuate with wet and dry periods and are gradually increasing due to human activity. Groundwater quality in the Santa Clarita Valley is also affected by perchlorate and volatile organic compounds from human-made sources. SCVWA is responsible for monitoring groundwater and coordinating with regulatory agencies such as the California Department of Toxic Substances Control (DTSC) and LARWQCB to address pollutants or constituents of concern that exceed maximum contaminant levels (MCLs). If MCLs are surpassed or pollutants are detected, affected wells are taken offline and wellhead treatment systems are used (SCVWA 2022).

4.10.1.2 Project Site Hydrology

The project site lies above the Santa Clara River Valley East Subbasin within the Santa Clara River Valley Groundwater Basin of the South Coast Hydrologic Region. According to the Phase I Environmental Site Assessment (ESA) prepared for the project, groundwater in the vicinity of the project site was reported between 26 and 30 feet below ground surface level in 1999 (Stantec 2025; EIR Appendix L). Review of more recent groundwater data for a site located at 18501 Soledad Canyon Road, approximately two miles east of the project site, indicates that groundwater has been encountered at depths ranging from 27 to 55 feet below ground surface level in the nearby vicinity (Environmental Resolutions, Inc 2010). Additionally, groundwater sampling for a well at the nearby Robinson Ranch, approximately 0.3 mile south of the project site, indicates that groundwater has been encountered at depths of 80 to 105 feet below surface level (Rincon Consultants 2002). Groundwater flow within the project site is anticipated to follow topography to the north-northwest.

The project site is predominantly flat and undeveloped. Oak Spring Canyon Creek is the major drainage feature in the area, and it runs in a northwest direction through portions of the project site. Lost Canyon Road is presently an “at grade” crossing with Oak Spring Canyon Creek and is flooded during major rain events. The western third of the project site drains into Oak Spring Canyon Creek, which is ephemeral, mostly undeveloped, and flows into the Santa Clara River. Just south of the river, the creek runs beneath the Los Angeles County Metropolitan Transit Authority (Metro) rail line. This undercrossing is also the existing Oak Spring Canyon Road, which is a dirt road used by local residents. Upstream of the project site, Oak Spring Canyon Creek runs through Sand Canyon Golf Course. Portions of the creek running

through the golf course have been stabilized to protect against erosion and flooding. A small box culvert exists on the boundary between the project site and the golf course and acts as an overpass for Oak Spring Canyon Road at this location. The eastern two-thirds of the project site drains northerly under the Metro rail line via three existing pipe culverts. From the pipe culverts, water sheet flows to the Santa Clara River.

The Santa Clara River, which borders the project site on the north, drains more than 170 square miles upstream of the project site and is subject to large seasonal flows that are conveyed west through Ventura County to the Pacific Ocean. Oak Spring Canyon Creek, which borders the project site on the west, drains 5.8 square miles of watershed to the south and east of the project site and flows to the Santa Clara River. Oak Spring Canyon Creek is generally dry and only flows during rainfall events.

4.10.1.3 Flooding and Hydrological Hazards

Parts of Sand Canyon and Placerita Canyon are prone to periodic flooding. During storms, runoff can overwhelm street rights-of-way, causing localized flooding and making roads like Sand Canyon Road and Placerita Canyon Road impassable. However, most City streets are designed to manage stormwater runoff. Flooding may also result from heavy, sustained rainfall, dam failures, aqueduct ruptures, or, on a smaller scale, in areas cleared by fire or mudslides. The primary flood hazards in the City are found along natural drainage channels within the 100-year floodplain.

Flood hazard areas identified on the FEMA Flood Insurance Rate Map (FIRM) are identified as a Special Flood Hazard Area (SFHA). An SFHA is defined as the area that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year. The 1% annual chance flood is also referred to as the base flood or 100-year flood. According to FEMA FIRM No. 06037C0845G, dated June 2, 2021, a majority of the project site is within FEMA Flood Zone X, which is defined as "areas determined to be outside the 0.2-percent-annual-chance floodplain" or not within a 100-year flood zone. However, several areas within the project site have been mapped as FEMA Flood Zone A and Zone AE, which are defined as "areas with a 1% annual chance of flooding" (FEMA 2021).

The project site is located approximately 27 miles northeast of the coastline along the Pacific Ocean. Based on the California Department of Conservation (CDOC) Map of Los Angeles County Tsunami Hazard Areas, the project site is not located within a tsunami zone (CDOC 2025). There are no standing waterbodies present in the immediate vicinity of the project site.

4.10.2 Regulatory Setting

Federal, State, and local agencies regulate surface water and groundwater resources and their associated water quality for the protection of watersheds, floodplains, and water quality. These agencies regulate surface water and groundwater so that identified beneficial uses are not impaired. Water quality regulations are designed to limit the discharge of pollutants into the environment, maintain surface water and groundwater quality, protect fish and wildlife and their habitats, and protect beneficial uses.

4.10.2.1 Federal

FEDERAL CLEAN WATER ACT OF 1977

The Federal CWA of 1977 (33 USC § 1251, et seq.) is the primary Federal law regulating discharges of pollutants into waters of the United States and regulating water quality standards for surface waters. The CWA prohibits the discharge of any pollutants from a point source into navigable waters unless an NPDES permit is obtained. The following CWA sections include relevant policies for regulating water quality:

- **Section 208** requires all States to assess damages to water quality from nonpoint source pollution, including runoff, and to develop either regulatory or non-regulatory programs to control nonpoint source pollution.
- **Section 303(d)** authorizes the U.S. Environmental Protection Agency (USEPA) to assist States, Territories, and authorized Tribes in listing impaired waters and developing total maximum daily loads (TMDLs) for the identified waterbodies. A TMDL establishes the maximum amount of a pollutant allowed in a listed waterbody, as well as a starting point for restoring water quality.
- **Section 304(a)(4)** requires the USEPA to designate potential water pollutants as either conventional pollutants or toxic pollutants based on the latest scientific knowledge regarding the effects of pollutants on water quality. Conventional pollutants include biochemical oxygen demand, total suspended solids, fecal coliform, pH, oil, and grease. The USEPA has designated 126 "priority" toxic pollutants.
- **Section 313** requires that each Federal agency that has jurisdiction over any facility or is engaged in an activity that may result in discharge or runoff of pollutants must comply with all Federal, State, and local water pollution control requirements. This may include adherence to all requirements, including, but not necessarily limited to, reporting, recordkeeping, and/or permitting requirements.
- **Section 401** requires a water quality certification to be issued or waived by States and authorized Tribes prior to issuance of a permit or license to conduct activities that may result in discharge to waters of the United States. In cases where a State or Tribe does not have authority, the USEPA is responsible for issuing certification. The major Federal licenses and permits subject to § 401 include: 1) CWA §§ 402 and 404 permits issued by the USEPA or U.S. Army Corps of Engineers (USACE); 2) Federal Energy Regulatory Commission (FERC) licenses for hydropower facilities and natural gas pipelines; and 3) Rivers and Harbors Act §§ 9 and 10 permits.
- **Section 402** establishes the NPDES. Discharges of point source pollutants to waters of the United States are prohibited unless they are compliant with provisions of the CWA. Typically, compliance is achieved by obtaining authorization to discharge pursuant to an NPDES permit issued by the USEPA or a State agency that has an approved NPDES program. NPDES permits generally contain water quality- and/or technology-based standards for effluent discharges, monitoring requirements, analytical testing methods, and reporting requirements.
- **Section 404** requires facilities that discharge dredged or fill materials into waters of the United States to apply for a permit issued by the USACE.
- **Section 405** requires that facilities that treat domestic sewage must meet Federal requirements for the use and disposal of sewage discharge through land application, surface disposal, or incineration. These requirements are incorporated into permits issued under CWA § 402.

The project would be subject to CWA §§ 208 (33 USC § 1288); 303(d) 33 USC § 1313(d)); 304(a)(4) (33 USC § 1314(a)(4)); 313 (33 USC § 1323); 401 (33 USC § 1341); 402 (33 USC § 1342); 404 (33 USC § 1344); and 405 (33 USC § 1345) permits.

EXECUTIVE ORDER 11988

FEMA administers floodplains and manages the National Flood Insurance Program (NFIP). FEMA also prepares FIRMs for States and other communities participating in the program. FIRMs delineate regulatory floodplains to assist communities with land use and floodplain management decisions. Specifically, Executive Order 11988, *Floodplain Management*, requires Federal agencies to avoid long- and short-term impacts associated with the occupancy and modification of floodplains to the extent

feasible. Executive Order 11988 also requires agencies to avoid direct and indirect support of floodplain management wherever there is a practicable alternative.

FEDERAL ANTIDEGRADATION POLICY OF 1972

The Federal Antidegradation Policy, adopted in 1972 (40 Code of Federal Regulations [CFR] § 131.12), requires States to develop Statewide policies to prevent degradation of surface water and groundwater resources and identify methods for implementing them. Pursuant to the CFR, State antidegradation policies and implementation methods must, at a minimum, protect and maintain: 1) existing in-stream water uses; 2) existing water quality where the quality of the waters exceeds levels necessary to support existing beneficial uses, unless the State finds that allowing lower water quality is necessary to accommodate economic and social development in the area; and 3) water quality in waters considered an outstanding national resource. While this policy was established after the adoption of the State of California Antidegradation Policy (found at Resolution No. 68-16, adopted October 28, 1968, by the State Water Board), it establishes the groundwork for other States to adopt antidegradation policies to protect surface and groundwater quality.

4.10.2.2 State

CALIFORNIA DEPARTMENT OF WATER RESOURCES

The California Department of Water Resources (DWR) is the State agency that studies, constructs, and operates regional-scale flood protection systems, in partnership with Federal and local agencies. DWR also provides technical, financial, and emergency response assistance to local agencies related to flooding.

Several bills were signed by Governor Schwarzenegger in 2007, adding to and amending State flood and land use management laws. The laws contain requirements and considerations that outline a comprehensive approach to improving flood management at State and local levels.

FloodSAFE California is a strategic, multifaceted program initiated by DWR in 2006. FloodSAFE is overseeing the drafting of regional flood management plans, which encourage regional cooperation in identifying and addressing flood hazards. Regional flood plans include flood hazard identification, risk analyses, review of existing measures, and identification of potential projects and funding strategies. The plans emphasize multiple objectives, system resiliency, and compatibility with State goals and Integrated Regional Water Management Plans (IRWMPs). DWR has the lead role to implement FloodSAFE, and will work closely with Federal, State, Tribal, and local partners to help improve integrated flood management systems Statewide. DWR's role is to advise and provide assistance as a resource to local jurisdictions as they pursue compliance.

As required by California Water Code § 6161, the DWR (via the Division of Safety of Dams [DSOD]) regulates the siting, design, construction, and periodic review of all dams in the State. The DSOD reviews and approves inundation maps prepared by licensed civil engineers and submitted by dam owners for extremely high, high, and significant hazard dams and their critical appurtenant structures. Inundation maps approved by the DSOD are a tool used to develop emergency action plans, and the maps are intended to provide general information for emergency planning. According to the *City of Santa Clarita General Plan Safety Element,* the project site is not within a potential dam inundation zone (City of Santa Clarita 2022).

CALIFORNIA FISH AND GAME CODE § 1602

California Fish and Game Code § 1602 requires any person, State or local government agency, or public utility proposing a project that may affect a river, stream, or lake to notify the California Department of Fish and Wildlife (CDFW) before beginning the project. If activities would result in the diversion or obstruction of the natural flow of a stream; substantially alter its bed, channel, or bank; impact riparian vegetation; or adversely affect existing fish and wildlife resources, a Streambed Alteration Agreement is required. A Streambed Alteration Agreement lists the CDFW conditions of approval relative to the project and serves as an agreement between an applicant and the CDFW for a term of not more than five years (for standard agreements) for the performance of activities subject to this section. Implementation of the project may require a Streambed Alteration Agreement for any impacts within the banks of drainages and extending to the outer edge of riparian vegetation (whichever is greater) if these areas are determined to be jurisdictional by the CDFW.

PORTER-COLOGNE WATER QUALITY CONTROL ACT OF 1969

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) (California Water Code § 13000 et seq.) created the State Water Board and the nine RWQCBs within the State. The State Water Board coordinates responsibilities of water quality and water rights within the State. The project site is within the jurisdiction of the LARWQCB, further discussed in Section 4.10.2.3, *Regional*.

The Porter-Cologne Act requires that waters of the State be protected. The State Water Board is given authority to enforce the Porter-Cologne Act, as well as CWA § 401. In California, the State Water Board issued the *General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; State Water Board Order 2009-0009-DWQ) to regulate runoff from construction sites involving grading and earthmoving in areas over one acre. The Construction General Permit also applies to projects of less than one acre that are part of a larger plan of common development and requires covered construction projects to use the best available technology economically achievable and the best conventional pollution control technology. Each construction project subject to the Construction General Permit is required to have a Stormwater Pollution Prevention Plan (SWPPP) prepared. A SWPPP identifies likely sources of sediment and pollution and incorporates measures to minimize sediment and pollution in runoff water. The project site is approximately 13 acres in size and, therefore, subject to the Construction General Permit.

CALIFORNIA ANTIDEGRADATION POLICY OF 1968

The California Antidegradation Policy, otherwise known as the Statement of Policy with Respect to Maintaining High Quality Water in California, was adopted by the State Water Board in 1968. Unlike the Federal Antidegradation Policy, the California Antidegradation Policy applies to all waters of the State (e.g., isolated wetlands and groundwater), not just surface waters. The policy states that whenever the existing quality of a waterbody is better than the quality established in individual Basin Plans, such high quality must be maintained, and discharges to that waterbody cannot unreasonably affect present or anticipated beneficial uses of that water resource.

CALIFORNIA TOXICS RULE OF 2000

In 2000, the USEPA promulgated the California Toxics Rule (40 CFR § 131.38), which establishes water quality criteria for certain toxic substances to be applied to waters in the State. The California Toxics Rule establishes acute (i.e., short-term) and chronic (i.e., long-term) standards for waterbodies such as inland surface waters and enclosed bays and estuaries that are designated by the LARWQCB as having beneficial uses protective of aquatic life or human health.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM CONSTRUCTION GENERAL PERMIT

Construction associated with the project would disturb more than one acre of land surface, affecting the quality of stormwater discharges into waters of the United States. The project would, therefore, be subject to the NPDES *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Construction General Permit regulates discharges of pollutants in stormwater associated with construction activity to waters of the United States from construction sites that disturb one acre or more of land surface, or that are part of a common plan of development or sale that disturbs more than one acre of land surface. The permit regulates stormwater discharges associated with construction or demolition activities, such as clearing and excavation, construction of buildings, and linear underground projects, including installation of water pipelines and other utility lines.

The Construction General Permit requires that construction sites be assigned a Risk Level of 1 (low), 2 (medium), or 3 (high), based both on the sediment transport risk at the project site and the receiving waters risk during periods of soil exposure (e.g., grading and site stabilization). The sediment risk level reflects the relative amount of sediment that could potentially be discharged to receiving waterbodies and is based on the nature of the construction activities and the location of the site relative to receiving waterbodies. The receiving waters risk level reflects the risk to the receiving waters from the sediment discharge.

The Construction General Permit requires the development and implementation of a SWPPP that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving off-site into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management, and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. Each category contains specific BMPs to achieve the goals of the overarching category. In addition, the SWPPP is required to contain a visual monitoring program, a chemical monitoring program for non-visible pollutants, and a sediment monitoring plan if the site discharges directly to a waterbody listed on the CWA § 303(d) list for sediment.

The SWPPP must be prepared before construction begins and contain a site map(s) that identifies the construction work area, existing and proposed buildings, parcel boundaries, roadways, stormwater collection and discharge points, general topography both before and after construction, and drainage patterns across the project site. The SWPPP must list BMPs and the placement of those BMPs that the applicant would use to protect stormwater runoff. Additionally, the SWPPP must contain a visual monitoring program, a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs, and a sediment monitoring plan if the project site discharges directly to a waterbody listed on the CWA § 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing, and fueling. The Construction General Permit also sets postconstruction standards (i.e., implementation of BMPs to reduce pollutants in stormwater discharges from the project site following construction).

In the project site, the Construction General Permit is implemented and enforced by the LARWQCB, which administers the stormwater permitting program. Dischargers are required to electronically submit a Notice of Intent and Permit Registration Documents in order to obtain coverage under this Construction General Permit. Dischargers are responsible for notifying the LARWQCB of violations or incidents of

non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. The risk assessment and SWPPP must be prepared by a State Qualified SWPPP Developer and implementation of the SWPPP must be overseen by a State Qualified SWPPP Practitioner. A Legally Responsible Person, who is legally authorized to sign and certify permit registration documents, is responsible for obtaining coverage under the permit.

CONSTRUCTION GENERAL PERMIT (STATE WATER BOARD ORDER NO. 2009-0009-DWQ, AS AMENDED)

The Construction General Permit is required for all projects where construction activity would disturb one acre or more of soil. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling and excavation. The Construction General Permit requires the development and implementation of a SWPPP, which would include and specify water quality BMPs designed to prevent pollutants from contacting stormwater and keep all products of erosion from moving off-site into receiving waters. Routine inspection of all BMPs is required under the provisions of the Construction General Permit, and the SWPPP must be prepared and implemented by "qualified individuals" as defined by the State Water Board.

NPDES MUNICIPAL STORMWATER PERMIT AND STORMWATER QUALITY MANAGEMENT PROGRAM

In California, the NPDES stormwater permit program is administered and enforced by the State Water Board through the nine RWQCBs by issuing Waste Discharge Requirements (WDRs) and NPDES permits. These permits are reissued approximately every five years and also include applicable provisions of the State Porter-Cologne Act, which is the principal legislation for controlling stormwater pollutants in California. The permit establishes regulations covering discharge prohibitions, receiving water limitations, municipal operations (such as the project), new development, construction site controls (construction site runoff), and other regulations to regulate surface water quality.

The discharge prohibitions prevent non-stormwater materials (materials other than stormwater) from entering storm drain systems and watercourses. The municipal operations regulations include a number of requirements to control and reduce non-stormwater discharges and polluted stormwater to storm drains and watercourses during operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure, such as the project. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

Eighty-seven entities (the Los Angeles County Flood Control District, the County of Los Angeles, and 85 incorporated Cities within the coastal watersheds of Los Angeles County, excluding Long Beach) implemented a stormwater quality management program (SQMP) to comply with LARWQCB Order No. R4-2012-0175-A01, Amending Order No. R4-2012-0175 as Amended by State Water Board Order No. WW 2015-0075, NPDES Permit No. CAS004001, *Waste Discharge Requirements For Municipal Separate Storm Sewer System (MS4), Discharges Within the Coastal Watersheds of Los Angeles County, Except Those Discharges Originating from the City of Long Beach MS4*, dated September 8, 2016. The SQMP has the goal of accomplishing the requirements of the MS4 Permit and reducing the amount of pollutants in stormwater runoff. The requirements include source control, site design, and stormwater treatment requirements, such as minimizing disturbance of natural infiltration areas and the addition of impervious surfaces, controlling and directing runoff, and the use of infiltration and bioretention measures, among other measures.

The SQMP requires the Co-Permittees to:

- Implement a public information and participation program to conduct outreach on stormwater pollution;
- Control discharges at commercial/industrial facilities through tracking, inspecting, and ensuring compliance at facilities that are critical sources of pollutants;
- Implement a development planning program for specified development projects;
- Implement a program to control construction runoff from construction activity at all construction sites within the relevant jurisdictions;
- Implement a public agency activities program to minimize stormwater pollution impacts from public agency activities; and
- Implement a program to document, track, and report illicit connections and discharges to the storm drain system.

The MS4 Permit contains the following provisions for implementation of the SQMP by the Co-Permittees:

1. General Requirements:
    a. Each permittee is required to implement the SQMP in order to comply with applicable stormwater program requirements.
    b. The SQMP shall be implemented and east permittee shall implement additional controls so that discharge of pollutants is reduced.
2. Best Management Practice Implementation:
    a. Permittees are required to implement the most effective combination of BMPs for stormwater/urban runoff pollution control. This should result in the reduction of stormwater runoff.
3. Revision of the SQMP:
    a. Permittees are required to revise the SQMP in order to comply with requirements of the RWQCB while complying with regional watershed requirements and/or waste load allocations for implementation of TMDLs for impaired waterbodies.
4. Designation and Responsibilities of the Principal Permittee:
    a. The Los Angeles County Flood Control District is designated as the Principal Permittee, who is responsible for:
        i. Coordinating activities that comply with requirements outlined in the NPDES permit;
        ii. Coordinating activities among Permittees;
        iii. Providing personnel and fiscal resources for necessary updates to the SQMP;
        iv. Providing technical support for committees required to implement the SQMP; and
        v. Implementing the Countywide Monitoring Program required under this Order and assessing the results of the monitoring program.

5. Responsibilities of Co-Permittee:
    a. Each Co-permittee is required to comply with the requirements of the SQMP as applicable to the discharges within its geographical boundaries. These requirements include:
        i. Coordinating among internal departments to facilitate the implementation of the SQMP requirements in an efficient way;
        ii. Participating in coordination with other internal agencies as necessary to successfully implement the requirements of the SQMP; and
        iii. Preparing an annual Budget Summary of expenditures for the stormwater management program by providing an estimated breakdown of expenditures for different areas of concern, including budget projections for the following year.
6. Watershed Management Committees (WMCs):
    a. Each WMC is comprised of a voting representative from each Permittee in the Watershed Management Area (WMA).
    b. Each WMC is required to facilitate exchange of information between Co-Permittees, establish goals and deadlines for WMAs, prioritize pollution control measures, develop and update adequate information, and recommend appropriate revisions to the SQMP.
7. Legal Authority:
    a. Co-Permittees are granted the legal authority to prohibit non-stormwater discharges to the storm drain system including discharge to the MS4 from various development types.

SUSTAINABLE GROUNDWATER MANAGEMENT ACT

The Sustainable Groundwater Management Act (SGMA) (California Water Code § 10720 et seq.) is managed by the DWR and provides a long-term Statewide framework to protect groundwater resources. The SGMA requires local agencies to form Groundwater Sustainability Agencies for high- and medium-priority basins. It is the responsibility of the Groundwater Sustainability Agencies to prepare and implement a Groundwater Sustainability Plan (GSP) to mitigate overdraft.

The SGMA does not apply to the adjudicated portion of the Los Angeles Coastal Plain Groundwater Basin, Central Subbasin. However, the project site is within an area of the Los Angeles Coastal Plain Groundwater Basin, Central Subbasin that is not adjudicated. The Los Angeles Coastal Plain Groundwater Basin, Central Subbasin is within a low- and very low-priority basin, which has the option to develop a GSP.

4.10.2.3 Regional

INTEGRATED REGIONAL WATER MANAGEMENT PLANS

IRWMPs are planning documents that outline strategies for the sustainable management of water resources within a specific region delineated by one or more watersheds. IRWMPs generally contain an assessment of current and future water demand, water supply, water quality, and environmental needs. They address the challenges of delivering a stable and clean supply of water for the public, addressing stormwater and urban runoff water quality, providing flood protection, meeting water infrastructure needs, maximizing the use of reclaimed water, enhancing water conservation, and promoting environmental stewardship. There are four IRWMP regions in Los Angeles County: Antelope Valley IRWMP, Upper Santa Clara River IRWMP, Greater Los Angeles County IRWMP, and Los Angeles Gateway Region. The project site is within the Upper Santa Clara River IRWMP.

BASIN PLAN FOR THE COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES

As required by the California Water Code, the LARWQCB has adopted the *Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan), which designates beneficial uses for surface waters and groundwater, sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's Antidegradation Policy, and describes implementation programs to protect all waters in the Los Angeles Region (LARWQCB 2020). In addition, the Basin Plan incorporates (by reference) all applicable State and RWQCB plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan. The Basin Plan is a resource for the RWQCB and others who use water and/or discharge wastewater in the Los Angeles Region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. The Basin Plan provides valuable information to the public about local water quality issues.

COUNTY OF LOS ANGELES

Low Impact Development Standards Manual

The County prepared the *2025 Low Impact Development (LID) Standards Manual* (LID Standards Manual) to comply with the requirements of the NPDES MS4 Permit. The LID Standards Manual provides guidance for the implementation of stormwater quality control measures in new development and redevelopment projects in unincorporated areas of the County, with the intention of improving water quality and mitigating potential water quality impacts from stormwater and non-stormwater discharges (Los Angeles County Public Works 2026). SCMC Chapter 17.95 (Standard Urban Stormwater Mitigation Plan Implementation) implements the LID Standards Manual (as updated in 2025 [see SCMC § 17.95.020, Scope and Applicability]) and outlines LID Standards and their applicability to projects in the county. The LID Standards Manual addresses the following objectives and goals (Los Angeles County Public Works 2026):

- Lessen the adverse impacts of stormwater and non-stormwater runoff from development on natural drainage systems, receiving waters, and other waterbodies;
- Minimize pollutant loadings from impervious surfaces by requiring development projects to incorporate properly designed, technically appropriate BMPs and other LID strategies; and
- Minimize erosion and other hydrologic impacts on natural drainage systems by requiring development projects to incorporate properly designed, technically appropriate hydromodification control development principles and technologies.

Hydrology Manual

The *Los Angeles County Department of Public Works Hydrology Manual* (Hydrology Manual) requires that a storm drain conveyance system be designed for a 25-year storm event and that the combined capacity of a storm drain and street flow system accommodate flow from a 50-year storm event (Los Angeles County Public Works 2006). Areas with sump conditions are required to have a storm drain conveyance system capable of conveying flow from a 50-year storm event. The County also limits allowable discharge into existing storm drain facilities under the MS4 permit, which is enforced for all new developments that discharge directly into the County's storm drain system. Any proposed drainage improvements of County-owned storm drain facilities, such as catch basins and storm drain lines requires the approval/review from the Los Angeles County Flood Control District.

Sedimentation Manual

The *Los Angeles County Department of Public Works Sedimentation Manual* (LACDWP 2018) established the Los Angeles County Public Works' sedimentation design criteria. The procedures and standards contained in the Sedimentation Manual were developed by Los Angeles County Public Works as the need arose to design erosion control structures, sediment retention structures, and channels carrying sediment-laden flows. These sedimentation techniques are applicable in the design of local debris basins, storm drains, retention and detention basins, and channel projects within Los Angeles County.

Los Angeles County MS4 Permit

California's Municipal Storm Water Permitting Program regulates stormwater discharges from MS4s. Under Phase I of the Program, the RWQCBs adopted NPDES stormwater permits for medium (serving between 100,000 and 250,000 people) and large (serving a minimum of 250,000 people) municipalities. Most of these permits were issued to a group of co-permittees encompassing an entire metropolitan area.

In 2001, the LARWQCB issued an NPDES Permit and WDRs (Order No. 01-182) under the CWA and the Porter-Cologne Act for discharges of urban runoff in public storm drains in Los Angeles County. The NPDES permit was amended in 2011. The permittees are the Los Angeles County incorporated cities (including the City) and the County (collectively the Co-Permittees). An important element incorporated into the NPDES MS4 permit is the set of requirements associated with the development or redevelopment of a site. The NPDES MS4 permit requires that permanent (postconstruction) stormwater management facilities/techniques are incorporated into a project to reduce the quantity and improve the quality of stormwater runoff that leaves a site.

To implement the requirements of the NPDES permit, the Co-Permittees created development planning guidance and control measures that control and mitigate stormwater quality and quantity impacts to receiving waters as a result of new development and redevelopment. The Co-Permittees are also required to implement other municipal source detection and elimination programs, as well as maintenance measures.

Enhanced Watershed Management Program

The City, County, and Los Angeles County Flood Control District jointly developed an Enhanced Watershed Management Program (EWMP), which allows collaboration among agencies on multi-beneficial regional projects to retain both non-stormwater and stormwater runoff, as well as facilitating flood control and increasing water supply. Nearly 90% of the Upper Santa Clara River Watershed (USCRW) is open space, with approximately 88% being undeveloped land and containing one of the last remaining natural rivers in Southern California. The USCRW presents unique challenges for maintaining the balance of population growth, conserving endangered species habitat and wildlife corridors, and managing floodplains and water supply that depend on the Santa Clara River and its floodplain. The EWMP has been developed to protect these beneficial uses of the USCRW receiving waters, while recognizing these unique characteristics.

4.10.2.4 Local

SANTA CLARA RIVER VALLEY EAST GROUNDWATER SUBBASIN GROUNDWATER SUSTAINABILITY PLAN

The Santa Clarita Valley Groundwater Sustainability Agency (SCV-GSA) is tasked with overseeing the sustainable management of groundwater in the East Subbasin. In 2017, SCVWA, the City, the County, and Los Angeles County Waterworks District No. 36 entered into an agreement to jointly operate as the SCV-GSA, with SCVWA designated as the primary administer.

The *Santa Clara River Valley East Groundwater Subbasin Groundwater Sustainability Plan* (East Subbasin GSP) was adopted by the SCV-GSA in 2022. The East Subbasin GSP outlines the East Subbasin's characteristics; provides quantitative approaches to assess its condition; details monitoring systems, projects, and management strategies to achieve long-term sustainability; and describes the plan's implementation (SCV-GSA 2022). The East Subbasin GSP compiles historical data and research from the past 50 years related to water demand, supply, and quality in the East Subbasin and addresses the needs of all groundwater users, including domestic well owners, agricultural stakeholders, municipal well operators, and groups or individuals dedicated to protecting groundwater-dependent ecosystems.

CITY OF SANTA CLARITA STORMWATER AND URBAN RUNOFF POLLUTION CONTROL

SCMC § 10.04.070 (Construction Activity Stormwater Measures) sets forth specific requirements for managing water runoff and discharges during construction activities in the City. These measures include establishing a grading and runoff control program that:

- Retains sediments produced or brought onto the project site using treatment controls or structural BMPs;
- Keeps construction-related materials, waste, spills, and residues on-site, preventing their discharge to streets, drainage facilities, the MS4, receiving waters, or neighboring properties;
- Contains non-stormwater runoff from equipment and vehicle washing at the project site; and
- Controls erosion on slopes and channels through effective BMPs, such as limiting grading during the wet season, inspecting graded areas during rainfall, planting and maintaining vegetation on slopes, and covering slopes prone to erosion.

CITY OF SANTA CLARITA FLOODPLAIN MANAGEMENT ORDINANCE

The City participates in the NFIP, which aims to reduce the financial impact of flooding in communities nationwide. The NFIP is a voluntary partnership between FEMA and local governments, making Federally backed flood insurance available to City residents and enabling access to direct Federal assistance after declared flood disasters.

In partnership with FEMA, the City adopted Floodplain Management regulations (SCMC Chapter 10.06, Floodplain Management) that govern development within local floodplains. To maintain NFIP eligibility, the City must manage development in flood-prone areas in accordance with the SCMC and FEMA's technical guidelines. To minimize flood risks, the SCMC requires:

- Restricting or prohibiting uses that pose health, safety, or property risks due to water or erosion hazards, or that worsen erosion, flood heights, or velocities;

- Ensuring flood-vulnerable uses and related facilities are protected against flood damage during initial construction;
- Controlling changes to natural floodplains, stream channels, and protective barriers that help manage floodwaters;
- Regulating filling, grading, dredging, and other activities that could increase flood damage;
- Preventing or managing the construction of flood barriers that might unnaturally divert floodwaters or raise flood risks elsewhere.

CITY OF SANTA CLARITA STORMWATER MITIGATION PLAN IMPLEMENTATION

SCMC Chapter 17.95 (Standard Urban Stormwater Mitigation Plan Implementation) specifies requirements for postconstruction stormwater management for development projects, ensuring compliance with NPDES and MS4 permits. This chapter mandates that each project create and implement a mitigation plan to reduce water quality impacts by adopting smart growth practices, BMPs, and integrating LID design strategies. These strategies aim to replicate pre-development hydrology through infiltration, evapotranspiration, rainwater harvesting, and reuse.

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011b). The *City of Santa Clarita General Plan Land Use Element* establishes a policy framework for planning future growth within the planning area and addresses existing development patterns (City of Santa Clarita 2011c). The *City of Santa Clarita General Plan Safety Element* includes policies related to the City's response to hazardous materials and represents the long-range emergency response plan for the City (City of Santa Clarita 2022). Table 4.10-1 provides goals, objectives, and policies within the General Plan that are applicable to hydrology and water quality and are relevant to the project.

Table 4.10-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 1	A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.
Objective CO 1.1	Protect the capacity of the natural "green" infrastructure to absorb and break down pollutants, cleanse air and water, and prevent flood and storm damage.
Objective CO 1.5	Manage urban development and human-built systems to minimize harm to ecosystems, watersheds, and other natural systems, such as urban runoff treatment trains that infiltrate, treat and remove direct connections to impervious areas.
Policy CO 1.5.1	Promote the use of environmentally-responsible building design and efficiency standards in new development, and provide examples of these standards in public facilities.
Goal CO 4	An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.
Objective CO 4.3	Limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, and managing stormwater runoff at the source.
Policy CO 4.3.1	On undeveloped sites proposed for development, promote onsite stormwater infiltration through design techniques such as pervious paving, draining runoff into bioswales or properly designed landscaped areas, preservation of natural soils and vegetation, and limiting impervious surfaces

Goal/Objective/ Policy	Description
Policy CO 4.3.5	Where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting.
Policy CO 4.3.7	Reduce the amount of pollutants entering the Santa Clara River and its tributaries by capturing and treating stormwater runoff at the source, to the extent possible
Objective CO 4.4	Promote measures to enhance water quality by addressing sources of water pollution
Goal CO 8	Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
Objective CO 8.4	Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.
Policy CO 8.4.4	Promote commercial and industrial recycling, including recycling of construction and demolition debris.
Policy CO 8.4.5	Develop and implement standards for refuse and recycling receptacles and enclosures to accommodate recycling in all development.
Land Use Element	
Goal LU 7	Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.
Objective LU 7.3	Protect surface and ground water quality through design of development sites and drainage improvements.
Policy LU 7.3.2	Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.
Policy LU 7.3.3	Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.
Safety Element	
Goal S 2	Protection of public safety and property from unreasonable risks due to flooding
Objective S 2.1	Plan for flood protection as part of a multi-objective watershed management approach for the Santa Clara River and its tributaries.
Policy S 2.1.2	Promote Low Impact Development standards on development sites, including but not limited to minimizing impervious surface area and promoting infiltration, in order to reduce the flow and velocity of stormwater runoff throughout the watershed
Policy S 2.1.5	Promote the joint use of flood control facilities with other beneficial uses where feasible, such as by incorporating detention basins into parks and extending trails through floodplains
Objective S 2.3	Plan for and construct adequate drainage and flood control infrastructure to ensure flood protection.
Objective S 2.4	Implement flood safety measures in new development.

4.10.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to hydrology and water quality if the project would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    i) Result in substantial erosion or siltation on- or off-site;
    ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    iv) Impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Each of these thresholds is discussed under Section 4.10.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.10.4 Impact Assessment Methodology

The hydrology and water quality analysis presented in this chapter is based on literature review of relevant documents, including the City's General Plan, the LARWQCB's Basin Plan, and the IRWMP for the Upper Santa Clara River, as well as technical reports prepared for the project, including the Hydrology Technical Report (PACE 2025; see EIR Appendix D), Hydrology Technical Report Addendum (PACE 2026; see EIR Appendix E), and Phase I ESA (Stantec 2025; see EIR Appendix L). The Hydrology Technical Report includes the *Belcaro Hydrology Report* (Hydrology Report) (Alliance 2024) and *Belcaro Low Impact Development (LID) Report* (LID Report) (Alliance 2025) as attachments. The Hydrology and LID Reports outline the existing and proposed hydrology and drainage management areas for the project site and provide the LID measures required to reduce the project's volume of stormwater runoff and potential pollutants in accordance with the LID Standards Manual.

4.10.5 Project-Specific Impacts and Mitigation Measures

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

CONSTRUCTION

During project construction, particularly during the grading phase, stormwater runoff from precipitation events could cause exposed and stockpiled soils to be subject to erosion and convey sediments into municipal storm drain systems. Grading for the project would require approximately 800,000 cubic yards of cut and 300,000 cubic yards of fill. Construction would result in 3,300,000 cubic yards of over-excavation, which has an expected shrinkage of 15%, reducing the total amount of cut by 500,000 cubic yards. Accordingly, the grading would be balanced on-site, and no import or export of soils would be required for the project. In addition, on-site watering activities to reduce airborne dust could contribute to pollutant loading in runoff.

Pollutant discharges relating to the storage, handling, use, and disposal of chemicals, adhesives, coatings, lubricants, and fuel could also occur. According to the Phase I ESA prepared for the project (Stantec 2025), groundwater at the project site was reported between 26 and 30 feet below ground surface level in 1999 (Stantec 2025; see EIR Appendix L). Additional review of documents from 2002 and 2010 indicates that groundwater has been encountered at depths of 27 to 106 feet in the vicinity of the project site (Rincon 2002; Environmental Resolutions, Inc. 2010). Due to the expected depth of groundwater at the project site, it is not anticipated that dewatering would be required during construction. Regardless, any discharge of stormwater or non-stormwater would comply with all applicable NPDES requirements related to construction, as well as the LARWQCB's *Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties* (LARWQCB 2023).

As project construction would disturb more than one acre of soil, coverage under the NPDES Construction General Permit would be required to be obtained for the project. In accordance with the requirements of the NPDES Construction General Permit, a site-specific SWPPP would be prepared and implemented for the project that specifies BMPs to be used during construction to manage stormwater and non-stormwater discharges. BMPs would include, but would not be limited to, erosion control, sediment control, non-stormwater management, and materials management BMPs. The SWPPP would include a description of potential sources of pollutants, including pollutants originating from off-site sources, which may flow across or through areas of construction. The SWPPP would specify the location, type, and maintenance requirements for BMPs necessary to prevent stormwater runoff from carrying construction-related pollutants into nearby receiving waters (in this case, the Santa Clara River). BMPs would be required to be implemented to address the potential release of fuels, oil, and/or lubricants from construction vehicles and equipment (e.g., drip pans, secondary containment, washing stations), release of sediment from material stockpiles and other construction-related excavations (e.g., sediment barriers, soil binders), and other construction-related activities with the potential to adversely affect water quality. The number, type, location, and maintenance requirements of BMPs to be implemented as part of the SWPPP depend on site-specific risk factors, such as soil erosivity factors, construction season/duration, and receiving water sensitivity.

Compliance with the requirements of the LARWQCB (CWA NPDES Program and Porter-Cologne Act WDRs), Construction General Permit, and City stormwater regulations would be sufficient to address the potential for buildout of the project to violate water quality standards or WDRs during construction activities. Therefore, impacts related to degradation of surface or groundwater quality from construction activities would be *less than significant*, and mitigation is not necessary.

OPERATION

The project would include the construction of two water quality treatment basins, two debris basins, and a debris swale. The water quality treatment basins would be installed on the northern portion of the project site, north of the Metro railroad. The two debris basins would be installed in the southern portion of the project site. The debris swale would be located along the proposed residences on the eastern side of the project site and would be separated by a proposed trail running north–south between the homes and debris swale. Biofiltration via engineered media, gravel, and underdrains will be used to capture stormwater pollution at these basins, which have been designed to accommodate the 85th percentile volume multiplied by a factor of safety of 1.5. Each basin will be fully emptied within 96 hours after any rainfall event.

The project would generally increase the acreage of impermeable surfaces at the project site by developing new single-family homes, roads, and associated infrastructure. However, despite the increase in impervious surface area, the project would result in only a minor increase in runoff at the project site by increasing groundwater infiltration through the installation of the water quality and debris basins

discussed above. According to the Hydrology Report, under existing conditions, the project site results in a 50-year runoff volume of 73.23 acre-feet. In comparison, the project site under developed conditions would only result in approximately 74.56 acre-feet of 50-year runoff volume. Additionally, the proposed water quality and debris basins would reduce the peak flowrate of runoff from the project site by from approximately 658.1 cubic feet per second to 545.1 cubic feet per second (Alliance 2024).

Potential pollutants generated by the project would be typical of residential-related land uses and may include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. The implementation of BMPs required by the County's LID regulations would target these pollutants to minimize pollutant loads in stormwater runoff. Implementation of the project's LID BMPs (i.e., biofiltration basins and underground infiltration units) would result in improved surface water runoff quality as compared to existing conditions. These BMPs would be implemented by the project's homeowner's association (HOA), which has responsibility to maintain the proposed water retention and debris basins. As provided in the *BMP Master Covenant for Operations and Maintenance* included as Appendix F to the LID Report, the following postconstruction activities would occur to maintain the proposed BMPs:

- Remove obstructions, debris, and trash from the bioretention area and dispose of properly. Monthly, or as needed after storm events.
- Inspect bioretention area to ensure that it drains between storms and within five days after rainfall. Monthly, or as needed after storm events.
- Inspect inlets for channels, soil exposure or other evidence of erosion. Clear obstructions and remove sediment. Monthly, or as needed after storm events.
- Remove and replace all dead and diseased vegetation. Twice a year.
- Maintain vegetation and the irrigation system. Prune and weed to keep bioretention area neat and orderly in appearance. Before the wet season begins, or as needed.
- Check that mulch is at the appropriate depth (three inches per soil specifications) and replenish as necessary before the wet season begins. Monthly.
- Inspect bioretention area using the attached inspection checklist. Monthly, or after large storm events, and after the removal of accumulated debris or material.

As analyzed and concluded in the LID Report, the water quality and debris basins included in the project would adequately manage stormwater runoff from the project site in accordance with the LID Standards Manual (Alliance 2025). The project would also be subject to LARWQCB postconstruction stormwater management requirements. Incorporation of the LID BMPs (i.e., biofiltration basins and underground infiltration units) and LARWQCB postconstruction stormwater management requirements would improve stormwater runoff water quality, which would benefit the water quality of downstream surface waters as well as underlying groundwater resources. As such, the increase in impervious surfaces with project implementation would not contribute to the degradation of surface or groundwater quality. With implementation of the required LID BMPs, operational impacts related to degradation of surface or groundwater quality would be *less than significant*, and mitigation is not necessary.

Impact HYD-1
The project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
Mitigation Measures
Mitigation is not necessary. Impact HYD-1 would be less than significant.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

CONSTRUCTION

No water supply wells are located at or within one mile of the project site that could be impacted by construction, nor would the project include the construction of new water supply wells. As discussed in Impact HYD-1, project construction would not require dewatering systems, and local groundwater hydrology in the immediate vicinity of the project site would not be affected. Therefore, the project would not substantially deplete groundwater supplies or affect groundwater recharge in a manner that would result in a net deficit in aquifer volume or permanent lowering of the local groundwater table during construction. Construction impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

The project would not directly pump local groundwater to serve the project's water demand. Instead, domestic water and water for fire protection would be supplied by SCVWA (see Section 4.19, *Utilities and Service Systems*, for a discussion of water supply). As discussed in Impact HYD-1, upon project implementation, impervious surface area would increase on the project site, which could reduce the amount of water percolating down into the underground aquifer that underlies the project site. However, the project includes design features that would maximize the percolation of rainfall into the groundwater basin, such as the proposed water quality and debris basins. Incorporation of the LID BMPs (i.e., biofiltration basins and underground infiltration units) and LARWQCB postconstruction stormwater management requirements would improve stormwater runoff water quality, which would increase infiltration and benefit the water quality of underlying groundwater resources. As discussed in the LID Report, the proposed LID BMPs (i.e., biofiltration basins and underground infiltration units) would result in increased infiltration at the project site, which would increase groundwater recharge (Alliance 2025). With implementation of these proposed components, buildout of the project would not adversely affect local groundwater recharge levels. Therefore, the project's operational impacts related to groundwater supplies and groundwater recharge would be *less than significant*, and mitigation is not necessary.

Impact HYD-2
The project would not substantially decrease groundwater supplies or interfere with groundwater recharge.
Mitigation Measures
Mitigation is not necessary. Impact HYD-2 would be less than significant.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv) Impede or redirect flood flows?

Construction

Grading, excavation, and other earth-moving activities associated with project construction could have the potential to alter existing drainage patterns and flows within the project site. Construction activities would be temporary in nature and the drainage patterns would follow the proposed drainage plan as described in the following discussion. The project would be subject to CWA §§ 401 and 404 permits, and a California Fish and Game Code § 1602 permit would be obtained for placement of dredged or fill material within jurisdictional drainages that would identify BMPs to protect water quality from discharge of pollutants.

During construction, implementation of the SWPPP required under the General Construction Permit would prevent construction site runoff from affecting off-site drainage patterns, as described in Impact HYD-1, through the use of BMPs and erosion control measures. Compliance with the NPDES Municipal Permits and its MS4 BMP requirements implemented in the SQMP, along with SCMC requirements, would reduce the amount of pollutants in stormwater runoff through the use of BMPs such as managing surface water runoff and increasing on-site infiltration. Adherence to the regulatory requirements and regulatory plans described above would decrease the potential for drainage pattern alteration and decrease erosion and sedimentation effects. Therefore, construction impacts would be *less than significant*, and mitigation is not necessary.

Operation

The project site is predominantly flat and undeveloped. Oak Spring Canyon Creek is the major drainage feature in the area and runs in a northwest direction through portions of the project site. Lost Canyon Road is presently an at-grade crossing with Oak Spring Canyon Creek and is flooded during major rain events. The western third of the project site drains into Oak Spring Canyon Creek, which is ephemeral, mostly undeveloped, and outlets into the Santa Clara River directly northwest of the project site. Just south of the Santa Clara River, the Oak Spring Canyon Creek runs beneath the Metro rail line. This undercrossing is also Oak Spring Canyon Road. Upstream of the project site, Oak Spring Canyon Creek runs through Sand Canyon Golf Course. Portions of Oak Spring Canyon Creek through the golf course have been stabilized to protect against erosion and flooding. A small box culvert exists on the boundary between the project site and the golf course and acts as an overpass for Oak Spring Canyon Road at this location. The eastern two-thirds of the project site drains northerly under the Metro rail line via three existing pipe culverts. From the pipe culverts, water sheet flows to the Santa Clara River. The project includes four drainage management areas that correspond with the existing drainage outfalls.

As discussed in Impact HYD-1, based on the calculations provided in the Hydrology and LID Reports, implementation of the project would result in similar overall permeability of the project site compared to existing conditions through the implementation of the two infiltration water quality basins and multiple debris basins, which would provide additional groundwater recharge offsetting the increase in total impervious surfaces (Alliance 2024, 2025). The grading and drainage plan for the project site has been designed to use the existing topography of the project site and maintain historic drainage patterns to the maximum extent feasible, with integration of additional water quality and drainage facilities to meet or exceed applicable LARWQCB Post-Construction Stormwater Management Requirements. The project includes LID BMPs, which would increase groundwater infiltration and reduce runoff at the project site. An underground infiltration unit would be used where ground water is low for treatment of stormwater runoff near the intersection of J Street and Oak Spring Canyon Road. Biofiltration via engineered media, gravel, and underdrains would be used to capture stormwater at two water quality basins. These basins have been designed to accommodate the 85th percentile volume of stormflows. The basins would be located at the northern end of the project site, north of the Metro railroad. The proposed biofiltration basins and underground infiltration units would be used to treat all water quality flows prior to discharge into the ultimate drainage outlet, the Santa Clara River.

Hydraulic modeling indicates that the three existing four-foot-diameter culvert barrels at Oak Spring Canyon Road near the southern end of the project site are substantially undersized and overtop during storm events with a recurrence interval of approximately 10 years or greater (PACE 2025; see EIR Appendix D). As a result, the natural channel immediately downstream of the culvert outlet has experienced notable erosion. The project would include replacing the existing culvert at Oak Spring Canyon Road with a larger-capacity culvert that would extend farther downstream, consisting of three 10-foot-diameter barrels. The culvert replacement would restore adequate hydraulic conveyance beneath Oak Spring Canyon Road and improve the channel's ability to transport sediment. The upstream segment of the proposed culvert would be approximately 230 feet in length. Additionally, the project includes the construction of a new roadway, J Street, to provide access to the proposed residential development area. The alignment would cross Oak Spring Canyon Creek approximately 250 feet downstream of the existing Oak Spring Canyon Road culvert. As such, a new culvert would also be installed beneath J Street and Oak Spring Canyon Road, north and east of the intersection of the two roads. The new culvert would replace the existing culvert beneath Oak Spring Canyon Road, and would consist of a broken back design, which includes three 10 × 10–foot box culverts and riprap elements (PACE 2026; see EIR Appendix E). As a result of these improvements, the flow patterns would remain mostly unchanged as compared to existing conditions (PACE 2025; see EIR Appendix D).

The flow path and alignment of Oak Spring Canyon Creek near the northern end of the project site would remain unchanged and continue to run northwesterly and out through the undercrossing of the Metro rail line. The adjacent Robison Ranch property would continue to be the upstream source of flow for Oak Spring Canyon Creek and the Santa Clara River would continue to be the outlet. Runoff from the eastern two-thirds of the project site would be treated and then conveyed north through the new Metro rail line undercrossing and the three existing pipe culverts on eastern portion of the project site. The existing culverts would also continue to handle offsite flow from the undeveloped property to the east. According to the Hydrology Report, under existing conditions, the project site results in a 50-year runoff volume of 73.23-acre feet. In comparison, the project site with development of the project would only result in approximately 74.56-acre feet of 50-year runoff volume. Additionally, the proposed water quality and debris basins would reduce the peak flowrate of runoff from the project site by from approximately 658.1 to 545.1 cubic feet per second (Alliance 2024).

The existing storm drainage infrastructure serving the project site has been designed by the City to carry stormwater flows per the County's Hydrology Manual and is designed to carry the 50-year storm event. No known deficiencies exist in the vicinity of the project site. Furthermore, the project's drainage plan would increase the water quality of discharged stormwater flows and reduce the peak discharge flow rates

out of the project site, thereby reducing the impact to downstream conveyance systems. In addition, the design of the proposed storm drainage infrastructure would be confirmed and validated through the design review process at the City prior to issuing grading and building permits, consistent with current City of Santa Clarita Engineering Services Division procedures and requirements. This division enforces City codes for grading and land subdivision. Staff reviews technical reports, including hydrology studies, to ensure compliance with design standards and public safety. Therefore, the project would be designed to capture, filter, and reduce the volume of any additional runoff from the project site's impervious surfaces in a way that mimics, as well as improves, existing drainage patterns. With adequate implementation and maintenance of SWPPPs, erosion and stormwater control plans, LID BMPs, and drainage plans that would be required for the project site, the project would not substantially alter the drainage pattern beyond the construction footprint and would not alter off-site drainage patterns. Operational impacts would be *less than significant*, and mitigation is not necessary.

Impact HYD-3
The project would not substantially alter the existing drainage pattern of the project site or increase surface water runoff in a manner that would result in substantial erosion or siltation, flooding, or an exceedance of stormwater drainage systems.
Mitigation Measures
Mitigation is not necessary. Impact HYD-3 would be less than significant.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The Pacific Ocean is located over 25 miles southwest of the project site; consequently, there is no potential for the project site to be impacted by a tsunami as tsunamis typically only reach up to a few miles inland. In addition, the project site is not mapped as a tsunami inundation area (CDOC 2025). No bodies of standing water are present on the project site or in the surrounding vicinity, and there is no risk for seiche in or around the project site. Additionally, as discussed above, the project would include new structural BMPs throughout the project site, which would reduce the amount of pollutants entering the stormwater system and groundwater.

According to the FEMA FIRM No. 06037C0845G, dated June 2, 2021, a majority of the project site is within FEMA Flood Zone X, which is defined as "areas determined to be outside the 0.2% annual chance floodplain" or not within a 100-year flood zone. However, several areas within the project site have been mapped as FEMA Flood Zone A and Zone AE, which are defined as "areas with a 1% annual chance of flooding" (FEMA 2021). Although a portion of the project site is located within a FEMA Zone A and Zone AE floodplains, the project would be designed to eliminate floodplain hazards within the proposed development footprint and would avoid alteration of the designated floodplains areas altogether. Based on the results of the Hydrology Report, the project would not include any new development within the FEMA Zone A or Zone AE floodplains within the project site(Alliance 2024).

Accordingly, the project site is not located within a flood hazard zone or tsunami zone, and the risk of seiche is low, and there would be no release of pollutants due to project inundation by these hazards during project construction and operation. Impacts would be *less than significant*, and mitigation is not necessary.

Impact HYD-4
The project would not risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.
Mitigation Measures
Mitigation is not necessary. Impact HYD-4 would be less than significant.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

The project site is underlain by the Santa Clara River watershed. As noted in Impact HYD-2, implementation of the project would not result in substantial adverse effects on local groundwater supplies or groundwater recharge during project construction and operation.

Pursuant to CWA § 303(d), States are required to identify waterbodies that do not meet their water quality standards. Biennially, the LARWQCB prepares a list of impaired waterbodies in the region, referred to as the CWA § 303(d) list. The CWA § 303(d) list outlines the impaired waterbody and the specific pollutant(s) for which it is impaired. All waterbodies on the CWA § 303(d) list are subject to the development of a Total Maximum Daily Load (TMDL). The project site is located within the Santa Clara River watershed. Constituents of concern listed for the Santa Clara River watershed include Nitrogen, Chloride, Bacteria, and phosphorus (State Water Board 2022).

The County of Los Angeles, the City of Santa Clarita, and all other cities in the regional watershed are responsible for the implementation of watershed improvement plans to improve water quality and assist in meeting the TMDL thresholds. The objective of the IRWMP for the Upper Santa Clara River is to determine the BMPs that will achieve required pollutant reductions while also providing multiple benefits to the community and leveraging sustainable green infrastructure practices. Compliance with the NPDES program would ensure that stormwater pollutants do not substantially degrade water quality during project construction and operation.

Potential pollutants generated by the project would be those typical of residential-related land uses and may include sediment, nutrients, pesticides, metals, pathogens, and oil and grease. The implementation of BMPs required by LID regulations would target these pollutants to minimize pollutant loads in stormwater runoff. Implementation of the project's LID BMPs (i.e., biofiltration basins and underground infiltration units) would result in improved surface water runoff quality as compared to existing conditions. Therefore, the project would not introduce new pollutants or an increase in pollutants that would conflict with or obstruct any water quality control plans for the Santa Clara River watershed.

With compliance with existing applicable regulatory requirements and implementation of LID BMPs, the project would not conflict with or obstruct implementation of a water quality control plan or a sustainable groundwater management plan. Construction and operational impacts would be *less than significant*, and mitigation is not necessary.

Impact HYD-5
The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.
Mitigation Measures
Mitigation is not necessary. Impact HYD-5 would be less than significant.

4.10.6 Cumulative Impacts

The project site lies above the Santa Clara River Valley East Subbasin within the Santa Clara River Valley Groundwater Basin of the South Coast Hydrologic Region. The geographic scope considered for cumulative impacts related to hydrology and water quality is the Santa Clara River Watershed and East Subbasin, respectively. As outlined in Chapter 3, *Environmental Setting*, there are nine related projects in the vicinity proposing various degrees of development, redevelopment, or modifications to existing land uses or structures. These projects mainly involve residential, assisted living/nursing home, commercial, hotel, industrial, and office uses.

SURFACE WATER AND GROUNDWATER QUALITY

Urban development sites often generate stormwater runoff that can introduce pollutants into both stormwater and groundwater systems. The related projects could contribute pollutants such as sediment, nutrients, metals, synthetic organics, and oil and grease. Like the project, these related projects within the City and Santa Clara River Watershed must comply with NPDES permit requirements, including the implementation of a SWPPP for projects disturbing more than one acre and an LID Plan and associated BMPs in their design. Additionally, related projects in the City are required to include stormwater treatment features to meet the City's Stormwater and Urban Runoff Pollution Control standards. With compliance to all applicable water quality regulations, the cumulative impacts of these projects on surface water and groundwater quality during both construction and operation would be less than significant. As a result, the project's contribution to these impacts would not be cumulatively considerable.

SURFACE WATER AND GROUNDWATER HYDROLOGY

In accordance with City requirements, future developments and related projects must implement BMPs to manage stormwater under LID and NPDES guidelines. Los Angeles County Public Works and/or the City will review each future development individually to ensure adequate stormwater drainage infrastructure is in place to handle runoff. The project would comply with the NPDES Construction General Permit by implementing a project-specific SWPPP during construction. During operation, the project would manage and treat stormwater on-site using biofiltration basins and underground infiltration chambers before releasing it to the Santa Clara River, ensuring that runoff rates and volumes do not significantly impact Santa Clara River, Oak Spring Canyon Creek, or groundwater. Therefore, the project's contribution to hydrology impacts on surface water and groundwater would not be cumulatively considerable.

FLOOD HAZARDS

Some portions of the project site fall within FEMA Zone A and Zone AE floodplains, and related projects in the City and the wider Santa Clara River Watershed may also be located in FEMA-designated floodplains. However, both the project and related developments will be designed to mitigate floodplain hazards within their respective footprints. Like the project, related projects will implement procedural and structural BMPs for hazardous materials management during construction and operation to prevent releases into stormwater. If related projects are in flood hazard zones, design features such as

infiltration/detention basins and underground infiltration chambers—similar to those for the project—will be incorporated to ensure impacts to flood rates and flows remain less than significant. Therefore, the project's contribution to flood hazard impacts would not be cumulatively considerable.

Impact HYD-6 (Cumulative Impacts)
The project would not result in cumulatively considerable impacts related to hydrology and water quality.
Mitigation Measures
Mitigation is not necessary. Impact HYD-6 would be less than significant.

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4.11 LAND USE AND PLANNING

This section of the EIR provides the existing land use and planning context for the project site and provides an analysis of the potential environmental impacts related to land use and planning that would result from implementation of the project. This section also includes a project consistency analysis with applicable land use policies, as well as an analysis of the potential impacts that may result from conflicts with applicable land use policies. The project is subject to the regulatory controls of the City, and this section includes consideration of related environmental policies within the *City of Santa Clarita General Plan* (City of Santa Clarita 2011a).

4.11.1 Existing Conditions

4.11.1.1 On-Site Land Uses

The project site is in the eastern portion of Santa Clarita, generally undeveloped, and accessible via Lost Canyon Road and Oak Spring Canyon Road. The project site consists of approximately 193.8 acres of vacant land that is separated into two parts by the Metro railroad line, which runs east–west just south of the northern portion of the project site. The associated infrastructure improvements would be located within existing public right-of-way (ROW) and undeveloped areas of the project site. The unpaved Oak Spring Canyon Road borders the southern edge of the project site. Ruderal vegetation, grass, brush, and trees cover the majority of the project site. Several dirt paths, a former railroad ROW, and roadways travel the project site and are primarily used by off-road vehicles, horses, bicycles, and pedestrians.

As shown below in Figure 4.11-1, 106.4 acres of the 193.8-acre project site have General Plan land use and zoning designations of Urban Residential 1 (UR1), and the remaining 87.4 acres have General Plan land use and zoning designations of Non-Urban 5 (NU5). A portion of the off-site associated infrastructure improvements, consisting of the railroad undercrossing and the improvements and extension of Lost Canyon Road, would be located within an area with General Plan land use and zoning designations of NU5, while the development of the proposed J Street would be located within an area with General Plan land use and zoning designations of Open Space (OS). The infrastructure improvements within the existing ROW on Lost Canyon Road, including the expansion of local utilities infrastructure (water, sewer, and storm drain lines) and roadway improvements have no General Plan land use or zoning designations; however, the southern portion of the project area is located within the City's Planned Development (PD) Overlay Zone. The project site is also located within the City's Significant Ecological Area (SEA) Overlay Zone and includes biological resources, as described in Section 4.4, *Biological Resources*, that are protected under Santa Clarita Municipal Code (SCMC) § 17.38.080 (SEA—Significant Ecological Area Overlay Zone).

4.11.1.2 Surrounding Land Uses

The project site is located approximately 26 miles north of downtown Los Angeles and is locally accessible via Lost Canyon Road and Oak Spring Canyon Road. Regionally, the project site is accessible from State Route (SR-) 14 via Sand Canyon Road, west of the project site. The project site is found on the Mint Canyon, California, U.S. Geological Survey (USGS) 7.5-minute quadrangle in Sections 13, 14, 23, and 24; Township 4 North; Range 15 West. The General Plan land use and zoning designations surrounding the project site include OS to the north, NU5 and OS to the south, NU5 to the east, and UR1 to the east. The project site is bordered by the Santa Clara River to the north (and SR-14 farther north), Sand Canyon Country Club to the south, undeveloped land to the east, and existing single-family development to the west.

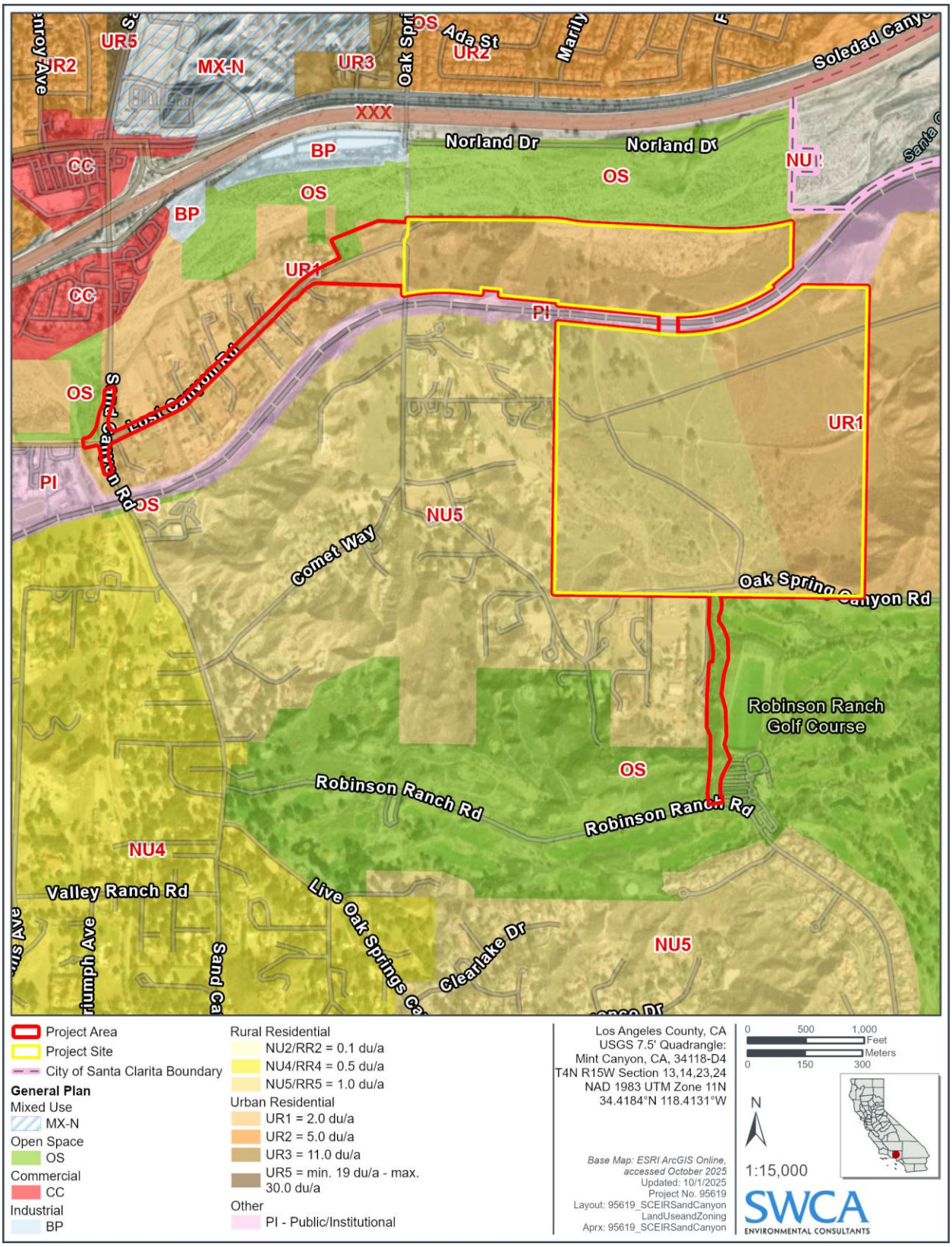


Figure 4.11-1. General Plan Land Use and Zoning Designations.

4.11.2 Regulatory and Planning Framework

4.11.2.1 Federal

There are no Federal land use regulations applicable to the project.

4.11.2.2 State

SENATE BILL 330

Senate Bill (SB) 330, also known as the Housing Crisis Act of 2019, permits an applicant to submit a preliminary application for a housing development project. The preliminary application allows an applicant to seek vesting rights for a qualified residential project proposal.

STATE DENSITY BONUS LAW

Government Code §§ 65915–65918 codify California's Density Bonus Law. The proposed 100% senior living project is eligible for a 20% density bonus beyond the maximum density permitted by local zoning regulations. The State Density Bonus Law further permits the applicant to request waivers or reductions in development standards and reductions in parking requirements.

4.11.2.3 Regional

2024-2050 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

In April 2024, the Southern California Association of Governments (SCAG) adopted the *Connect SoCal: A Plan for Navigating to a Brighter Future*—the 2024-2050 Regional Transportation Plan/Sustainable Communities (RTP/SCS) (SCAG 2024). Similar to the 2020-2045 RTP/SCS, the 2024-2050 RTP/SCS is a long-range transportation plan that provides a vision for regional transportation investments over a period of 20 years or more. The SCS demonstrates the integration of land use, transportation strategies, and transportation investments within the RTP. Although the 2024-2050 RTP/SCS was adopted by the SCAG, the 2020-2045 RTP/SCS forecasted population, housing, and employment growth data were used to characterize regional growth in the South Coast Air Quality Management District's (SCAQMD's) *2022 Air Quality Management Plan* (SCAQMD 2022).

4.11.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan* establishes goals and policies related to land use, transportation, population growth and distribution, development, open space, resource preservation and utilization, air and water quality, noise impacts, public safety, infrastructure, and other related physical, social, and economic factors. In addition to serving as a guide for local decision-making, the General Plan establishes a clear set of development guidelines for citizens, developers, neighboring jurisdictions, and agencies, and provides the community with an opportunity to participate in the planning process. The purpose of the General Plan is to comply with State requirements and to provide the City with a comprehensive, long-range policy guideline for future development (City of Santa Clarita 2011a).

The following elements of the General Plan are applicable to the project, and Table 4.1-1 provides goals, policies, and objectives within the General Plan that are relevant to the project.

Land Use Element

The *City of Santa Clarita General Plan Land Use Element* is the City's and County of Los Angeles's long-term blueprint for development of property to meet the Santa Clarita Valley's future needs for new housing, retail, office, industrial, parks, open space, and other uses. The Land Use Element contains a Land Use Map and goals, policies, and programs designed to address the development issues facing the community through a variety of land use planning strategies, along with the type, intensity, quality, and location of future uses within the planning area. The Land Use Element addresses existing development patterns in the Santa Clarita Valley planning area and establishes a framework for focusing future growth in a logical and orderly manner (City of Santa Clarita 2011b).

Circulation Element

The *City of Santa Clarita General Plan Circulation Element* plans for the continued development of efficient, cost-effective, and comprehensive transportation systems that are consistent with regional plans, local needs, and the valley's community character. The Circulation Element complements and supports the Land Use Element, insofar as a cohesive land use pattern cannot be achieved without adequate circulation. The Circulation Element identifies and promotes a variety of techniques for improving mobility that go beyond planning for the construction of new streets and highways. These techniques include development of alternative travel modes and support facilities, increased efficiency and capacity of existing systems through management strategies, and coordination of land use planning with transportation planning by promoting concentrated, mixed-use development near transit facilities (City of Santa Clarita 2011c).

Noise Element

The *City of Santa Clarita General Plan Noise Element* is a comprehensive program for including noise management in the planning process, providing a tool for planners to use in achieving and maintaining land uses that are compatible with existing and future environmental noise levels. The Noise Element identifies current noise conditions within the planning area and projects future noise impacts resulting from continued growth allowed by the Land Use Element. The Noise Element identifies noise-sensitive land uses and noise sources and defines areas of noise impact for the purpose of developing programs to ensure that residents in the Santa Clarita Valley will be protected from excessive noise intrusion (City of Santa Clarita 2011d).

Conservation and Open Space Element

The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the wide range of community benefits derived from open space. In addition to providing land for park and recreational facilities, open spaces provide the benefits of wildlife habitat preservation, scenic views, water recharge and watershed protection, enhancement of air quality, protection of cultural and historical resources, moderation of microclimates, and enhanced property values (City of Santa Clarita 2011e).

Safety Element

The *City of Santa Clarita General Plan Safety Element* describes natural and human-made hazards that may affect existing and future residents and provides guidelines for protecting public health and safety. It identifies present conditions and public concerns, and establishes policies and standards designed to minimize risks from hazards to acceptable levels. In addition, the Safety Element informs citizens about

hazardous conditions in specific areas and assists policy makers in making land use and development decisions (City of Santa Clarita 2022).

Table 4.11-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Land Use Element	
Goal LU 1	An interconnected Valley of Villages providing diverse lifestyles, surrounded by a greenbelt of natural open space.
Objective LU 1.1	Maintain an urban form for the Santa Clarita Valley that preserves an open space greenbelt around the developed portions of the Valley, protects significant resources from development, and directs growth to urbanized areas served with infrastructure.
Policy LU 1.1.3	Discourage urban sprawl into rural areas by limiting non-contiguous, “leap-frog” development outside of areas designated for urban use.
Policy LU 1.1.4	Preserve community character by maintaining natural features that act as natural boundaries between developed areas, including significant ridgelines, canyons, rivers and drainage courses, riparian areas, topographical features, habitat preserves, or other similar features, where appropriate.
Policy LU 1.1.5	Increase infill development and re-use of underutilized sites within and adjacent to developed urban areas to achieve maximum benefit from existing infrastructure and minimize loss of open space, through redesignation of vacant sites for higher density and mixed use, where appropriate.
Objective LU 1.2	Maintain the distinctive community character of villages and neighborhoods throughout the planning area by establishing uses, densities, and design guidelines appropriate to the particular needs and goals of each area.
Policy LU 1.2.5	In Sand Canyon, ensure compatibility of development with existing rural, equestrian lots and the adjacent National Forest land; provide additional recreational trail links; minimize impacts to the Santa Clara River from incompatible development; and maintain community character in accordance with the City’s Sand Canyon Special Standards District.
Objective LU 1.3	Plan for density and intensity of development that respects and is reflective of the natural terrain.
Policy LU 1.3.2	Substantially retain the integrity and natural grade elevations of significant natural ridgelines and prominent landforms that form the Valley's skyline backdrop.
Policy LU 1.3.6	Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.
Goal LU 2	A mix of land uses to accommodate growth, supported by adequate resources and maintaining community assets.
Objective LU 2.2	Protect significant community resources from encroachment by incompatible uses, where feasible and appropriate.
Policy LU 2.2.3	Consistent with adopted plans, ensure that adequate open space is set aside and protected from development throughout the planning area in order to provide the benefits of watershed management, habitat preservation and connectivity, and recreational opportunities.
Objective LU 2.3	Increase mixed-use development where appropriate to create more livable neighborhoods, walkable business districts, and to reduce vehicle trips, while ensuring land use compatibility, through mixed-use zoning.
Policy LU 2.3.4	Adequate public spaces and amenities shall be provided in a mixed-use development to support both commercial and residential uses, including but not limited to plazas, landscaped walkways, village greens, and greenbelts.
Objective LU 3.1	Provide for a diversity of housing types available to provide safe and suitable homes for all economic levels, household sizes, age groups and special needs groups within the community.
Policy LU 3.1.6	Promote development of housing suitable to residents with special needs, including but not limited to senior citizens and persons with disabilities.

Goal/Objective/ Policy	Description
Objective LU 3.2	Promote walkable neighborhoods that provide safe access to community services and essential services.
Policy LU 3.2.2	In planning residential neighborhoods, include pedestrian linkages, landscaped parkways with sidewalks, and separated trails for pedestrians and bicycles, where appropriate and feasible.
Objective LU 3.3	Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.
Policy LU 3.3.1	Identify areas subject to hazards from seismic activity, unstable soils, excessive noise, unhealthful air quality, or flooding, and avoid designating residential uses in these areas unless adequately mitigated.
Policy LU 3.3.2	In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
Policy LU 3.3.4	Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.
Policy LU 3.3.5	Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.
Objective LU 3.4	Encourage creation of pleasant neighborhoods that provide a high quality of life for residents.
Policy LU 3.4.1	Promote the inclusion of green spaces, neighborhood parks, and other gathering places that allow neighbors to meet one another and encourage “eyes on the street” for safety purposes.
Policy LU 3.4.2	Ensure provision of street trees in urban residential areas where appropriate, to provide shade, comfort, and aesthetic enhancement.
Policy LU 3.4.3	Provide appropriate levels of code enforcement to ensure maintenance of neighborhoods in a clean, healthy, and safe condition.
Policy LU 3.4.4	Within higher density housing developments, ensure provision of adequate recreational and open space amenities to ensure a high quality living environment.
Circulation Element	
Goal C 1	An inter-connected network of circulation facilities that integrates all travel modes, provides viable alternatives to automobile use, and conforms with regional plans.
Objective C 1.1	Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.
Policy C 1.1.1	Reduce dependence on the automobile, particularly single occupancy vehicle use, by providing safe and convenient access to transit, bikeways, and walkways.
Policy C 1.1.2	Promote expansion of alternative transportation options to increase accessibility to all demographic and economic groups throughout the community, including mobility-impaired persons, senior citizens, low-income persons, and youth.
Policy C 1.1.4	Promote public health through provision of safe, pleasant, and accessible walkways, bikeways, and multi-purpose trail systems for residents.
Policy C 1.1.13	Design new activity centers and improve existing activity centers to prioritize walking, bicycling and circulator transit for internal circulation of person-travel.
Objective C 1.2	Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.
Policy C 1.2.2	Create walkable communities, with paseos and walkways connecting residential neighborhoods to multi-modal transportation services such as bus stops and rail stations.
Policy C 1.2.12	Balance the anticipated volume of people and goods movement with the need to maintain a walkable and bicycle friendly environment.
Goal C 2	A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.

Goal/Objective/ Policy	Description
Objective C 2.1	Implement the Circulation Plan for streets and highways to meet existing and future travel demands for mobility, access, connectivity, and capacity.
Policy C 2.1.2	Enhance connectivity of the roadway network to the extent feasible given the constraints of topography, existing development patterns, and environmental resources, by constructing grade separations and bridges; connecting discontinuous streets; extending secondary access into areas where needed; prohibiting gates on public streets; and other improvements as deemed appropriate based on traffic analysis.
Objective C 2.5	Consider the needs for emergency access in transportation planning.
Policy C 2.5.2	Ensure that new development is provided with adequate emergency and/or secondary access for purposes of evacuation and emergency response; require two points of ingress and egress for every subdivision or phase thereof, except as otherwise approved for small subdivisions where physical constraints preclude a second access point.
Noise Element	
Goal N 1	A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.
Objective N 1.1	Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.
Policy N 1.1.1	Use the Noise and Land Use Compatibility Guidelines, which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.
Policy N 1.1.2	Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with state and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.
Policy N 1.1.3	Include consideration of potential noise impacts in land use planning and development review decisions.
Policy N 1.1.4	Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.
Policy N 1.1.5	Monitor and update data and information regarding current and projected noise levels in the planning area.
Policy N 1.1.6	Provide development review comments on projects proposed by other agencies and special districts that may generate noise impacts affecting land uses within the Santa Clarita Valley, including any freeway and high-speed rail projects.
Goal N 3	Protect residential neighborhoods from excessive noise.
Objective N 3.1	Prevent and mitigate significant noise levels in residential neighborhoods.
Policy N 3.1.1	Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.
Policy N 3.1.2	Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.
Policy N 3.1.3	Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.
Policy N 3.1.4	Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences, and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

Goal/Objective/ Policy	Description
Policy N 3.1.5	Require that developers of private schools, childcare centers, senior housing, and other noise sensitive uses in areas where the ambient noise level exceeds 65 dBA (day), provide mitigation measures for these uses to reduce interior noise to acceptable levels.
Policy N 3.1.7	Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.
Policy N 3.1.8	As a condition of issuing permits for special events, require event promoters to mitigate noise impacts to adjacent sensitive uses through limiting hours of operation and other means as appropriate, which may include notification to affected residents.
Policy N 3.1.9	Implement a buyer and renter notification program for new residential developments where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following area: • Within 1,000 feet of the railroad, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time.
Conservation and Open Space Element	
Goal CO.1	A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.
Goal CO 2	Conserve the Santa Clarita Valley's hillsides, canyons, ridgelines, soils, and minerals, which provide the physical setting for the natural and built environments.
Goal CO 3	Conservation of biological resources and ecosystems, including sensitive habitats and species.
Goal CO 4	An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.
Goal CO 7	Clean air to protect human health and support healthy ecosystems.
Goal CO 8	Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
Goal CO 9	Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents
Goal CO 10	Preservation of open space to meet the community's multiple objectives for resource preservation.
Safety Element	
Goal S 1	Protection of public safety and property from hazardous geological conditions, including seismic rupture and ground shaking, soil instability, and related hazards.
Goal S 2	Protection of public safety and property from unreasonable risks due to flooding.
Goal S 3	Protection of public safety infrastructure and property from fires.
Goal S 4	Protection of public safety and property from hazardous materials.
Goal S 5	Protection of public safety through the provision of law enforcement services and crime prevention strategies.
Goal S 7	Protection of the public through planning for disaster response and recovery, in order to minimize damage from emergency incidents or terrorist activities.

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Development of the project is subject to the SCMC, which establishes requirements for the project site with respect to permitted uses, building height, density, yard setbacks, and parking. The following sections of the SCMC are applicable to the project.

Urban Residential 1 (UR1) Zone

Under SCMC § 17.33.010 (Urban Residential 1 (UR1) Zone), the UR1 Zone is intended to accommodate residential neighborhoods at densities that require urban services. The zone primarily allows single-family homes and other residential uses at a maximum density of two units per acre. Development within the UR1 Zone is subject to standards regulating building height, setbacks, open space, and parking to ensure compatibility with surrounding development. The UR1 Zone typically permits residential densities of approximately up to two dwelling units per acre.

Non-Urban 5 (NU5) Zone

Under SCMC § 17.32.050 (Non-Urban 5 (NU5) Zone), the NU5 Zone provides for the maintenance and expansion of rural communities, distinguished with large lots, generally one acre or larger, as well as equestrian and agricultural uses. The zone primarily allows single-family homes at a maximum density of one unit per acre, as well as agricultural, equestrian, private recreational, and public/institutional uses serving the local area.

4.11.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to land use and planning if the project would:

a) Physically divide an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Each of these thresholds is discussed under Section 4.11.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.11.4 Impact Assessment Methodology

Sources used in the assessment of land use and planning impacts include the General Plan, SCMC, and SCAG 2020-2045 RTP/SCS. The project's potential consistency with relevant plans and policies is evaluated below. Based on CEQA Guidelines, inconsistency with an adopted policy does not constitute an impact unless it may cause either a direct or indirect physical change in the environment, or a reasonably foreseeable physical change in the environment.

4.11.5 Project-Specific Impacts and Mitigation Measures

a) Would the project physically divide an established community?

CONSTRUCTION

The project site, consisting of the residential development area, public and private trails, and recreation area, would be located on 193.8 acres of vacant, undeveloped land. The project area consists of approximately 208 acres, which includes the project site and the proposed off-site improvements to and the extension of Lost Canyon Road, as well as the development of the proposed J Street. Within the project site, 106.4 acres have General Plan land use and zoning designations of UR1, and the remaining

87.4 acres are designated as NU5. The associated infrastructure improvements would be located within an area zoned as OS to the south of the project site, an area zoned as NU5 to the west of the project site, and within public ROWs throughout the project area, which have no zoning designations.

The project site's residential land use and zoning designations within the General Plan indicates that future residential development of the project site was planned for and has been taken into consideration in planning other developments and infrastructure in the area. Construction activities would utilize existing roadways and would extend Lost Canyon Road and construct J Street. These construction activities would not divide any existing communities. In addition, future development of residential uses on-site would serve City residents and the general region. The project would be consistent with the project site's OS zoning, as the project would include approximately 73.8 acres of undisturbed open space on-site.

Construction of the project would occur within the boundaries of the project area, which would not affect the continued functioning of, access to, or otherwise obstruct aspects of the physical linkages between surrounding land uses and this part of the community. Construction of the project would not involve features such as a highway or an easement through an established neighborhood, which has the potential to divide an established community. Construction of the project would not divide an established community. *No impact* would occur.

OPERATION

Following construction activities, implementation of the project would result in 341 dwelling units on-site, intentionally designed to be consistent with the scale and diversity of the existing built environment and surrounding areas, and in compliance with the SCMC. The proposed pedestrian paths and trails would connect project site features and increase walkability and accessibility throughout the project site. Further, the proposed development of passive recreation areas on-site would occur in existing areas intended for community gathering purposes and would not introduce features that would divide these established uses.

In addition, project operation would not require the permanent closure of any streets surrounding the project site that currently provide access to surrounding uses. The northern and southern portions of the project site are currently separated by the existing Metro railroad line. The project would include a railroad undercrossing to provide access between the northern and southern portions of the project site, increasing local connectivity. Therefore, the implementation of the project would serve to physically connect future communities.

The project would have gated entries on proposed A Street (just south of the proposed railroad undercrossing) and proposed J Street (north of the J Street intersection with Oak Spring Canyon Road). Consequently, public access to the project site would be restricted behind the gated entries on A and J Streets. However, the proposed extension of Lost Canyon Road and portions of J Street outside of the project site would be open for public vehicular access, and no existing roadways or access would be eliminated or gated. This fencing would provide a safety feature for the proposed residents and would not be considered an element that would divide an established community.

Given the project includes the construction of single-family residences and associated facilities within the existing boundary of the project site and would not introduce features that would implement barriers or divide the established uses within the project site or within the greater area, the project operation would not physically divide an established community; therefore, *no impacts* would occur.

Impact LUP-1
The project would not include features that would physically divide an established community.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

b) Would the project cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project's consistency with applicable land use plans, policies, and regulations is analyzed below. The consistency analysis considers the holistic impacts associated with project implementation and does not provide separate construction and operation analyses, as most policies broadly consider the appropriateness of land use types.

STATE DENSITY BONUS LAW

The base UR1 and NU5 zoning, as reduced by the SCMC's Hillside Development regulations, permits 283.4 dwelling units; the State Density Bonus Law requires rounding up of density calculations. Therefore, the allowable base density on site is 284 units, with the 20 percent density bonus allowing an additional 57 units, for a total of 341 units.

2020-2045 RTP/SCS

The project includes the construction of 341 single-family senior housing dwelling units with the potential to house approximately 614 people (based on an average household size of 1.8 persons per dwelling unit). According to the SCAG 2020-2045 RTP/SCS, the project's estimated 614 new residents would fall within SCAG's projection of 40,600 new City residents through 2045 (SCAG 2020). The project would not result in near-term increases in population that would exceed the year 2045 population projections. The additional population growth attributable to the project, in combination with the existing population of the City, falls within SCAG's RTP/SCS growth projections for the City. The project does not require a General Plan Amendment because it is consistent with the General Plan land use and zoning designations for the project site and is consistent with the SCMC; thus, the project is consistent with the SCAG 2020-2045 RTP/SCS.

CITY OF SANTA CLARITA GENERAL PLAN

As shown in Table 4.11-2, the project would be consistent with the applicable goals, objectives, and policies identified in the General Plan, including the Land Use, Circulation, Noise, Conservation and Open Space, and Safety Elements (listed in detail in Table 4.11-1).

Table 4.11-2. City of Santa Clarita General Plan Consistency Analysis

Goal/Objective/ Policy No.	Project Consistency Analysis
Land Use Element	
Goal LU 1 Objective LU 1.1 Policy LU 1.1.3 Policy LU 1.1.4 Policy LU 1.1.5	**Consistent.** The project involves the development of 341 age-restricted, detached single-family homes; an approximately 3.1-acre recreation center; public and private hiking trails; a trailhead/emergency staging area; and associated infrastructure improvements. The project would include the preservation of open space by encouraging the use of public and private hiking trails. The project site is designated for UR1 and NU5 uses; therefore, implementation of the project would not result in urban sprawl into rural areas. The project would include approximately 73.8 acres of undisturbed open space on-site. The undisturbed open space lots mostly border existing open space outside the project site boundaries and would preserve the prominent portion of a significant ridgeline (in the southeasternmost portion of the project site), conserve habitat areas, and provide a buffer and transition to the proposed developed uses at the project site. The project would increase infill development of underutilized vacant lots with the construction of single-family homes and associated infrastructure improvements.
Objective LU 1.2 Policy LU 1.2.5	**Consistent.** The project site is designated for UR1 and NU5 uses; therefore, implementation of the project would be consistent with the established use, density, and design guidelines of the project area. The project would provide additional recreational trail links by establishing public and private hiking trails. The project area is bordered by the Santa Clara River to the north, Sand Canyon Country Club to the south, undeveloped land to the east, and existing single-family development to the west; therefore, the project would be compatible with existing surrounding development. As discussed in Section 4.4, *Biological Resources*, the project would not result in impacts to the Santa Clara River from incompatible development. Any potentially significant impact related to the Santa Clara River would be adequately mitigated.
Objective LU 1.3 Policy LU 1.3.2 Policy LU 1.3.6	**Consistent.** The project would require State Density Bonus waivers in order to develop the dwelling units under the existing General Plan land use and zoning designations. However, no General Plan Amendment or zone change is required. As mentioned above, undisturbed open space lots mostly border existing open space outside of the project site boundaries and would preserve the prominent portion of a significant ridgeline (in the southeasternmost portion of the project site), conserve habitat areas, and provide a buffer and transition to the proposed developed uses at the project site. As discussed in Section 4.4, *Biological Resources*, the project would not result in impacts to riparian areas. Any potentially significant impact related to riparian areas would be adequately mitigated.
Goal LU 2 Objective LU 2.2 Policy LU 2.2.3	**Consistent.** The project would provide additional community resources by developing a variety of uses, including single-family homes, a recreation center, public and private hiking trails, and a trailhead/emergency staging area. The project would include approximately 73.8 acres of undisturbed open space on-site to conserve habitat areas and provide a buffer and transition to the proposed developed uses at the project site. Additionally, the project would provide additional community resources by providing new sources of lighting and infrastructure improvements, including curb and gutter, storm drain, and water and sewer connections to existing facilities within the local vicinity.
Objective LU 2.3 Policy LU 2.3.4	**Consistent.** The project would create a more livable neighborhood by developing residential uses with public spaces and amenities. This variety of uses, including single-family homes, a recreation center, public and private hiking trails, a trailhead/emergency staging area, and associated infrastructure improvements, will ensure land use compatibility with the surrounding existing uses. Additionally, the project would improve circulation by developing a railroad undercrossing, a bridge connecting the project to Lost Canyon Road, and J Street, which connects to Robinson Ranch Road.
Objective LU 3.1 Policy LU 3.1.6	**Consistent.** The project includes the development of 341 age-restricted, detached single-family homes, the entirety of which will be reserved for age-restricted senior citizens (55+).
Objective LU 3.2 Policy LU 3.2.2	**Consistent.** The project would include the development of a trail network, which would include both private and public trails within the 193.8-acre project site, as well as new public trails elsewhere throughout the project area. The new public trails would provide connections to existing and planned trails in the vicinity of the project site and would fulfill the planned expansion of the Sand Canyon Road and Spring Canyon Road Trails as included in the City's Trail Plan. The proposed new public Lost Canyon Road Trail is anticipated to be used by pedestrians, equestrians, and bicyclists. Additionally, pedestrian sidewalks are proposed throughout the project site.

Goal/Objective/ Policy No.	Project Consistency Analysis
Objective LU 3.3 Policy LU 3.3.1 Policy LU 3.3.2 Policy LU 3.3.4 Policy LU 3.3.5	**Consistent.** As discussed in Section 4.3, *Air Quality*; Section 4.7, *Geology and Soils*; Section 4.9, *Hazards and Hazardous Materials*; Section 4.10, *Hydrology and Water Quality*; and Section 4.13, *Noise*, the project would have less-than-significant impacts associated with hazards from unhealthy air quality, seismic activity, unstable soils, flooding, or excessive noise. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated. As discussed in Section 4.20, *Wildfire*, the project includes a trailhead/emergency staging area, which would also be available for use as an emergency equestrian area for the public. The project would include adequate setbacks, fuel modification areas, and emergency access routes. As discussed in Section 4.15, *Public Services*, police and fire protection would be adequate for the project.
Objective LU 3.4 Policy LU 3.4.1 Policy LU 3.4.2 Policy LU 3.4.3 Policy LU 3.4.4	**Consistent.** The project would establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified population, fostering active, healthy lifestyles in accordance with best practices in community design. The project includes an approximately 3.1-acre recreation center with a clubhouse that may incorporate a club room, kitchen, lobby, flex space, fitness center, yoga room, and restrooms. Other amenities at the recreation center would include a courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, an event/multi-purpose lawn, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop. Additional recreational amenities would be provided throughout the project site, including pickleball courts, horseshoe pits, and a dog park. The project would include landscaping throughout the residential, recreational, and improved open spaces within the project area.
Circulation Element	
Goal C 1 Objective C 1.1 Policy C 1.1.1 Policy C 1.1.2 Policy C 1.1.4 Policy C 1.1.13	**Consistent.** The project would promote the use of multimodal circulation systems. Pedestrian sidewalks are proposed throughout the project site. Additionally, the project would include the development of a trail network, which would include both private and public trails within the 193.8-acre project site, as well as new public trails elsewhere throughout the project area. The new public trails would provide connections to existing and planned trails in the vicinity of the project site and would fulfill the planned expansion of the Sand Canyon Road and Spring Canyon Road Trails as included in the City's Trail Plan. Numerous new trails would be anticipated to be used by pedestrians, equestrians, and bicyclists. To reduce travel by vehicle, the project includes the development of several on-site uses for senior citizens. The project includes an approximately 3.1-acre recreation center with a clubhouse that may incorporate a club room, kitchen, lobby, flex space, fitness center, yoga room, and restrooms. Other amenities at the recreation center would include a courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, an event/multi-purpose lawn, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop. Additionally, other recreational amenities would be provided throughout the project site, including pickleball courts, horseshoe pits, and a dog park. These uses would promote internal person-travel throughout the project site and reduce the need for off-site vehicle travel.
Objective C 1.2 Policy C 1.2.2 Policy C 1.2.12	**Consistent.** See response to Goal C 1.
Goal C 2 Objective C 2.1 Policy C 2.1.2	**Consistent.** The project includes numerous infrastructure improvements, including, but not limited to, a railroad undercrossing, a bridge connecting the project to Lost Canyon Road, and J Street, which connects to Robinson Ranch Road. Additionally, the project would provide space and legal access for future road access to the parcel to the east of the project area. This future road would be located north of the proposed residences and would ultimately connect to the public portion of A Street located on-site. In addition, a future 28-foot gated emergency vehicle access road could be provided from the extension of H Street.
Objective C 2.5 Policy C 2.5.2	**Consistent.** The project would include a trailhead/emergency staging area, which would also be available for use as an emergency equestrian area for the public. In addition, a future 28-foot gated emergency vehicle access road could be provided with the extension of H Street.

Goal/Objective/ Policy No.	Project Consistency Analysis
Noise Element	
Goal N 1 Objective N 1.1 Policy N 1.1.1 Policy N 1.1.2 Policy N 1.1.3 Policy N 1.1.4 Policy N 1.1.5 Policy N 1.1.6	**Consistent.** As discussed in Section 4.13, *Noise*, construction of the project would generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards. With the implementation of Mitigation Measure (MM) NOI-1.1, construction impacts would be less than significant. Once operational, the project would generate new vehicle trips that would incrementally add to the existing traffic levels on the roadway system and could result in an increase in the associated traffic noise levels. However, this increase is less than the threshold for an ambient sound level. During project operation, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.
Goal N 3 Objective N 3.1 Policy N 3.1.1 Policy N 3.1.2 Policy N 3.1.3 Policy N 3.1.4 Policy N 3.1.5 Policy N 3.1.7 Policy N 3.1.8 Policy N 3.1.9	**Consistent.** As discussed in Section 4.13, *Noise*, noise-generating mechanical equipment at the project site would include numerous pieces of heating, ventilation, and air conditioning (HVAC) equipment in the proposed recreation center and single-family homes. Several outdoor amenities and sports courts are included in the project, in addition to the recreation center and single-family homes. A pickleball court, horseshoe pit, and dog park are proposed on the western portion of the project site adjacent to nearby noise-sensitive residential land uses. A pool and bocce ball courts would also be adjacent to the recreation center. These estimated noise levels are lower than the City's daytime threshold of 65 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}) and nighttime threshold of 55 dBA L_{eq} for residential land uses. When considering the City's thresholds with an additional 5 dBA reduction, the estimated levels remain lower than the City's daytime threshold of 60 dBA L_{eq} and nighttime threshold of 50 dBA L_{eq}.
Conservation and Open Space Element	
Goal CO.1	**Consistent.** The project involves the development of 341 age-restricted, detached single-family homes to ensure a balance of social and economic residential needs. As discussed throughout this EIR, any potentially significant impact related to the natural environment would be adequately mitigated.
Goal CO 2	**Consistent.** As discussed in Section 4.7, *Geology and Soils*, and Section 4.12, *Mineral Resources*, the project would have less-than-significant impacts associated with hillsides, canyons, ridgelines, soils, and minerals. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated.
Goal CO 3	**Consistent.** As discussed in Section 4.4, *Biological Resources*, the project would have less-than-significant impacts associated with the **c**onservation of biological resources and ecosystems. As discussed in Section 4.4, any potentially significant impact related to biological resources would be adequately mitigated.
Goal CO 4	**Consistent.** As discussed in Section 4.19, *Utilities and Service Systems*, the project would have less-than-significant impacts associated with supply of clean water. As discussed in Section 4.19, any potentially significant impact related to the supply of clean water would be adequately mitigated.
Goal CO 7	**Consistent.** As discussed in Section 4.3, *Air Quality*, and Section 4.8, *Greenhouse Gas Emissions*, the project would have less-than-significant impacts associated with clean air. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated.
Goal CO 8	**Consistent.** As discussed in Section 4.6, *Energy*, and Section 4.8, *Greenhouse Gas Emissions*, the project would have less-than-significant impacts associated with energy efficiency and greenhouse gases. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated.
Goal CO 9	**Consistent.** As discussed in Section 4.16, *Recreation*, the project would have less-than-significant impacts associated with **e**quitable distribution of park, recreational, and trail facilities by providing ample open space throughout the project site. The project would include the development of a trail network, which would include both private and public trails. The project includes an approximately 3.1-acre recreation center with a clubhouse that may incorporate a club room, a kitchen, a lobby, a flex space, a fitness center, a yoga room, and restrooms. Other amenities at the recreation center would include a courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, an event/multi-purpose lawn, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop. Other recreational amenities would be provided throughout the project site, including pickleball courts, horseshoe pits, and a dog park.
Goal CO 10	**Consistent.** See response to Goal CO 9.

Goal/Objective/ Policy No.	Project Consistency Analysis
Safety Element	
Goal S 1	**Consistent.** As discussed in Section 4.7, *Geology and Soils*, and Section 4.9, *Hazards and Hazardous Materials*, the project would have less-than-significant impacts associated with hazards from seismic activity and unstable soils. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated.
Goal S 2	**Consistent.** As discussed in Section 4.9, *Hazards and Hazardous Materials*, and Section 4.10, *Hydrology and Water Quality*, the project would have less-than-significant impacts associated with hazards from flooding. As discussed in each respective environmental resource area section, any potentially significant impact related to the aforementioned environmental impacts would be adequately mitigated.
Goal S 3	**Consistent.** As discussed in Section 4.20, *Wildfire*, the project would have less-than-significant impacts associated with hazards from wildfires. As discussed in Section 4.20, any potentially significant impact related to wildfires would be adequately mitigated.
Goal S 4	**Consistent.** As discussed in Section 4.9, *Hazards and Hazardous Materials*, the project would have less-than-significant impacts associated with hazardous materials. As discussed in Section 4.9, any potentially significant impact related to hazardous materials would be adequately mitigated.
Goal S 5	**Consistent.** As discussed in Section 4.15, *Public Services*, the project would have less-than-significant impacts associated with protection of public safety through law enforcements services. As discussed in Section 4.15, any potentially significant impact related to public safety through law enforcement would be adequately mitigated.
Goal S 7	**Consistent.** As discussed in Section 4.9, *Hazards and Hazardous Materials*, and Section 4.20, *Wildfire*, the project would have less-than-significant impacts associated with disaster response. As discussed in each respective environmental resource area section, any potentially significant impact related to disaster response would be adequately mitigated.

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The project would exceed the residential density permitted under the UR1 and NU5 zoning designations of the SCMC and would therefore be inconsistent with the zoning development standards. However, the project qualifies as a 100% senior housing development and is eligible for a density bonus pursuant to the State Density Bonus Law, as described above. The proposed 341 units therefore meet density requirements based on State Density Bonus Law. Under the State Density Bonus Law, qualifying projects may receive a density bonus as well as incentives, concessions, and waivers or reductions of development standards that would otherwise physically preclude the construction of the project.

The applicant has requested the following waivers, which would apply to the entirety of the project:

- Reduction in minimum lot size to 5,000 square feet (all lots).
- Reduction in minimum lot width to 50 feet (all lots).
- Waiver of the Ridgeline Alteration Permit (RAP) requirement.
- Increase of allowable continuous retaining wall length beyond the 100-linear-foot limit established in the Hillside Development Ordinance.
- Construction of some retaining walls greater than six feet in height (up to a maximum height of 8.5 feet, generally along the new portion of Lost Canyon Road and the northern end of J Street).

In addition, the applicant has requested waivers from the following development standards. These waivers are requested only for the lots listed, and all other proposed homes will comply with the applicable NU5 and UR1 development standard:

- Reduction in minimum cul-de-sac widths below 40 feet (Lots 4, 9, 17, 18, 21, 22, 41, 42, 64, 194, 249, 251, 270, and 327)
- Reduction of front yard setback (Lots 85, 159, 273)
- Reduction of side yard setback for reverse corner properties (Lots 1, 11, 38, 39, 43, 209, 231, 232, 245, 257, 261, 273, 275, 276, 279, 280, 290, 291, 306, 307, 314, and 338)
- Reduction of rear yard setback (Lots 64, 204, and 318)

Through the application of these provisions, any initial inconsistency with the UR1 and NU5 zoning standards would be addressed through the State Density Bonus Law, and the project would not result in a significant land use impact.

CONCLUSION

As detailed above, the project would be consistent with the applicable goals, objectives, and policies identified in the General Plan elements, and with the SCMC and the SCAG 2020-2045 RTP/SCS; therefore, *no impacts* would occur.

Impact LUP-2
The project would not 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.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

4.11.6 Cumulative Impacts

As stated above, the project would have no impact related to the physical division of an established community (see Impact LUP-1 and LUP-2) and would not contribute to cumulative impacts related to this issue.

As discussed above, implementation of the project would generally be consistent with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. Chapter 3, *Environmental Setting*, details the existing and reasonably foreseeable future development projects located within proximity to the project site. The project, in combination with the related projects provided in Chapter 3, could result in cumulative impacts if it conflicts with a land use plan, policy, or regulation adopted for the purpose of mitigating an environmental effect (see Impact LUP-3). However, each related project identified in Chapter 3 would be required to demonstrate consistency with applicable land use plans, policies, and regulations. Therefore, project impacts associated with land use and planning would not be cumulatively considerable.

Impact LUP-3 (Cumulative Impacts)
The project would not result in cumulatively considerable impacts associated with land use and planning.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

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4.12 MINERAL RESOURCES

This section evaluates the project's potential to impact mineral resources within the project site. The analysis consists of a description of existing conditions of the project site and surrounding area, a summary of the regulatory framework, and an evaluation of potential impacts associated with mineral resources.

4.12.1 Existing Conditions

4.12.1.1 Regional Setting

Mining activities in California are regulated by the Surface Mining and Reclamation Act of 1975 (SMARA). This act provides for the reclamation of mined lands and directs the State Geologist to classify and map mineral resources to show where economically significant mineral deposits occur or are likely to occur (City of Santa Clarita 2011). Areas known as Mineral Resource Zones (MRZs) are classified according to the presence or absence of significant deposits:

- MRZ-1 describes areas where available geologic information indicates that little likelihood exists for the presence of significant Portland cement concrete (PCC) aggregate resources;
- MRZ-2 describes areas where geologic data indicate that significant measured, or indicated, resources are present;
- MRZ-3 describes areas containing known or inferred PCC aggregate resources of undetermined mineral resource significance; and
- MRZ-4 describes areas where available geologic information is inadequate to assign to any other MRZ category.

Aggregate (sand, gravel, and crushed stone) is the number one non-fuel mineral commodity produced in California by value. Construction aggregate is a crucial material for construction and infrastructure maintenance (California Geological Survey [CGS] 2021). There are extensive aggregate mineral resources located within the City, and approximately 19,000 acres are designated as MRZ-2. Sand and gravel resources are primarily concentrated along waterways, including the Santa Clara River, the South Fork of the Santa Clara River, Castaic Creek, and east of Sand Canyon Road. Construction-grade aggregate can be found in the Santa Clara River, particularly in the section extending approximately 15 miles from Agua Dulce Creek in the east to the Ventura County boundary in the west (City of Santa Clarita 2011).

The project site is within the Saugus-Newhall Production-Consumption (P-C) Region. The Saugus-Newhall P-C Region encompasses approximately 651 square miles, including the upper Santa Clara River Valley as well as the surrounding hills to the north (Joseph et al. 1984). The following three areas within the region are known to contain significant mineral deposits or have a high likelihood of containing mineral deposits (CGS 2021):

- **Santa Clara River Valley.** The Santa Clara River originates east of the Saugus-Newhall P-C Region, near Soledad Pass, and flows into Ventura County. Several tributaries, including Bouquet Canyon, Castaic Creek, Newhall Creek, and Sand Canyon, merge with the Santa Clara River and form an approximately 18-mile-long material deposit. The project site is located along the Santa Clara River Valley. While the composition of material may vary throughout the length of the river, measurements taken at Lang Station indicate that materials are made up of approximately 65% sand and 35% rock. As such, it is assumed that the approximate material composition throughout the segment of the Santa Clara River within the region is similar to that of Lang Station.

- **Mint Canyon Formation.** The Mint Canyon Formation, which was deposited during the Miocene Epoch, consists of fine- to coarse-grained, well-consolidated, non-marine sediments. The formation is bounded by the Sierra Pelona to the north, Agua Dulce Canyon to the east, the San Gabriel Mountains to the south, and the San Gabriel fault to the west.
- **Anorthosite-Gabbro Group.** The anorthosite-gabbro group, which was formed approximately 1,200 million years ago, is found in the eastern portion of the Saugus-Newhall P-C Region within the San Gabriel Mountains.

The State Geologist identifies and quantifies areas containing regionally significant mineral deposits, referred to as "sectors." A sector is an area classified as MRZ-2 and has a land use compatible with mining. Examples of incompatible land uses include high-density residential developments, commercial and industrial developments, and major public infrastructure. Examples of compatible land use include land that is non-urbanized or has very low-density residential development (approximately one unit or less per 10 acres), lands that lack high-cost improvements (including recreational lands), and lands used for agriculture, silviculture, grazing, or open space (CGS 2021).

4.12.1.2 Project Site Setting

The project site consists of a 193.8-acre area along the Santa Clara River. Land use and zoning designations within the project site consist of Urban-Residential 1 (UR1), Non-Urban 5 (NU5), and Open Space (OS). The surrounding land use and zoning designations directly adjacent to the project site include OS to the north, NU5 to the east, NU5 and OS to the south, and UR1 to the east. According to the CGS (2021), the project site is within the MRZ-2 and MRZ-3 classifications (Figure 4.12-1). The northern portion of the project site is within a sector containing regionally significant PCC aggregate resources. There is one mine in the vicinity of the project site: Lang Station Mine, approximately two miles east of the project site. This mine is located east of the City limits and in an unincorporated area of Los Angeles County with limited surrounding development and, thus, is anticipated to have few conflicts with existing land uses. According to Exhibit CO-2 in the *City of Santa Clarita General Plan Conservation and Open Space Element*, there are no lode mines located within the City limits (City of Santa Clarita 2011). The Conservation and Open Space Element details that many older mines in the planning area have been abandoned, and there are policies included in the element to ensure that mines are sealed and that any pollutants associated with extraction activities are remediated in order to ensure public safety after these operations are completed.

4.12.2 Regulatory Setting

4.12.2.1 Federal

There are no Federal regulations related to mineral resources applicable to the project.

4.12.2.2 State

SURFACE MINING AND RECLAMATION ACT OF 1975

SMARA was enacted by the California legislature to ensure the reclamation of mined lands, ensure mineral resources location and quantity data are updated, and manage the loss of significant mineral resources in response to urban development. SMARA is administered by the California Department of Conservation (CDOC) Division of Mine Reclamation and mandates the CDOC Division of Mines and Geology, as well as the State Mining and Geology Board (SMGB), to prepare mineral resource reports for each jurisdiction.

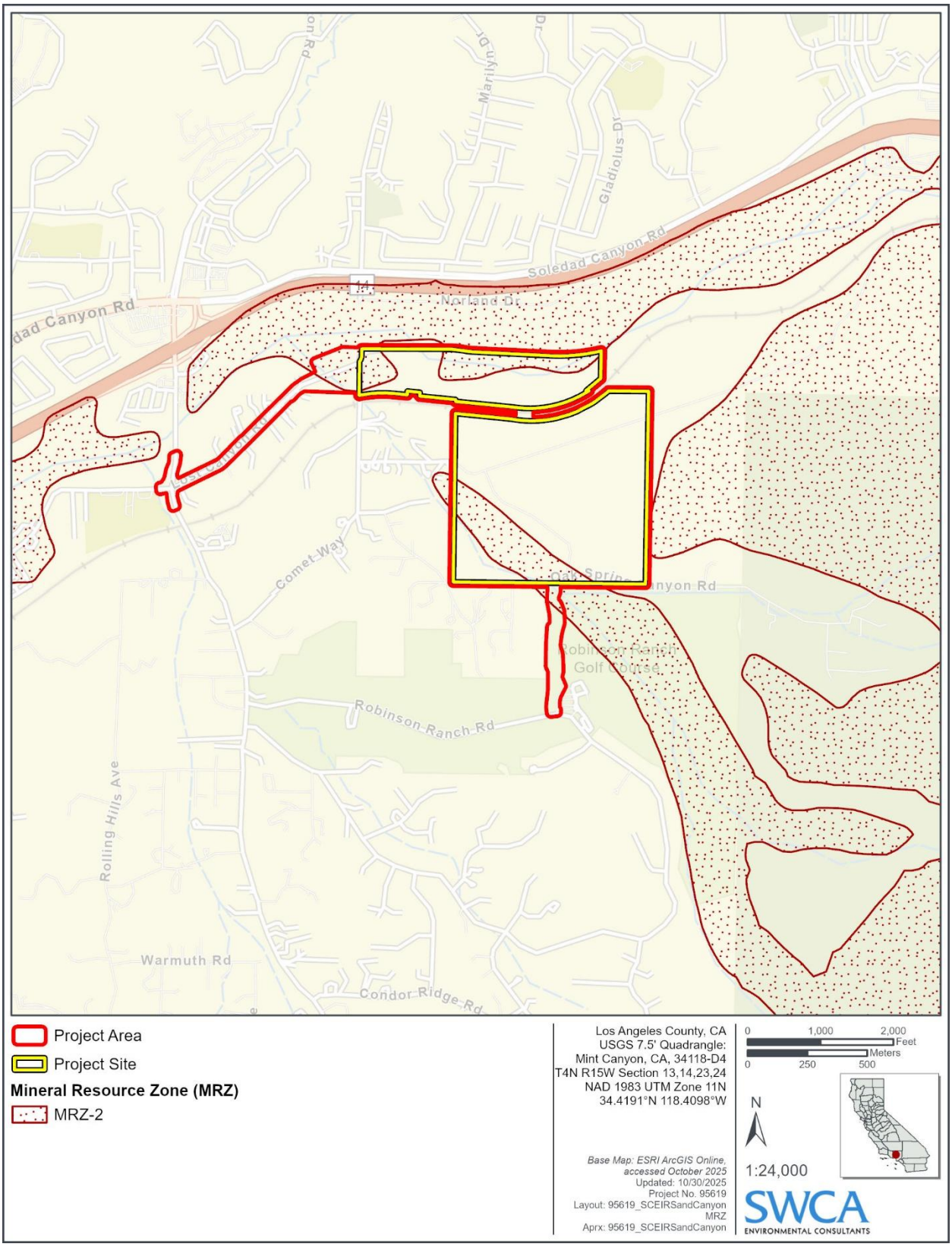


Figure 4.12-1. Mineral Resource Zones within the Project Site.

California Public Resources Code §§ 2761(a) and (b) and 2790 provide for a two-phase mineral lands inventory process termed Classification-Designation. The primary objective of the process is to ensure the availability and prevent inaccessibility of mineral resources through local lead-agency policies and procedures by informing future land use and planning decisions.

Based on geologic factors, lands that contain mineral deposits are first identified by the State Geologist, regardless of land ownership or use, and assigned MRZ classifications (MRZ-1 through MRZ-4). Significant mineral deposits are then formally recognized by the SMGB after consultation with lead agencies and involved parties. The mineral resource areas within the Saugus-Newhall P-C Region are categorized into one of four MRZs, defined below (CGS 2021). There are no areas within the P-C Region that are classified as MRZ-4. However, portions of the region remain unclassified, including land controlled by the U.S. Forest Service.

- **MRZ-1:** Areas where available geologic information indicates that little likelihood exists for the presence of significant PCC aggregate resources
- **MRZ-2:** Areas where geologic information indicates the presence of significant PCC aggregate resources
- **MRZ-3:** Areas containing known or inferred PCC aggregate resources of undetermined mineral resource significance
- **MRZ-4:** Areas where available geologic information is inadequate to assign to any other mineral resource zone category

Regionally significant mineral deposits, also known as sectors, are also identified and quantified by the State Geologist. A sector is defined as an area with the classification of MRZ-2 and a land use designation compatible with mining. Compatible land uses include non-urbanized land, land with very low-density residential development, land without high-cost improvements, and land used for agriculture, grazing, managing forests and woodlands, or open space.

4.12.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

Land Use Element

The *City of Santa Clarita General Plan Land Use Element* is the City's long-term blueprint for development of the Santa Clarita Valley planning area to meet the Santa Clarita Valley's future needs for new housing, retail, office, industrial, parks, open space, and other uses (City of Santa Clarita 2011). The Land Use Element identifies goals, policies, and programs designed to address the development issues facing the community through a variety of land use planning strategies, along with the type, intensity, quality, and location of future uses within the planning area. The Land Use Element identifies the following objective related to mineral resources:

- **Objective LU 7.7:** Protect significant mineral resources, natural gas storage facilities, and petroleum extraction facilities from encroachment by incompatible uses.

Conservation and Open Space Element

The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the wide range of community benefits derived from open space, including wildlife habitat preservation, scenic views, water recharge and watershed protection, enhancement of air quality,

protection of cultural and historical resources, moderation of microclimates, and enhanced property values (City of Santa Clarita 2011). Table 4.12-1 provides goals and policies within the Conservation and Open Space Element that are relevant to the project.

Table 4.12-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Objective CO 1.3	Conserve and make more efficient use of non-renewable resource systems, such as fossil fuels, minerals, and materials.
Objective CO 2.3	Conserve areas with significant mineral resources, and provide for extraction and processing of such resources in accordance with applicable laws and land use policies.
Policy CO 2.3.1	Identify areas with significant mineral resources that are available for extraction through appropriate zoning or overlay designations.
Policy CO 2.3.2	Consider appropriate buffers near mineral resource areas that are planned for extraction, to provide for land use compatibility and prevent the encroachment of incompatible land uses.
Policy CO 2.3.3	Through the review process for any mining or mineral extraction proposal, ensure mitigation of impacts from mining and processing of materials on adjacent uses or on the community, including but not limited to air and water pollution, traffic and circulation, noise, and land use incompatibility.
Policy CO 2.3.4	Ensure that mineral extraction sites are maintained in a safe and secure manner after cessation of extraction activities, which may include the regulated decommissioning of wells, clean-up of any contaminated soils or materials, closing of mine openings, or other measures as deemed appropriate by the agencies having jurisdiction.
Policy CO 2.3.5	Promote remediation and restoration of mined land to a condition that supports beneficial uses, which may include but are not limited to recreational open space, habitat enhancement, groundwater recharge, or urban development.

SANTA CLARITA MUNICIPAL CODE

SCMC § 17.38.030 (MOCA—Mineral/Oil Conservation Area Overlay Zone) identifies the purpose, permitted uses, and development standards of the mineral/oil conservation area (MOCA) Overlay Zone. The MOCA Overlay Zone designates areas that have a significant mineral aggregate resource and/or oil fields. The purpose is to permit the continuation of mineral/oil usage while providing development of the area when certain environmental factors have been adequately mitigated.

The City has mapped two MOCA Overlay Zones, neither of which includes the project site. The closest MOCA Overlay Zone to the project site is located approximately 4.44 miles southwest of the project site and is roughly bounded by Golden Valley Road to the north, Sierra Highway and the Antelope Valley Freeway (SR-14) to the east, Dockweiler Street to the south, and Quigley Road to the west. This MOCA Overlay Zone includes approximately 978 square acres with existing developed and undeveloped parcels designated for Commercial, Urban Residential, Open Space, and Industrial land uses. The other MOCA Overlay Zone is located approximately 9.48 miles northwest of the project site.

4.12.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to mineral resources if the project would:

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.

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.

These thresholds are discussed under Section 4.12.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.12.4 Impact Assessment Methodology

The project's potential impacts associated with mineral resources were evaluated by use of the environmental checklist questions included in Appendix G of the CEQA Guidelines, included in Section 4.12.3, *Thresholds of Significance*. Potential impacts were evaluated based on a comprehensive review of the project and all associated components, CDOC applicable database information, and all applicable regulatory requirements.

4.12.5 Project-Specific Impacts and Mitigation Measures

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The project site is classified as MRZ-2 (indicating the presence of significant PCC aggregate resources) and MRZ-3 (indicating there are known or inferred mineral occurrences of undetermined mineral resource significance) (CGS 2021). The portions of the project site that contain the MRZ-2 designation have either Urban Residential or Non-Urban land use designations and would therefore not be utilized for mining due to its location, surrounding land uses, and existing zoning. By designating the project site with Urban Residential and Non-Urban land uses, the City envisions future development on the project site and accounts for new growth on the project site under the UR1 and NU5 zones in the City's General Plan EIR buildout projections. Additionally, mineral recovery is not permitted in the UR1 or NU5 zones.

As a result of Conservation and Open Space Element Policy CO 2.3.1, the City established MOCA Overlay Zones for areas with significant mineral resources. However, the project site is not located within either of the two City-designated MOCA Overlay Zones, which are areas the City has identified as having a significant mineral aggregate resource and/or oil field, and are areas in which mining is permitted. The project does not include exploration or mining of any known mineral resources.

The project site is located within the Saugus-Newhall P-C Region, which contains approximately 10,492 million tons of PCC aggregate resources. The projected 50-year demand on the Saugus-Newhall P-C Region through the year 2068 is estimated to be 80 million tons of PCC-quality aggregate. Therefore, the PCC aggregate resources in the region are plentiful, and the demand for these resources will be met through 2068. The Saugus-Newhall P-C Region will continue to import the majority of the PCC aggregate to meet the demands of the region (CGS 2021).

Implementation of the project would not interfere with any existing or future mineral aggregate resource or oil production. Although a small portion of the project site has been classified as MRZ-2, a significant portion of the project site that has potential PCC aggregate is within the Santa Clara River riverbed and, thus, the feasibility of mining within this area is likely nonexistent from a financial and permitting perspective. Additionally, the project site is within the City's Significant Ecological Area (SEA) Overlay Zone and includes biological resources, including oak trees, that are protected under the SCMC. These

sensitive environmental features would complicate the permitting process for aggregate mining, as these environmental obstacles would restrict mining. The project site does not have suitable zoning or favorable geologic conditions to permit aggregate mining.

Therefore, project development would not result in the loss of availability of any known mineral resources that would be of value to the region and the residents of the State, and *no impact* to known mineral resources would occur.

Impact MR-1
The project would not 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.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

There are no significant mineral resources or mineral resource recovery sites in the project site vicinity, and the project does not propose exploration or mining. The project site is not located in an MOCA Overlay Zone, and implementation of the project would not interfere with any existing or future mineral aggregate or oil production, nor conflict with any local general plan, specific plan, or other land use plan. Therefore, the project would have *no impact* related to the loss of a locally important mineral resource recovery site.

Impact MR-2
The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.
Mitigation Measures
Mitigation is not necessary. No impact would occur.

4.12.6 Cumulative Impacts

The project's cumulative study area and development scenario are described in Chapter 3, *Environmental Setting*. The project would not result in effects that, when considered in combination with the impacts of nearby regional projects, would be considered cumulatively considerable or significant. The MOCA Overlay Zone designates areas that have a significant mineral aggregate resource and/or oil fields and is used to permit the continuation of mineral/oil usage while providing development of the area. There are no MOCA Overlay Zones located within a two-mile radius of the project site; therefore, there are no related projects in the vicinity of the project site that currently have a MOCA Overlay Zone designation. Additionally, land in the region classified as MRZ-2 is generally found along or adjacent to the Santa Clara River. The remaining MRZ areas in the City are mostly classified as MRZ-3. Similar to the project, future development of related projects would not be located within the Santa Clara River, as it is designated an SEA. Though mineral and aggregate resource extraction could occur for related projects, it

would not be likely as the portion of the Santa Clara River in the project site vicinity does not have a MOCA overlay, and therefore mining would not be permitted. Any reasonably foreseeable future development would be required to adhere to the permitted uses of each specific project site to avoid the loss of mineral resources. Therefore, the project is not expected to result in significant cumulative impacts to mineral resources or mineral resource recovery sites, and impacts would not be cumulatively considerable.

Impact MR-3 (Cumulative Impacts)
The project would not contribute to the cumulative loss of mineral resources within the City.
Mitigation Measures
Mitigation is not necessary. Impact MR-3 would be less than significant.

4.13 NOISE

This section of the EIR describes the existing conditions and regulatory setting for noise pertaining to the project, evaluates potential environmental impacts regarding noise that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. The setting and impact discussion in this section is based, in part, on *Noise Technical Report: Belcaro at Sand Canyon Project* (Noise Technical Report) (Dudek 2026a; EIR Appendix N). The Noise Technical Report includes an in-depth assessment of potential sources of noise that would be generated by the project and the potential for existing sources of noise to disturb proposed land uses. This section also discusses applicable noise standards and thresholds established by the *City of Santa Clarita General Plan Noise Element* (City of Santa Clarita 2011) and the Santa Clarita Municipal Code (SCMC) Chapter 11.44 (Noise Limits), which regulates noise.

4.13.1 Existing Conditions

4.13.1.1 Noise Fundamentals

DEFINITION OF ACOUSTICAL TERMS

Several different descriptors of time-averaged sound levels are used to account for fluctuations of sound intensity over time. The sound descriptors calculated by the sound meters and used in this report to describe environmental sound are defined below:

- Ambient sound level is defined as the composite of noise from all sources near and far, the normal or existing level of environmental noise at a given location.
- Decibel (dB) is the physical unit commonly used to measure sound levels. Technically, a dB expresses sound pressure on a logarithmic scale relative to a standard pressure of reference pressure of 20 micropascals (μPa), which approximates the threshold of human hearing.
- Sound measurement is further refined by using an A-weighted decibel (dBA) scale that more closely measures how a person perceives different frequencies of sound; the A-weighting reflects the sensitivity of the ear to low or moderate sound levels.
- Equivalent continuous noise level (L_{eq}) is the average sound level over a specified period, representing a steady sound that has the same acoustic energy as the changing sound levels measured during that time. It is often used to describe environmental noise exposure.
- Maximum sound level (L_{max}) is the highest sound level recorded during a specific period, crucial for assessing short-term noise events that could cause disturbance or harm.
- Day-night average sound level (L_{dn}) is the A-weighted equivalent sound level for a 24-hour period, with an additional 10 dB weighting imposed on the equivalent sound levels occurring during nighttime hours (10:00 p.m.–7:00 a.m.).
- Community noise equivalent level (CNEL) is a measure of the 24-hour average noise level that penalizes noise that occurs during the evening and nighttime hours when noise is considered more disturbing. To account for this increase in disturbance, 5 dBA is added to the hourly L_{eq} during the evening hours (7:00 p.m.–10:00 p.m.), and 10 dBA is added to the hourly L_{eq} during the nighttime hours (10:00 p.m.–7:00 a.m.).
- Percentile-exceeded sound level (L_{xx}) describes the sound level exceeded for a given percentage of a specific period.

SOUND LEVELS OF REPRESENTATIVE SOUNDS AND NOISES

The U.S. Environmental Protection Agency (EPA) devised an index for evaluating the impact of noise originating from various sources when affecting residential areas. In tranquil rural settings during nighttime, noise typically registers between 32 and 35 dBA. In urban areas with low noise levels during the nighttime, readings typically fall within the range of 40 to 50 dBA. In bustling urban areas during daylight hours, noise levels can frequently escalate to as high as 70 to 80 dBA. Noise levels exceeding 110 dBA are considered unmanageable, while continuous exposure to levels exceeding 80 dBA can lead to hearing impairment. Levels surpassing 70 dBA are often linked to disruptions in tasks, and noise levels ranging from 50 to 55 dBA typically correspond to raised voices during a regular conversation (EPA 1974).

Table 4.13-1 provides criteria that have been used to estimate an individual's perception of increases in sound. In general, an average person perceives an increase of 3 dBA or less as barely perceptible. An increase of 10 dBA is perceived as a doubling of the sound.

Table 4.13-1. Average Human Ability to Perceive Changes in Sound Levels

Increase in Sound Level (dBA)	Human Perception of Sound
2–3	Barely perceptible
5	Readily noticeable
10	Doubling of the sound
20	Dramatic change

Source: Anderson et al. (1973)

Note: Perception levels apply to noise experienced in an urban or natural environment, not in a controlled auditory lab.

Table 4.13-2 presents sound levels for common noise sources and some of the human responses to those levels.

Table 4.13-2. Sound Levels of Representative Noise Sources

Source and Distance	Sound Level (dBA)	Human Response
Jet takeoff (nearby)	150	
Jet takeoff (15 meters/50 feet)	140	
50-horsepower siren (30 meters/100 feet)	130	
Loud rock concert (near stage)	120	Pain threshold
Construction noise (3 meters/10 feet)	110	Intolerable
Jet takeoff (610 meters/2,000 feet)	100	
Heavy truck (8 meters/25 feet)	90	
Garbage disposal (0.6 meter/2 feet)	80	Constant exposure endangers hearing
Busy traffic	70	
Normal conversation	60	
Light traffic (30 meters/100 feet)	50	Quiet
Library	40	
Soft whisper (4.5 meters/15 feet)	30	Very quiet

Source and Distance	Sound Level (dBA)	Human Response
Rustling leaves	20	
Normal breathing	10	Barely audible
Threshold of hearing	0	

Source: Beranek (1988)

NOISE ASSESSMENT COMPONENTS

A noise assessment considers several key components—a sound-generating source, the medium through which the source transmits and the pathways taken by these sounds, and an evaluation of the proximity to noise receptors—as described below:

- **Source.** The sources of sound are any generators of small back-and-forth motions (i.e., motions that transfer their motional energy to the transmission path where it is propagated). The acoustic characteristics of the sources are essential. Sources must generate sound of sufficient strength, approximate pitch, and duration so that the sound may be perceived and can cause adverse effects compared with the natural ambient sounds.
- **Transmission path or medium.** The transmission path or medium for sound or noise is most often the atmosphere (i.e., air). For the noise to be transmitted, the transmission path must support the free propagation of the small vibratory motions that make up the sound. Atmospheric conditions (e.g., wind speed and direction, temperature, humidity, precipitation) influence the attenuation of sound. Barriers and/or discontinuities (e.g., existing structures, topography, foliage, ground cover) that attenuate the flow of sound may compromise the path. For example, sound will travel very well across reflective surfaces such as water and pavement but can attenuate across rough surfaces (e.g., grass, loose soil).
- **Proximity to noise-sensitive receptors.** A noise-sensitive receptor is usually defined as a location where a state of quietness is a basis for use or where excessive noise interferes with the normal use of the location. Typical receptors include residential areas, monuments, schools, hospitals, churches, and libraries.

4.13.1.2 Groundborne Vibration Fundamentals

This section describes basic concepts related to groundborne vibration, which is a small, rapidly fluctuating motion transmitted through the ground. When seismic waves are perceptible (when they can be felt), they are called “ground vibrations.” Seismic waves are classified as follows:

- **Body waves.** These waves travel across the mass of the rock, penetrating down into the interior of the rock mass. There are two forms of body waves: compressional waves (P-waves) and shear waves (S-waves). The P-wave is a push-pull-type wave that produces alternating compression and dilatation in the direction of wave travel. The S-wave is produced when the medium particles oscillate perpendicular to the propagation direction.
- **Surface waves (L-waves).** These waves travel over the surface of rock mass but do not travel through it. L-waves are generated by body waves constrained by physical and geometrical conditions from traveling into the rock mass. L-waves are the large energy carriers and account for the largest ground motions. There are two fundamental types of L-waves: Raleigh waves and Love waves (Q-waves). Raleigh waves and Q-waves represent the energy measured by a seismograph and are the main component of vibration when examining ground vibration from blasting activities.

The ground vibration from surface waves is measured as the velocity of motion, or how many inches per second (ips) the ground is moving. The motion of the ground particles (vibration) happens in three dimensions: radial, transverse, and vertical. During vibration, each particle has a velocity, and the maximum velocity is referred to as the peak particle velocity (PPV). The resulting vector of all three components (i.e., radial, transverse, and vertical) combined is referred to as peak vector sum (PVS).

The industry standard is to use PPV to measure the intensity of the ground vibration. In reporting, the maximum measurement of any of the three components is used rather than the resulting PVS.

GROUND VIBRATION TERMS

Ground vibration is described using the following terms:

- **Acceleration.** The rate at which particle velocity changes.
- **Displacement.** The farthest distance the ground moves before returning to its original position.
- **Frequency.** The number of oscillations per second that a particle makes when under the influence of seismic waves.
- **Hertz.** The unit of acoustic or vibration frequency representing cycles per second.
- **PPV.** The greatest particle velocity associated with an event.
- **PVS.** The square root of the sum of the squares of the individual PPV values in all three vector directions.
- **Particle velocity.** The velocity at which the ground moves.
- **Vibration velocity level.** Ten times the common logarithm of the ratio of the square of the amplitude of the root mean square vibration velocity to the square of the amplitude of the reference root mean square vibration velocity.

GROUND VIBRATION AND STRUCTURE DAMAGE

Ground vibrations may induce lasting alterations in the positions of the constituent particles making up structures. The magnitude of the vibration, signifying higher ground movement speeds, amplifies the likelihood of these lasting shifts in particle positions within structures. While ground vibrations can lead to structural damage, observable damage from vibrations often manifests as visible cracks in materials such as drywall, plaster, and exterior surfaces (e.g., grout and stucco). It is important to note that such damage may or may not signify structural issues. Cosmetic damage can also result from factors such as settling, temperature fluctuations, and the natural aging of a building.

GROUND VIBRATION AND HUMAN PERCEPTION

Beyond concerns related to structural damage, ground vibrations can, under specific conditions, startle or irritate individuals. Assessing human reactions to vibration is challenging due to variations in individual perception as the human body can distinctly sense ground vibrations as low as 0.1 ips; however, some individuals may even perceive lower levels.

Table 4.13-3 indicates the average human response to vibration that may be anticipated when a person is at rest in a quiet surrounding.

Table 4.13-3. Human Response to Ground Vibration

Average Human Response	Inches per Second PPV
Barely to distinctly perceptible	0.02–0.10
Distinctly to strongly perceptible	0.10–0.50
Strongly perceptible to mildly unpleasant	0.50–1.00
Mildly to distinctly unpleasant	1.00–2.00
Distinctly unpleasant to intolerable	2.00–10.00

Source: California Department of Transportation (Caltrans) (2020)

VIBRATION ASSESSMENT COMPONENTS

Vibration energy extends out as it travels through the ground, causing the vibration level to reduce with respect to the distance from the source. High-frequency vibration decreases much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source. The propagation of groundborne vibration is not simple to model due to geological differences in the medium (ground). Geological factors that may influence the propagation of groundborne vibration include the following:

- **Soil conditions.** The type of soil has a strong influence on the propagation of groundborne vibration. Hard, dense, and compacted soil; stiff clay soil; and hard rock transfer vibration more efficiently than loose, soft soils, sand, or gravel.
- **Depth to bedrock.** Shallow depth to bedrock provides more efficient propagation of groundborne vibration. Shallow bedrock concentrates the vibration energy near the surface, reflecting vibration waves back toward the surface that would otherwise continue to propagate farther down into the earth.
- **Soil strata.** Discontinuities in the soil layering can produce diffractions or channeling effects that impact the propagation of vibration over long distances.
- **Water conditions.** The amount of moisture in the soil has an impact on vibration propagation. The depth of the water table in the path of the propagation also has substantial effects on groundborne vibration levels.

Vibration levels can also be influenced by conditions at both the source and receptor locations. For instance, at the receptor location, variables such as building construction and the type of foundation can influence vibration levels.

4.13.1.3 Sensitive Noise Receptors

According to the *City of Santa Clarita General Plan Noise Element*, housing, schools, medical facilities, libraries, social care facilities, and similar facilities are considered noise-sensitive land uses (City of Santa Clarita 2011). 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 other places where low interior noise levels are essential are also considered sensitive to increases in exterior noise levels.

The nearest sensitive receptors to the project site are existing single-family homes, located approximately 10 feet west of the property boundary near Holt Avenue and Whitewater Canyon Road. Other sensitive receptors in the area of the project site include single-family homes along Lost Canyon Road, as well as

residential and recreational uses south of the project site between Oak Spring Canyon Road and Robinson Ranch Road.

4.13.1.4 Existing Ambient Noise Environment

The project area is surrounded by residential uses to the west, Sand Canyon Country Club to the south, and undeveloped land to the east. The northern boundary of the project area is bordered by the Santa Clara River and State Route (SR-) 14 farther to the north. The project site is bisected by the Southern Pacific Railroad, which runs in an east–west direction, south of the Santa Clara River. As such, ambient noise levels in the vicinity of the project area are predominantly influenced by vehicular traffic on the local roadway network and rail noise from the Metrolink rail line. Table 4.13-4 summarizes the existing ambient noise environment in the project vicinity based on a short-term survey of the project area. As shown in Table 4.13-4, measured short-term average outdoor ambient noise levels in the project area generally ranged from approximately 41.9 dBA L_{eq} to approximately 71.0 dBA L_{eq}.

Table 4.13-4. Measured Baseline Outdoor Ambient Noise Levels

Site*	Location/Address (noted sounds)	Time	L_{eq}†	L_{max}†	L_{min}†
ST1	Northeast corner of the Oak Spring Canyon Road and the trail to Whitewater Canyon Road intersection (traffic, birds, landscaping, rustling leaves)	11:10 a.m. to 11:25 a.m.	53.4	73.1	31.4
ST2	Northern side of the Oak Spring Canyon Road and Pashley Street intersection (birds, distant conversation/yelling, rustling leaves)	11:34 a.m. to 11:49 a.m.	55.7	76.4	29.8
ST3	Adjacent to the front yard of the residence at 16115 Lost Canyon Road (traffic, dog barking, landscaping, rustling leaves)	12:36 p.m. to 12:51 p.m.	52.9	73.4	43.6
ST4	Northeast corner of the Sand Canyon and Lost Canyon Roads intersection (traffic, rustling leaves)	12:54 p.m. to 1:09 p.m.	71.0	94.0	49.8
ST5	North of Robinson Ranch Road, south of the Sand Canyon Country Club overflow lot (traffic)	11:57 a.m. to 12:12 p.m.	48.7	66.0	35.0
ST7	Northeast corner of the Holt Avenue and Whitewater Canyon Road intersection (traffic, birds, dog barking, rustling leaves)	10:39 a.m. to 10:54 a.m.	41.9	55.0	35.6
ST8	Adjacent to the community pool on Rosehaven Lane (traffic, birds, rustling leaves)	1:17 p.m. to 1:32 p.m.	55.8	73.0	46.4

Source: Dudek (2026a)

Notes: L_{min} = minimum sound level during the measurement interval

* ST6 was not included as the investigator was asked to leave and no measurements were taken.

† Measurements in dBA.

In addition to the seven short-term noise measurement survey locations, 24-hour noise monitoring was conducted at two locations (Table 4.13-5). Measurements were taken at the northeast corner of the intersection of Oak Spring Canyon Road and the trail to Whitewater Canyon Road, as well as on the northeast corner of the Holt Avenue and Whitewater Canyon Road intersection to determine long-term ambient noise levels in the vicinity of the project area. Noise levels at these locations were primarily affected by vehicular traffic on the local roadway network and rail noise from the Metrolink rail line bisecting the project area. Measured average day-night noise levels ranged from approximately 52 dBA L_{dn} to 61 dBA L_{dn} (Dudek 2026a).

Table 4.13-5. Summary of Long-Term Ambient Noise Measurements

			Daytime Average Noise Level*				Nighttime Average Noise Level*			
Site	**Location**	**L_{dn}**	**L_{eq}**	**L_{max}**	**L50**	**L90**	**L_{eq}**	**L_{max}**	**L50**	**L90**
LT1	Northeast corner of the intersection of Oak Spring Canyon Road and the trail to Whitewater Canyon Road	61	50	92	45	43	55	89	50	48
LT2	Northeast corner of the intersection of Holt Avenue and Whitewater Canyon Road	52	49	56	41	39	44	58	41	40

Source: Dudek (2026a)

Notes: L50 = median noise level (sound level exceeded for 50% of the time)
L90 = background/ambient noise level (sound level exceeded for 90% of the time)

* Measurements in dBA.

4.13.2 Regulatory Setting

4.13.2.1 Federal

FEDERAL TRANSIT ADMINISTRATION

No Federal noise standards or regulations directly regulate environmental noise related to the construction or operation of the project. However, the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* provides guidelines for assessing noise impacts associated with construction activities (FTA 2018). While the FTA guidelines are primarily intended for transit projects, they are widely accepted as a standard for evaluating construction noise and vibration impacts on sensitive receptors, including residential areas. According to the FTA guidelines, acceptable construction noise levels for residential areas are established to protect residents from excessive noise that could interfere with normal activities such as conversation, relaxation, and sleep. The construction noise impact criteria for residential areas are as follows:

- Daytime hours (7:00 a.m.–10:00 p.m.): The hourly L_{eq} should not exceed 90 dBA.
- Nighttime hours (10:00 p.m.–7:00 a.m.): The hourly L_{eq} should not exceed 80 dBA.

These thresholds consider both the noise level and the duration of construction activities. Exceeding these levels may result in significant noise impacts on residential communities.

As well, no standards or limits applicable to potential building damage from groundborne vibration have been adopted by a Federal agency. However, the FTA has guidelines available to assess potential impacts on buildings and structures due to groundborne vibration. The FTA's *Transit Noise and Vibration Impacts Assessment Manual* also provides impact criteria concerning building damage during construction activities (FTA 2018). Table 4.13-6 presents the FTA vibration criteria for construction activities.

Table 4.13-6. Construction Vibration Impact Criteria for Building Damage

Building Category	Inches per Second PPV
I. Reinforced-concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Source: FTA (2018)

FEDERAL INTERAGENCY COMMITTEE ON NOISE

Guidance for determining what constitutes a substantial, permanent increase in ambient noise levels near a project site can be found in *Federal Agency Review of Selected Airport Noise Analysis Issues* (Federal Interagency Committee on Noise [FICON] 1992). This report evaluates the extent to which changes in ambient noise—primarily from aircraft operations—affect the annoyance levels experienced by nearby residents. FICON's recommendations are informed by research linking noise from aircraft and traffic to the percentage of individuals who report being highly annoyed. Annoyance, in this context, refers to the negative reactions people have to noise, such as difficulty holding conversations, disrupted sleep, or reduced enjoyment of peaceful surroundings.

FICON's recommendations are based on the premise that people's annoyance due to transportation noise can be reliably quantified using L_{dn}. The committee found that specific increases in noise exposure correspond to predictable increases in annoyance, particularly for sensitive land uses. While FICON originally developed these thresholds to assess aircraft noise, they are commonly applied to all transportation-related and permanent non-transportation noise sources in environmental noise analyses. The FICON thresholds for a substantial increase in community noise levels are as follows:

- If the outdoor ambient sound level without the project is less than 60 dBA L_{dn}, an increase of five dBA or more attributable to the project is considered significant.
- If the outdoor ambient sound level without the project is between 60 and 65 dBA L_{dn}, an increase of three dBA or more attributable to the project is considered significant.
- If the outdoor ambient sound level without the project exceeds 65 dBA L_{dn}, an increase of 1.5 dBA or more attributable to the project is considered significant.

4.13.2.2 State

CALIFORNIA GOVERNMENT CODE § 65302

Government Code § 65302(f) requires that each City and County in California include a Noise Element as part of its General Plan. The Noise Element must identify and assess the community's existing and projected noise environment and establish policies to reduce exposure to excessive noise, particularly in noise-sensitive land uses such as residences, schools, and hospitals.

To assist local governments in meeting this requirement, the Governor's Office of Planning and Research (OPR; now the Governor's Office of Land Use and Climate Innovation [LCI]) published the *State of California General Plan Guidelines*, most recently updated in 2017 (OPR 2017). These guidelines include land use compatibility standards based on community noise exposure, typically expressed in terms of the CNEL or L_{dn}. For example, the guidelines suggest that outdoor noise levels up to 65 dB CNEL are "normally acceptable" for residential uses, while cemeteries and similar passive recreational uses are considered compatible with levels up to 70–75 dB CNEL. Figure 4.13-1 provides an example of the exterior noise standards for various land uses, as recommended by the LCI (OPR 2017).

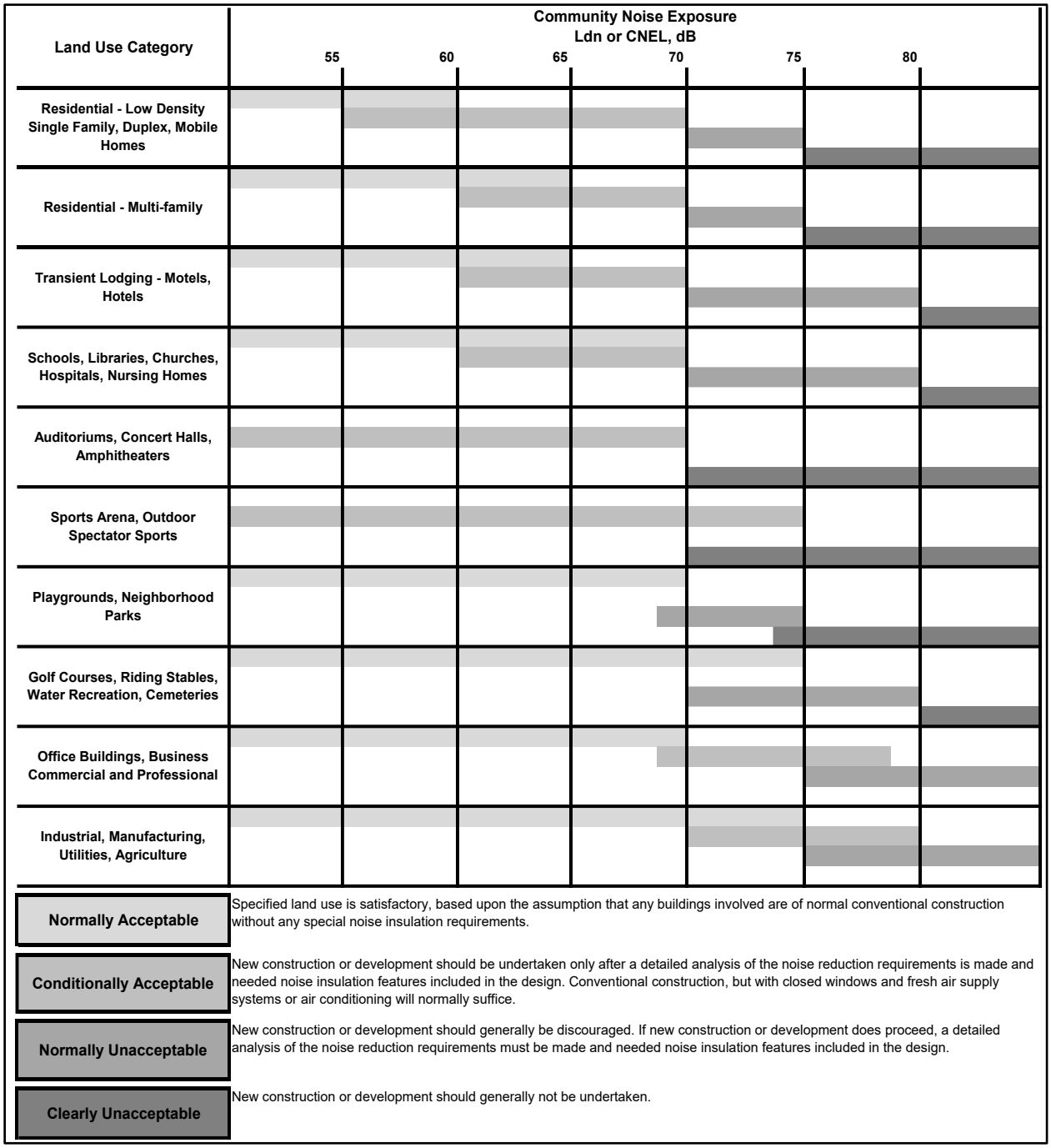


Figure 4.13-1. Land use compatibility for exterior community noise exposure.

While the State of California does not enforce specific numeric noise limits, the OPR guidelines serve as a model for local planning and zoning decisions. As such, the County of Los Angeles has developed its own General Plan Noise Element (County of Los Angeles 2015), consistent with State requirements and guidelines, and these local standards form the basis for evaluating the project's noise compatibility and impacts.

There are currently no State-adopted standards for groundborne vibration that apply to general land development projects. Vibration impacts are instead typically evaluated using Federal guidance, such as that provided by the FTA.

CALIFORNIA NOISE INSULATION STANDARDS (CALIFORNIA CODE OF REGULATIONS TITLE 24)

The California Noise Insulation Standards, codified in 24 California Code of Regulations (CCR) Part 2 (Building Code), were established to protect interior spaces of residential and certain nonresidential buildings from excessive environmental noise. These regulations apply primarily to new multi-family residential units, hotels, motels, dormitories, and schools within airport noise impact zones or areas where the exterior CNEL exceeds 60 dB.

Under these standards, the interior noise level must not exceed 45 dB CNEL in any habitable room. To comply, developers must include appropriate sound insulation features in building design and construction when exterior ambient noise levels surpass the established threshold.

CALIFORNIA DEPARTMENT OF HEALTH SERVICES GUIDELINES

The California Department of Health Services established guidelines related to community noise acceptability to be implemented by local agencies. Levels relevant to the project include the following:

- Below 65 dBA CNEL: normally acceptable for high-density residential use and transient lodging
- 60 to 70 dBA CNEL: conditionally acceptable for high-density residential, transient lodging, churches, educational, and medical facilities

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) recommends a threshold of 0.5 ips PPV to prevent structural damage to typical newer residential buildings exposed to ongoing or frequently occurring groundborne vibration (Caltrans 2020). For short-term vibration events, such as blasting, the recommended damage threshold increases to 1.0 ips PPV for newer residential structures. More conservative thresholds apply to older buildings: 0.3 ips PPV for continuous or intermittent vibration sources and 0.5 ips PPV for short-term vibration events. Regarding human sensitivity, Caltrans indicates that occupants exposed to continuous groundborne vibration levels between 0.2 and 0.6 ips PPV are likely to experience annoyance or discomfort, which may be considered a significant impact. While these Caltrans thresholds are not regulatory requirements, they are often used as quantitative standards when local regulations do not specify vibration limits.

4.13.2.3 Local

CITY OF SANTA CLARITA NOISE ORDINANCE

SCMC Chapter 11.44 (Noise Limits) identifies restrictions and standards for noise-generating activities, helping to prevent noise nuisances within the community. SCMC § 11.44.040 (Noise Limits) specifies maximum allowable exterior noise levels, which vary depending on the type of land use receiving the

noise. These standards primarily address stationary noise sources, such as mechanical equipment (e.g., ventilation systems, air conditioners, pool pumps). Table 4.13-7 details the applicable property line noise standards.

Table 4.13-7. City of Santa Clarita Exterior Property Line Noise Limits

Land Use	Time	Sound Level (dBA)
Residential Zone	Day	65
Residential Zone	Night	55
Commercial and Manufacturing	Day	80
Commercial and Manufacturing	Night	70

Source: SCMC Chapter 11.44

SCMC § 11.44.040(A) also provides that, at the boundary line between a residential property and a commercial and manufacturing property, the noise level of the quieter zone must be used.

SCMC § 11.44.040(B) (Corrections to Noise Limits) requires that property line noise limits must be adjusted by the corrections shown in Table 4.13-8 under the listed noise conditions:

Table 4.13-8. City of Santa Clarita Corrections to Exterior Property Line Noise Limits

Noise Condition	Correction (dB)
Repetitive impulsive noise	-5
Steady whine, screech or hum	-5
Noise occurring more than 5 but less than 15 minutes per hour (daytime)	+5
Noise occurring more than 1 but less than 5 minutes per hour (daytime)	+10
Noise occurring less than 1 minute per hour (daytime)	+20

Source: SCMC § 11.44.040B

SCMC § 11.44.070 (Special Noise Sources—Machinery, Fans and Other Mechanical Devices) states:

> Any noise level from the use or operation of any machinery, equipment, pump, fan, air conditioning apparatus, refrigerating equipment, motor vehicle, or other mechanical or electrical device, or in repairing or rebuilding any motor vehicle, which exceeds the noise limits as set forth in Section 11.44.040 at any property line, or, if a condominium or rental units, within any condominium unit or rental unit within the complex, shall be a violation of this chapter.

SCMC § 11.44.080 (Special Noise Sources—Construction and Building) states:

> "No person shall engage in any construction work which requires a building permit from the City on sites within three hundred (300) feet of a residentially zoned property except between the hours of seven a.m. to seven p.m., Monday through Friday, and eight a.m. to six p.m. on Saturday. Further, no work shall be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day and Labor Day.
>
> Emergency work as defined in Section 11.44.020(D) is permitted at all times.

> The Department of Community Development may issue a permit for work to be done "after hours"; provided, that containment of construction noises is provided."

The SCMC defines emergency work as: "work made necessary to restore property to a safe condition following a public calamity, or work required to protect persons or property from an imminent exposure to danger, or work by private or public utilities when restoring utility service" (SCMC § 11.44.020, Definitions).

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Noise Element* is a comprehensive program for including noise management in the planning process and provides a tool for planners to use in achieving and maintaining land uses that are compatible with existing and future environmental noise levels (City of Santa Clarita 2011). The Noise Element identifies current noise conditions within the planning area and projects future noise impacts resulting from continued growth allowed by the *City of Santa Clarita General Plan Land Use Element*. In addition, the Noise Element identifies noise-sensitive land uses and noise sources and defines areas of noise impact for the purpose of developing programs to ensure that residents in the City's planning area will be protected from excessive noise intrusion. Table 4.13-9 lists the goals, objectives, and policies of the Noise Element that would be applicable to the project.

Table 4.13-9. City of Santa Clarita General Plan Relevant Goals, Policies, and Objectives

Goal/Objective/ Policy	Description
Noise Element	
Goal N 1	A healthy and safe noise environment for Santa Clarita Valley residents, employees, and visitors.
Objective N 1.1	Protect the health and safety of the residents of the Santa Clarita Valley by the elimination, mitigation, and prevention of significant existing and future noise levels.
Policy N 1.1.1	Use the Noise and Land Use Compatibility Guidelines [see Figure 4.13-1], which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.
Policy N 1.1.2	Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with state and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.
Policy N 1.1.3	Include consideration of potential noise impacts in land use planning and development review decisions.
Policy N 1.1.4	Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.
Policy N 1.1.5	Monitor and update data and information regarding current and projected noise levels in the planning area.
Policy N 1.1.6	Provide development review comments on projects proposed by other agencies and special districts that may generate noise impacts affecting land uses within the Santa Clarita Valley, including any freeway and high-speed rail projects.
Goal N 3	Protect residential neighborhoods from excessive noise.
Objective N 3.1	Prevent and mitigate significant noise levels in residential neighborhoods.
Policy N 3.1.1	Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.
Policy N 3.1.2	Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.

Goal/Objective/ Policy	Description
Policy N 3.1.3	Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.
Policy N 3.1.4	Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.
Policy N 3.1.5	Require that developers of private schools, childcare centers, senior housing, and other noise sensitive uses in areas where the ambient noise level exceeds 65 dBA (day), provide mitigation measures for these uses to reduce interior noise to acceptable levels.
Policy N 3.1.6	Ensure that new residential buildings shall not be located within 150 feet of the centerline for Interstate 5.
Policy N 3.1.7	Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.
Policy N 3.1.8	As a condition of issuing permits for special events, require event promoters to mitigate noise impacts to adjacent sensitive uses through limiting hours of operation and other means as appropriate, which may include notification to affected residents.
Policy N 3.1.9	Implement a buyer and renter notification program for new residential developments where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas: • Within 1 mile of Six Flags Magic Mountain theme park, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time. • Within 1,000 feet of the railroad, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time. • Within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time, and the associated noise levels and frequency of noise events may change along with the use. • Within 1,000 feet of the Saugus Speedway, in the event speedway operations are resumed in the future.
Goal N 4	Protection of sensitive uses from commercial and industrial noise generators.
Objective N 4.1	Prevent, mitigate, and minimize noise spillover from commercial and industrial uses into adjacent residential neighborhoods and other noise sensitive uses.
Policy N 4.1.1	Implement and enforce the applicable Noise Ordinance to control noise from commercial and industrial sources that may adversely impact adjacent residential neighborhoods and other sensitive uses.
Policy N 4.1.2	Require appropriate noise buffering between commercial or industrial uses and residential neighborhoods and other sensitive uses.
Policy N 4.1.3	Adopt and enforce standards for the control of noise from commercial and entertainment establishments when adjacent to residential neighborhoods and other sensitive uses.

4.13.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to noise and vibration if the project would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Generation of excessive groundborne vibration or groundborne noise levels.

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.

Each of these thresholds is discussed under Section 4.13.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.13.4 Impact Assessment Methodology

The following impact assessment is based, in part, on the Noise Technical Report prepared for the project (Dudek 2026a). The assessment evaluates the potential change in the existing noise levels at the project site and surrounding area due to an increase in noise and groundborne vibration during both construction and operation of the project. The evaluation of potential impacts is based on the following criteria.

4.13.4.1 Short-term Construction Noise Criteria

The nearest sensitive receptors to the project area are single-family residences along the portion of Lost Canyon Road, which are 10 feet from the proposed off-site street improvements. Therefore, the closest source-to-sensitive-receptor distance would be approximately 10 feet during the paving phase. Other existing single-family homes are also approximately 30 feet to the west of the project site. Therefore, this analysis uses 80 dBA L_{eq} over an eight-hour period as the construction noise impact threshold consistent with FTA guidance (FTA 2018).

4.13.4.2 Short-Term Construction Vibration Criteria

According to Caltrans guidance, a vibration velocity level of 0.2 ips PPV or more received at a structure would be considered annoying by occupants within the structure. Caltrans also states that a vibration level of 0.3 ips PPV or more would result in damage to the receiving structure (Caltrans 2013).

4.13.4.3 Long-Term Operational Noise Criteria

For purposes of this analysis, a noise impact would be considered significant if noise from typical operation of heating, ventilation, and air conditioning (HVAC), and other electro-mechanical systems associated with the project exceeded 65 dBA L_{eq} during daytime hours (7:00 a.m.–9:00 p.m.) or 55 dBA L_{eq} during nighttime hours (9:00 p.m.–7:00 a.m.) at the property line of the nearest sensitive receptor, per the City's Noise Ordinance (SCMC Chapter 11.44).

4.13.4.4 Traffic Noise Criteria

For purposes of this analysis, the impact of the project to existing and future predicted ambient noise levels caused by transportation noise would be considered significant if predicted noise levels exceeded the following thresholds established by FICON (1992):

- Outdoor ambient sound level without the project less than 60 dBA L_{dn}: A project-attributed increase of five dBA or more would be considered significant.
- Outdoor ambient sound level without the project of between 60 and 65 dBA L_{dn}: A project-attributed increase of three dBA or more would be considered significant.
- Outdoor ambient sound level without the project of greater than 65 dBA L_{dn}: A project-attributed increase of 1.5 dBA or more would be considered significant.

4.13.5 Project-Specific Impacts and Mitigation Measures

a) Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

SHORT-TERM ON-SITE CONSTRUCTION ACTIVITIES

Noise and vibration generated by the construction of the project would be temporary and would vary throughout each day, depending on the equipment in use, the activity performed, and the distance between the source and receptor. Equipment that would be in use during construction may include, but is not limited to, graders, backhoes, rubber-tired dozers, loaders, cranes, forklifts, pavers, rollers, and air compressors. Typically, construction equipment operates in cycles of full power and low power, resulting in average noise levels over time that are less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities. The typical maximum noise levels at a distance of 50 feet from various pieces of construction equipment anticipated for use during project construction are presented in Table 4.13-10.

Table 4.13-10. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
All other equipment > 5 horsepower	85
Backhoe	78
Compressor (air)	78
Concrete saw	90
Crane	81
Dozer	82
Excavator	81
Flatbed truck	74
Front end loader	79
Generator	72
Grader	85
Man lift	75
Paver	77
Roller	80
Scraper	84
Welder / torch	73

Source: Dudek (2026a)

Consistent with FTA guidance, the Noise Technical Report (Dudek 2026a) assumes that only two of the loudest types of equipment per phase would be located at the nearest possible distance to a sensitive receptor during the eight-hour evaluation period. The remainder of active equipment would be operating at further distances from a given noise-sensitive receptor over the course of the same eight-hour

evaluation period and therefore would be too distant to affect the ambient noise levels at the receptor's location. As shown in Table 4.13-11, construction equipment would operate as close as 10 feet to the nearest receptors along Lost Canyon Road during paving activities and as close as 30 feet to the nearest residence west of the project during site preparation and grading. The resulting unmitigated noise levels are provided in Table 4.13-12.

Table 4.13-11. Estimated Distances Between Construction Phase Boundaries and Nearest Noise-Sensitive Receptors

Construction Phase (and Equipment Types Involved)	Distance from Noise-Sensitive Receptors to Construction Phase Boundary (feet)
Initial Phase – Grading, Off-Site Infrastructure, On-Site Utilities, Paving	
Site preparation (dozer, backhoe, tractor, excavator)	10
Grading (excavator, grader, dozer, scraper, backhoe)	10
Utilities/trenching (slurry trenching machine, backhoe, scraper, ground compactor, air compressor, pumps, man lift)	200
Paving (paver, roller, backhoe)	10 to 30
Construction – Phase 1	
Building construction (crane, man lift, generator, backhoe, welder/torch)	850
Architectural coating (air compressor)	850
Construction – Phase 2	
Building construction (crane, man lift, generator, backhoe, welder/torch)	690
Architectural coating (air compressor)	690
Construction – Phase 3	
Building construction (crane, man lift, generator, backhoe, welder/torch)	200
Architectural coating (air compressor)	200

Source: Dudek (2026a)

Table 4.13-12. Predicted Construction Noise Levels per Activity Phase (unmitigated)

Construction Phase/Equipment Type	8-Hour L_{eq} at Nearest Receptors to Construction Phase Boundary (dBA)
Initial Phase – Grading, Off-Site Infrastructure, On-Site Utilities, Paving	
Site preparation (dozer, backhoe, tractor, excavator)	86
Grading (excavator, grader, dozer, scraper, backhoe)	88
Utilities/trenching (slurry trenching machine, backhoe, scraper, ground compactor, air compressor, pumps, man lift)	66
Paving – nearest at 10 feet (paver, roller, backhoe)	84
Paving – at 30 feet (paver, roller, backhoe)	82
Construction – Phase 1	
Building construction (crane, man lift, generator, backhoe, welder/torch)	46
Architectural coating (air compressor)	43

Construction Phase/Equipment Type	8-Hour L_{eq} at Nearest Receptors to Construction Phase Boundary (dBA)
Construction – Phase 2	
Building construction (crane, man lift, generator, backhoe, welder/torch)	48
Architectural coating (air compressor)	45
Construction – Phase 3	
Building construction (crane, man lift, generator, backhoe, welder/torch)	60
Architectural coating (air compressor)	57

Source: Dudek (2026a)

As presented in Table 4.13-12, the highest estimated construction noise levels would exceed the FTA threshold of 80 dBA L_{eq} limit over an eight-hour period at the nearest noise-sensitive receptors. As a result, noise impacts resulting from project construction could be *significant*.

Impact NOI-1

The project would generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.

Mitigation Measures

MM NOI-1.1 ***Temporary Construction Noise Reduction.*** *The project contractor must ensure that the following measures are implemented and monitored for compliance throughout construction:*

a. *During the paving phase, construction equipment must have supplier-approved sound muffling devices (e.g., engine air intake or exhaust treatment) installed and used in compliance with relevant industry standards and California Occupational Safety and Health (Cal/OSHA) regulations pertaining to construction noise. Such devices must be properly maintained and used at all times the equipment is in operation. The combination of these techniques must reduce construction noise levels by a minimum of 4 A-weighted decibels (dBA), where feasible. If equipment capable of achieving this reduction is not available, the contractor must document the unavailability of compliant equipment through written confirmation from at least two equipment suppliers or manufacturers and provide such documentation to the Director of Community Development or designee before the paving phase. In such cases, the contractor must implement the next best available noise-reduction measures (e.g., use of quieter equipment models, temporary noise barriers, increased setback of equipment from sensitive receptors, or other feasible controls) to minimize construction noise to the maximum extent practicable.*

b. *During the paving phase, when high-noise paving equipment is operating within approximately 10 feet of the nearest sensitive receptor, operation of that equipment in that location must be limited to a maximum of one hour per day. Construction activities may continue beyond this period provided that the equipment is relocated farther from the receptor, substituted with quieter equipment where feasible, or other feasible noise-reduction measures are implemented.*

c. *Stationary construction equipment must be placed so that emitted noise is directed away from noise-sensitive receptors.*

d. *Equipment staging areas must be located so as to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during the construction period.*

Impact NOI-1	
	e. All noise-producing construction activities, including warming up or servicing equipment and any preparation for construction, must be limited to between 7:00 a.m. and 7:00 p.m. on weekdays and 8:00 a.m.to 6:00 p.m. on Saturdays. *f. An 8-foot-tall temporary noise barrier must be erected along the western project boundary for the site preparation and grading construction phases.*
MM NOI-1.2	***Construction Schedule.*** *The project contractor must, to the extent feasible, schedule construction activities to avoid concurrent operation of several pieces of construction equipment at the nearest distance to an off-site noise-sensitive receptor.*
MM NOI-1.3	***Construction Noise Reduction.*** *Construction noise reduction methods such as shutting off idling equipment, maximizing the distance between construction equipment staging areas and adjacent residences, and use of electric air compressors and similar power tools, rather than diesel equipment, must be used where feasible.*
MM NOI-1.4	***Contact Information.*** *Construction hours, allowable workdays, and the phone number of the job superintendent must be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event the City of Santa Clarita receives a complaint, appropriate corrective actions must be implemented by the contractor and a report of the action provided to the reporting party.*
Impacts Following Mitigation	
With implementation of MM NOI-1.1 through MM NOI-1.4, construction impacts would be less than significant as demonstrated by the analysis conducted to calculate the effectiveness of the mitigation measures, shown in Table 4.13-13.	

Table 4.13-13 shows the highest construction noise levels at the nearest sensitive receptors after implementation of Mitigation Measure (MM) NOI-1.1 through MM NOI-1.4. MM NOI-1.1 would require noise reduction techniques and the use of temporary noise barriers at the project site's western property line adjacent to noise-sensitive receptors. Additionally, implementation of MM NOI-1.2, MM NOI-1.3, and MM NOI-1.4 would further minimize impacts to adjacent noise-sensitive receptors during construction. With the implementation of MM NOI-1.1 through MM NOI-1.4, project construction noise levels would not exceed the FTA threshold of 80 dBA L_{eq} limit over an eight-hour period. Therefore, impacts would be *less than significant with mitigation.*

Table 4.13-13. Predicted Construction Noise Levels per Activity Phase (mitigated)

Construction Phase/Equipment Type	8-Hour L_{eq} at Nearest Receptors to Construction Phase Boundary (dBA)
Initial Phase – Grading, Off-Site Infrastructure, On-Site Utilities, Paving	
Site preparation (dozer, backhoe, tractor, excavator)	73
Grading (excavator, grader, dozer, scraper, backhoe)	75
Utilities/trenching (slurry trenching machine, backhoe, scraper, ground compactor, air compressor, pumps, man lift)	66
Paving – Nearest at 10 feet (paver, roller, backhoe)	80
Paving – at 30 feet (paver, roller, backhoe)	78
Construction – Phase 1	
Building construction (crane, man lift, generator, backhoe, welder/torch)	46

Construction Phase/Equipment Type	8-Hour L_{eq} at Nearest Receptors to Construction Phase Boundary (dBA)
Architectural coating (air compressor)	43
Construction – Phase 2	
Building construction (crane, man lift, generator, backhoe, welder/torch)	48
Architectural coating (air compressor)	45
Construction – Phase 3	
Building construction (crane, man lift, generator, backhoe, welder/torch)	60
Architectural coating (air compressor)	57

Source: Dudek (2026a)

SHORT-TERM OFF-SITE CONSTRUCTION ACTIVITIES

Roadway noise generated by construction traffic would be temporary and would depend on the number of worker and vendor trips to and from the project site. Based on the air quality analysis prepared for the project (Dudek 2026b; EIR Appendix H), the project would generate an estimated maximum of 92 one-way trips and an estimated maximum average of 16 one-way daily vendor truck trips during Phase I of construction.

Based on data from the *Transportation Assessment for Belcaro at Sand Canyon, Santa Clarita, California* (Transportation Assessment) (Gibson Transportation Consulting, Inc. [Gibson] 2026; EIR Appendix I), the predicted existing (2025) plus project construction trip traffic noise level on Lost Canyon Road from Sand Canyon Road to the project boundary is an estimated 52 dBA, which is an increase of 0.8 dBA from the predicted existing traffic noise level of 51.2 dBA.

Therefore, the estimated off-site traffic noise level increase would be below the FICON threshold of five dBA. As a result, noise impacts resulting from construction traffic would be *less than significant*, and mitigation is not necessary.

Impact NOI-2
During project construction, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.
Mitigation Measures
Mitigation is not necessary. Impact NOI-2 would be less than significant.

LONG-TERM OPERATIONAL

Off-Site Traffic Noise Exposure

Once operational, the project would generate new vehicle trips that would incrementally add to the existing traffic levels on the roadway system and could result in an increase in the associated traffic noise levels. Based on the Transportation Assessment prepared for the project (Gibson 2026; see EIR Appendix I), the project would generate an estimated 1,596 average daily trips to the roadway system. Approximately 116 passenger cars are estimated to enter or exit the project site during the afternoon peak hour.

In accordance with Caltrans guidance (Caltrans 2013), the Noise Technical Report assumes 80% of the average daily traffic occurs during daytime hours (7:00 a.m.–7:00 p.m.), 5% during evening hours (7:00 p.m.–10:00 p.m.), and 15% during nighttime hours (10:00 p.m.–7:00 a.m.). Traffic speed was modeled based on the anticipated speed limits for Sand Canyon Road and Lost Canyon Road, which are 45 miles per hour (mph) and 25 mph, respectively. The noise model assumed that vehicles would consist of 1% medium trucks and 2% heavy trucks, based on vehicle surveys conducted for similar roadways within California.

Traffic noise levels were predicted for the following four conditions: existing (2025), existing (2025) plus project, future (2032), and future (2032) plus project. Traffic noise levels were measured for the following roadway segments with major intersections within the project site:

- Sand Canyon Road: From Lost Canyon Road to SR-14
- Lost Canyon Road: East of Sand Canyon Road

The predicted traffic noise levels in Table 4.13-14 are based on the FICON thresholds presented in Section 4.13.4.4, *Traffic Noise Criteria*. Table 4.13-14 shows that the calculated future year 2032 plus project traffic noise level for noise-sensitive land uses for the Sand Canyon Road segment is 0.27 dBA greater than the future year 2032 without project traffic noise level. This increase is less than the 1.5 dBA FICON threshold for an ambient sound level greater than 65 dBA L_{dn}. The calculated future year 2032 plus project traffic noise increase for noise-sensitive land uses for the Lost Canyon Road segment is 2.74 dBA. This increase is less than the 5 dBA FICON threshold for an ambient sound level less than 60 dBA L_{dn}.

Therefore, the project's potential impacts to noise-sensitive land uses adjacent to the project site due to future off-site traffic noise would be *less than significant*, and mitigation is not necessary.

Table 4.13-14. Predicted Traffic Noise Levels

Segment	Existing	Existing Plus Project	Difference	Future	Future Plus Project	Difference
Sand Canyon Road (between Lost Canyon Road and SR-14)	68.05 dBA CNEL	68.51 dBA CNEL	0.47 dBA	70.49 dBA CNEL	70.76 dBA CNEL	0.27 dBA
Lost Canyon Road (between Sand Canyon Road and project boundary)	51.18 dBA CNEL	54.75 dBA CNEL	3.57 dBA	52.79 dBA CNEL	55.53 dBA CNEL	2.74 dBA

Source: Dudek (2026a)

Impact NOI-3
During project operation, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.
Mitigation Measures
Mitigation is not necessary. Impact NOI-3 would be less than significant.

On-Site Stationary Noise Sources

As part of the project, noise-generating mechanical equipment at the project site would include numerous pieces of HVAC equipment in the proposed recreation center and single-family homes. A roof-mounted air conditioning system would be installed in the recreation center to cool down the building. Estimated

sound levels for the roof-mounted HVAC equipment were calculated by considering several factors, including the square footage of the proposed recreation center, applicant-provided data, and manufacturer-provided noise levels. Ground-level heating or air conditioning equipment would be installed within the single-family homes. Additionally, several outdoor amenities and sports courts are proposed for the project in addition to the recreation center and single-family homes—a pickleball court, horseshoe pit, and dog park are proposed on the western portion of the project site adjacent to nearby noise-sensitive residential land uses, and a pool and bocce ball courts would be adjacent to the recreation center.

Based on predicted noise contours associated with aggregate sound propagation from operating HVAC equipment and other stationary noise sources, the project is estimated to produce up to 59 dBA L_{eq} during daytime hours and up to 35 dBA L_{eq} during nighttime hours near the single-family homes west of the project site (Dudek 2026a; see EIR Appendix N). These estimated noise levels are lower than the City's daytime threshold of 65 dBA L_{eq} and nighttime threshold of 55 dBA L_{eq} for residential land uses. When considering the City's thresholds with an additional five dBA reduction, the estimated levels remain lower than the City's daytime threshold of 60 dBA L_{eq} and nighttime threshold of 50 dBA L_{eq}. Therefore, the project's potential impacts to noise-sensitive land uses adjacent to the project site due to stationary operations noise would be *less than significant*, and mitigation is not necessary.

Impact NOI-4
During operation, the project would not generate a substantial temporary or permanent increase in ambient noise levels in excess of established standards.
Mitigation Measures
Mitigation is not necessary. Impact NOI-4 would be less than significant.

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

CONSTRUCTION

Groundborne vibration or groundborne noise generated by construction of the project could result in a potentially significant impact to noise-sensitive receptors adjacent to the project site. According to Caltrans, continuous vibrations with a PPV of approximately 0.2 ips are generally considered annoying to typical building occupants in nearby sensitive uses (Caltrans 2020). Heavy pieces of equipment that may be used during construction, such as rollers, have a PPV of approximately 0.21 ips or less at a distance of 25 feet (FTA 2018). Groundborne vibration levels associated with construction equipment likely to be required during project construction are summarized in Table 4.13-15.

Table 4.13-15. Representative Vibration Levels for Construction Equipment

Equipment	Vibration Level at 25 Feet (ips PPV)
Vibratory roller	0.210
Large bulldozer	0.089
Loaded trucks	0.076
Small bulldozers/tractors	0.003

Source: FTA (2018)

As shown in Table 4.13-15, construction-generated vibration levels would range from approximately 0.003 to 0.210 ips PPV at 25 feet. The highest vibration levels would be associated with the use of vibratory rollers.

A roller operating off-site on Lost Canyon Road during paving activities would be located approximately 10 feet away from the nearest occupied structure. The estimated vibration velocity would be 0.83 ips. Predicted construction vibration levels at nearby structures would not exceed guidance limits for human annoyance or building damage (0.2 and 0.3 ips PPV, respectively). Predicted groundborne vibration levels at the nearest off-site structures associated with construction activities would not exceed the Caltrans thresholds for potential human annoyance or building damage; therefore, impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

During project operation, no anticipated uses of the project site would generate groundborne vibration or noise. Mechanical equipment, such as HVAC systems that include rotating fans, motors, and reciprocating compressors, would be equipped with mechanisms that isolate vibration. Therefore, operational impacts related to groundborne vibration or noise would be *less than significant*, and mitigation is not necessary.

Impact NOI-5
The project would not generate excessive groundborne vibration or groundborne noise levels during project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact NOI-5 would be less than significant.

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 not within two miles of a private airstrip or public airport and is not within an airport land use plan. The closest airport is the Agua Dulce Airpark, approximately 6.7 miles northeast of the project site; therefore, airport noise impacts would be *less than significant*, and mitigation is not necessary.

Impact NOI-6
The project would not expose people residing or working in the project area to excessive noise levels related to aircrafts during project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact NOI-6 would be less than significant.

4.13.6 Cumulative Impacts

Cumulative noise or vibration impacts can occur when more than one project is under construction simultaneously or when a project is expected to generate operational noise or vibration at the same time. The potential for cumulative noise impacts is specific to the distance between the related projects and their stationary sources. Refer to Table 3-3 and Figure 3-3 in Chapter 3, *Environmental Setting*, for a list of cumulative projects identified within the general vicinity of the project.

ON-SITE CONSTRUCTION NOISE

Related projects in the project vicinity include construction activities that could occur simultaneously with the construction of the project. Construction-related noise levels from the related projects would be temporary and intermittent. Further, it is assumed that these projects would be required to comply with the City's Noise Ordinance (SCMC Chapter 11.44) and FTA guidance. Noise resulting from cumulative construction activities would be reduced to the extent feasible through mitigation measures proposed for each project and compliance with locally enforced noise ordinances. Project-specific construction-related impacts would be mitigated to a less-than-significant level with implementation of MM NOI-1.1 and are not anticipated to permanently increase ambient noise levels in a manner that would exceed the City's thresholds. Additionally, the implementation of MM NOI-1.1 through MM NOI-1.4 would further minimize impacts to adjacent noise-sensitive receptors during construction. Construction of reasonably foreseeable future projects has the potential to increase short-term ambient noise; however, construction-related noise generated by reasonably foreseeable present and future projects would be short-term, intermittent, and required to comply with the City's acceptable construction hours. Reasonably foreseeable future projects would be subject to separate environmental review to determine potential sources of short- or long-term increases in ambient noise levels that may exceed established City noise standards and would be required to reduce noise impacts where feasible. Therefore, impacts related to the generation of short- and long-term ambient noise levels would be less than cumulatively considerable.

ON-SITE CONSTRUCTION VIBRATION

Project-specific impacts related to the generation of groundborne noise and vibration would be less than significant, and no mitigation is necessary. Typical construction activities do not generate groundborne noise or vibration in a manner that would be perceptible to humans; therefore, other reasonably foreseeable future projects are not anticipated to result in significant impacts related to the generation of groundborne noise or vibration. Nevertheless, reasonably foreseeable present and future projects would be subject to separate environmental review to determine potential sources of groundborne noise and vibration and to reduce potential impacts as necessary. Therefore, impacts related to the generation of groundborne noise and vibration would be less than cumulatively considerable.

Impact NOI-7 (Cumulative Impacts)
The project would not contribute considerably to cumulative noise and/or vibration impacts.
Mitigation Measures
Mitigation is not necessary. Impact NOI-7 would be less than significant.

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4.14 POPULATION AND HOUSING

This section provides the existing conditions and regulatory setting for population and housing, including population, employment characteristics, and housing availability within Santa Clarita, as they pertain to the project, and evaluates the potential environmental impacts to population and housing that would result from implementation of the project.

4.14.1 Existing Conditions

4.14.1.1 Population

The project site is in the City of Santa Clarita in Los Angeles County, which is within the jurisdiction of the Southern California Association of Governments (SCAG). The SCAG region encompasses six counties—Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura—and 191 cities in an area covering more than 38,000 square miles. Historically, the SCAG region's population growth has been rapid, but the annual growth rate has decreased every decade since the 1980s. Deaths are expected to outnumber births by the late 2030s, and population growth is projected to fall below zero in the years following. As a result, people entering from other regions, States, or Countries are expected to be the sole source of population growth in the later years of the 2019–2050 growth forecast, and domestic migration is expected to rebound. Nonetheless, the region still added 773,000 residents in the last decade.

According to the 2020 U.S. Census taken on April 1, 2020, the most recent official count on record, the population of the SCAG region was 18,824,382. The SCAG region population accounts for 47.6% of California's 39.5 million residents and 5.7% of the total population (331 million) of the United States. According to the California Department of Finance (DOF), population size peaked in 2019 and has since decreased to 18,770,806 as of January 1, 2025 (DOF 2025). The decline in population is attributed to both the long-term trend of slower population growth as well as factors related to the coronavirus disease 2019 (COVID-19) pandemic, including near-zero immigration levels, pandemic-related deaths, and increasingly negative net domestic migration.

DOF population estimates indicate that, as of January 1, 2025, the population of Los Angeles County is approximately 9,876,811 (DOF 2025). According to SCAG's 2024 demographics and growth forecast technical report, the county's population is projected to consistently increase through 2050, when total growth is estimated at 1,183,000 (SCAG 2024a).

DOF population estimates as of January 1, 2025, the population of Santa Clarita is approximately 232,377 (DOF 2025). Neither the SCAG 2024 demographics and growth forecast technical report nor the DOF population projections identify population projections for Santa Clarita. To determine the projected future population of the City, the average number of persons per household was compared against the SCAG projections for housing units. As described in Section 4.14.1.2, *Housing*, according to DOF housing estimates, as of January 1, 2025, Santa Clarita had a total of 82,437 housing units (DOF 2025). The number of housing units is projected to increase to a total of 90,300 housing units by 2035 and a total of 92,500 housing units by 2050 (SCAG 2024a).

4.14.1.2 Housing

The SCAG demographics and growth forecast technical report estimates 69,700 new households per year in the SCAG region between 2020 and 2035 in comparison to 32,500 per year between 2035 and 2050, demonstrating a steady catch-up to past housing shortages (SCAG 2024a).

According to the *City of Santa Clarita General Plan Housing Element*, approximately 11.4% of Santa Clarita's population is aged 65 and above, which is lower than the regional average of 13%. However, 12.4% of the population is currently in the 55 to 64 age group, which is projected to increase the population of elderly residents by the end of 2026. Elderly people often have fixed incomes and may have additional special needs related to access and care that may require physical improvements to their homes, such as ramps, handrails, and lower cupboards and counters; creation of a downstairs bedroom; or other modifications to allow them to remain in their homes. They may also need assistance in the form of a part-time or live-in caretaker. Strategies to serve Santa Clarita's elderly residents include protecting affordable units from converting to market rate, development of single-story homes, and the development of more affordable senior living communities, especially near amenities such as transportation, grocery stores, and medical care (City of Santa Clarita 2023).

According to DOF housing estimates, as of January 1, 2025, Santa Clarita had a total of 82,437 housing units (DOF 2025). The number of housing units is projected to increase to 90,300 by 2035 and 92,500 by 2050 (SCAG 2024a). According to the *Transportation Assessment for Belcaro at Sand Canyon*, the average size of a household for senior detached housing is 1.8 persons (Gibson 2026; EIR Appendix I). As of 2021, Santa Clarita had over 1,900 senior residential units, including rental units, ownership units, and assisted living units. Over 827 of those units are deed-restricted affordable. In addition to those units, an additional 901 senior units are pending, approved, or under construction (City of Santa Clarita 2023).

4.14.1.3 Employment

Since 2000, the SCAG region has faced three recessions: the 8-month "dot-com bubble" recession in 2001, the Great Recession of 2008, and the COVID-19 recession. During the recovery from the Great Recession (2010–2019), Southern California experienced over 20% job growth, adding 1.5 million jobs. During this time, the unemployment rate dropped from 12.5% to 4.2%. When the COVID-19 pandemic struck in 2020, these job gains evaporated in a matter of months. Between February and May 2020, the region lost 1.9 million jobs, and the unemployment rate reached a historic high of 17.3%. However, by 2022, regional employment returned to its pre-pandemic level of 8.9 million, and the unemployment rate dropped to 4%, a testament to the resilience of the SCAG region's economy. Employment in the region is projected to continue growing due to structural economic advantages, including its diverse industry mix, accessible ports, natural amenities, well-recognized educational institutions, and welcoming atmosphere promoting diversity and innovation. Employment in the region is projected to grow at a compounded annual growth rate of 0.49%, with the top three growth sectors in terms of added jobs being health care and social assistance, construction, and accommodation and food service (SCAG 2024a). The SCAG region projects 22,000 new jobs per year between 2019 and 2050 (SCAG 2024a).

The industries with the highest percentage of employees are education and social services, with 23,164 employees (22.2% of total), followed by professional services (11.5% of total). As of April 2021, the largest employers were Henry Mayo Newhall Hospital with 1,917 employees, Six Flags Magic Mountain with 1,900 employees, and William S. Hart Union School District with 1,641 employees (City of Santa Clarita 2023). According to the California Employment Development Department (EDD), as of August 2025, there are approximately 118,900 workers in the City's labor force (EDD 2025). Employment in Santa Clarita is projected to increase to 99,500 and 100,800 by 2035 and 2050, respectively.

4.14.2 Regulatory Setting

4.14.2.1 Federal

No Federal regulations or planning programs regarding population and housing apply to the project.

4.14.2.2 State

HOUSING ELEMENT LAW (CALIFORNIA GOVERNMENT CODE §§ 65583 AND 65584(A)(1))

Under Government Code § 65583, Cities and Counties are required to include a Housing Element, updated by each jurisdiction every eight years, as part of the General Plan to ensure adequate housing for all income levels of the county or city. The purpose of the Housing Element is to recognize the housing needs of the community and state the housing goals and objectives of the community, including housing conservation, production, and rehabilitation to meet housing needs. The Regional Housing Needs Assessment (RHNA) is mandated by California law and quantifies the need for housing during specified planning periods and within each jurisdiction. Pursuant to California Government Code § 65584(a)(1), the California Department of Housing and Community Development (HCD) calculates the housing needs for income levels from very low to above moderate and prepares initial housing needs assessments. The HCD collaborates with each regional planning body, or Council of Governments, to prepare the final RHNA. SCAG serves as the Council of Governments for the Southern California region.

THE SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT OF 2008 (SENATE BILL 375)

The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375) focuses on aligning housing, transportation, and other land uses to achieve regional greenhouse gas (GHG) emission reduction targets recognized under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32. SB 375 requires the Metropolitan Planning Organizations for each region to develop a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP), with the goal of identifying policies and strategies to reduce per capita passenger vehicle-generated GHG emissions.

4.14.2.3 Regional

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

The City of Santa Clarita falls under SCAG's jurisdiction. On April 4, 2024, SCAG's Regional Council adopted the 2020–2045 RTP/SCS, known as *Connect SoCal: A Plan for Navigating to a Brighter Future* (Connect SoCal 2024), which establishes a long-term vision for integrating land use and transportation initiatives (SCAG 2024b). The plan aims to expand mobility options, promote sustainable growth, and meet GHG reduction targets set by the California Air Resources Board. The core vision of the 2020–2045 RTP/SCS emphasizes maintaining and managing the existing transportation infrastructure, enhancing mobility by aligning housing, employment centers, and transit, and increasing investments in public transit and complete streets. Key strategies to realize this vision include Smart Cities and Job Centers, Housing Supportive Infrastructure, Go Zones, and Shared Mobility initiatives. Through these efforts, the RTP/SCS seeks to advance regional objectives such as sustainability, transportation equity, improved public health and safety, and a higher overall quality of life. Projected outcomes include a 5% decrease in vehicle miles traveled (VMT) per capita, a 9% reduction in vehicle hours traveled, and a 2% rise in transit trips for work purposes (SCAG 2024b).

Regional Housing Needs Assessment

SCAG develops the RHNA, as required by California law, to assist local jurisdictions in updating their housing elements. The RHNA determines the housing needs for various income categories—very low, low, moderate, and above moderate—and assigns these targets to each jurisdiction within the SCAG region. It addresses both current and projected housing needs, with existing needs based on the latest U.S. Census data and future needs estimated using factors such as anticipated household growth, historical trends, job creation, and household formation rates. The allocation process ensures that new housing needs are distributed across income levels to help communities align more closely with the region's average income distribution. The most recent RHNA allocation, known as the *6th Cycle RHNA Allocation Plan*, was adopted by SCAG and approved by the HCD in March 2021, and covers the period from October 2021 to October 2029. For this cycle, SCAG was assigned a total need of 1,341,827 housing units, which were allocated among all 197 SCAG jurisdictions (SCAG 2025).

4.14.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN HOUSING ELEMENT

The *City of Santa Clarita General Plan Housing Element* establishes goals, policies, programs, and objectives regarding housing development for City residents (City of Santa Clarita 2023). Table 4.14-1 provides objectives and policies within the General Plan that are relevant to the project.

Table 4.14-1. City of Santa Clarita General Plan Relevant Objectives and Policies

Objective/Policy	Description
Housing Element	
Objective H1-1	Maintain adequate site capacity to accommodate Santa Clarita's regional housing need throughout the planning period, including 5,131 lower-income units, 1,672 moderate-income units, and 3,228 market-rate units.
Policy H1.2	Encourage the development of housing affordable to lower income groups in areas well served by public transportation, schools, retail, and other services.
Policy H2.3	Encourage a variety of housing types such as single-family attached (townhouses), multifamily units, planned unit developments, mixed use housing, board & care facilities and other typologies that make housing more affordable.
Policy H2.4	Continue to encourage and promote the development of new affordable units through the provision of incentives and density bonuses as provided in Government Code Section 65915.
Policy H3.1	Ensure safe, decent housing by enforcing habitability standards in a manner that does not discriminate and that protects the occupant's cultural, socioeconomic, and/or accessibility needs.
Policy H3.3	Promote energy efficiency in all new and existing residential structures.

4.14.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to population and housing if the project would:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Each of these thresholds is discussed under Section 4.14.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.14.4 Impact Assessment Methodology

This impact analysis evaluates proposed development and considers whether these changes would result in substantial adverse impacts on local and/or regional population growth and housing, particularly in relation to existing conditions and to the cumulative growth estimated in the DOF projections (DOF 2025), SCAG's demographics and growth forecast technical report (SCAG 2024a), and the *City of Santa Clarita General Plan Housing Element* (City of Santa Clarita 2023). Potential secondary direct and indirect impacts of population growth on resources such as transportation, public services, water supply, and other issues are addressed in respective sections of this EIR. Growth-inducing impacts related to the construction of new roadways and utility infrastructure are addressed in Chapter 6, *Other CEQA Considerations*.

4.14.5 Project-Specific Impacts and Mitigation Measures

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The project would include the development of a gated senior community consisting of 341 age-restricted, detached single-family homes; a recreation center; and trails within the 193.8-acre project site.

CONSTRUCTION

Construction activities would require a peak of 92 construction workers on-site per day during the five-year construction period, which would have the potential to generate short-term employment opportunities. Based on the EDD's August 2025 unemployment estimates, Santa Clarita has an unemployment rate of 6%, with approximately 7,100 unemployed workforce members. Within the City, as of 2022, construction jobs made up approximately 5.3% of the regional employment, with approximately 473,000 workers in the construction sector. Between 2022 and 2050, the number of construction jobs within the City is expected to increase to 6% of the regional employment, with approximately 621,000 workers in the sector (SCAG 2024a). Based on the existing unemployment rate and projected job growth in the construction sector, construction activities are expected to use workers from the local workforce and would not require a substantial number of workers to relocate to the project area. Proposed construction activities would not induce substantial or unplanned population growth; therefore, construction-related impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

The following analysis evaluates the project's long-term impact on population, housing, and employment growth in the City following full project buildout, which is anticipated to occur in 2032.

Population

According to DOF population estimates, as of January 1, 2025, the population of Santa Clarita is approximately 232,377 (DOF 2025). The project would result in 341 new age-restricted, detached single-family homes that would introduce a new and permanent population. According to the *Transportation Assessment for Belcaro at Sand Canyon* , the average size of a household for senior detached housing is 1.8 persons (Gibson 2026; see EIR Appendix I). Using the average estimate of 1.8 persons per household, the project would generate approximately 614 residents. The addition of 614 new residents would result in an approximate total of 232,991 residents in the City following full buildout in 2032. Population growth associated with the project would represent an approximately 0.26% increase over the five-year construction buildout period. This growth would be negligible and would not exceed the projected growth scenarios identified using SCAG housing projections.

Indirect population growth may occur by removing a barrier to growth, such as creating new access to undeveloped areas or increasing the capacity of existing infrastructure. The project would be limited to development on the existing project parcels within the City limits and would not result in new construction in a manner that could foster new growth in a previously undeveloped area beyond the project site itself. The project would include roadway improvements and new access roads; however, these roadway extensions are proposed to solely provide access to the project site from Lost Canyon Road and Robinson Ranch Road and to be private and gated roads. Vacant, undeveloped land is currently located east of the project site; however, the proposed new access roads implemented as part of the project would not provide access to this undeveloped area to the east as the new roads would not extend into neighboring undeveloped areas. Therefore, the project would not result in the construction of new roadways, bridges, or other features that would make previously undeveloped areas accessible to new development.

Further, the project would be limited to the construction of infrastructure to serve the project and does not include major expansion of existing public or utility services or facilities in a manner that would allow for substantial growth in other areas not currently served, or currently underserved, by utility services or facilities. Proposed infrastructure developments associated with the project, including the expansion of local utilities (water and sewer lines), are not anticipated to be extended into previously undeveloped areas that would be available for future development. These infrastructure improvements are intended to meet the service needs of the project and are consistent with City infrastructure plans and policies. These project-specific improvements would facilitate the buildout of the project and account for planned related projects located within a relevant geographical area in proximity to the project site using similar infrastructure; however, they do not account for use by unplanned and undeveloped areas.

Housing

The number of established households is projected to increase to 90,300 by 2035 and to 92,500 by 2050 (SCAG 2024a). As of January 1, 2025, Santa Clarita has approximately 82,437 established households, a 0.6% increase from January 1, 2024 (DOF 2025). The project would result in 341 new age-restricted residences within the City, which would result in an approximate total of 82,778 households following buildout of the project site. The construction of new households within the City would represent an approximately 0.41% increase over the five-year construction period. This growth would be negligible and would fall below the annual percent change as well as SCAG growth projections.

Employment

Employment in Santa Clarita is projected to increase to 99,500 workers by 2035 and to 100,800 workers by 2050 (SCAG 2024a). According to the EDD, as of August 2025, there are approximately 118,900 workers in the City's labor force, which exceeds the SCAG projections (EDD 2025). The project is a residential development; therefore, the project would result in a negligible increase in employees, such as on-site security or recreation center management staff. Based on August 2025 unemployment estimates by the EDD, Santa Clarita has an unemployment rate of 6% with approximately 7,100 unemployed members of the workforce in the City. Based on the existing unemployment rate, the project is expected to use workers from the local employment force and would not require a substantial number of workers to relocate to the project area. Therefore, any population growth associated with new permanent employment opportunities would be negligible and would fall below SCAG growth projections.

Conclusion

Based on the analysis provided above, operation of the project would not result in substantial or unplanned growth related to population, housing, or employment, either directly or indirectly; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact PH-1
The project would not 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).
Mitigation Measures
Mitigation is not necessary. Impact PH-1 would be less than significant.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The project site is currently vacant and does not currently contain any existing residential structures or uses. Therefore, the project would not displace existing people or housing, and *no impacts* would occur.

Impact PH-2
The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

4.14.6 Cumulative Impacts

As provided in Chapter 3, *Environmental Setting*, a list of cumulative development projects in the vicinity of the project site also details nearby related projects, which consist of a variety of land uses, including residential, assisted living/nursing home, commercial, hotel, office, and mixed-use.

As described in Impact PH-1, the project would not result in substantial or unplanned growth related to population, housing, or employment either directly or indirectly. Other reasonably foreseeable future projects would be subject to subsequent environmental review to determine if individual projects would result in substantial or unplanned growth. It is assumed that a portion of the residents generated by the project and related projects would already live in the City and would move into the project or one of the related project's residential components. It is also assumed that a portion of these residents are already included in the total local labor force in the City. The project site is zoned for urban residential and rural residential uses; therefore, development of the project site has been anticipated, and the project's residential growth, employee growth, and infrastructure improvements have been accounted for in the City's General Plan.

Reasonably foreseeable future projects would be subject to the underlying zoning requirements of the specific project site to be consistent with the City's growth assumptions in the General Plan. Any proposed new roadways and infrastructure improvements would serve the applicable related project and would not extend roads or other infrastructure into previously undeveloped areas that would be available for future development. As described in Impact PH-2, the project would not displace existing people or housing or necessitate the construction of replacement housing elsewhere. No project-specific impacts would occur, and impacts related to the project would not be cumulatively considerable.

Impact PH-3 (Cumulative Impacts)
The project would not result in cumulative impacts related to population and housing.
Mitigation Measures
Mitigation is not necessary. Impact PH-3 would be less than significant.

4.15 PUBLIC SERVICES

This section of the EIR describes the existing conditions and regulatory setting for public services as they pertain to the project, evaluates potential environmental impacts to public services that would result from implementation of the project, and provides mitigation measures that would reduce these impacts, including those related to fire protection services, law enforcement, public schools, public parks, and other governmental facilities.

4.15.1 Existing Conditions

4.15.1.1 Fire Protection Services

The City is provided with fire protection services by the Los Angeles County Fire Department (LACoFD). LACoFD provides fire protection and life safety services to a service population of approximately four million residents and 1.3 million housing units within a service area encompassing 60 incorporated Cities and 122 unincorporated areas in Los Angeles County (LACoFD 2025). LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System, which is an agreement among emergency responders to provide assistance across jurisdictional boundaries when an emergency exceeds the capabilities of local resources (City of Santa Clarita 2022).

As of 2025, the LACoFD had a total of approximately 5,000 fire services personnel and 177 total fire stations. Other LACoFD resources include 228 total personnel units, 112 paramedic units, 61 engines, 10 helicopters, four hazardous materials task force squads, two urban search and rescue squads, six swift water rescue units, two fire boats, and other additional specialized equipment (LACoFD 2023). The LACoFD documented 455,722 total incidents for 2024 generated by a County-wide service area total population of approximately 3,965,562 persons in 60 Cities and all unincorporated communities within Los Angeles County (LACoFD 2025). The LACoFD's goal response time in suburban areas, described as areas with dense population and some wildland urban interface such as the project site, is eight minutes or less.

The project site is within the jurisdiction of the LACoFD Northern Operations Bureau, Division 3, which includes Stations 107, 123, 128, 132, and 150. The project site would be served by Fire Station 132, located at 29310 Sand Canyon Road in Canyon Country, approximately 1.3 miles northwest of the project site. Table 4.15-1 provides a summary of the available equipment located at the closest responding LACoFD stations. In 2023, Station 132 responded to a total of 2,213 incidents with an approximate call volume of six calls per day (Dudek 2025).

Table 4.15-1. Closest Responding LACoFD Fire Stations Summary

Station	Address	Amenities
Station 132	29310 Sand Canyon Road Canyon Country, CA 91387	Engines 132, 4132, 532; Patrol 132
Station 123	26321 Sand Canyon Road Santa Clarita, CA 91387	Engines 123, 5123; Patrol 123
Station 107	18239 Soledad Canyon Road Canyon Country, CA 91387	Engine 107; Squads 107, 5107
Station 150	19190 Golden Valley Road Canyon Country, CA 91387	Engines 150, 5150; Haz Mat 150; Utility 22; Command 1
Station 128	28450 Whites Canyon Road Santa Clarita, CA 91351	Engine 128; Patrols 128, 5128; WT128

Source: City of Santa Clarita (2025)

4.15.1.2 Law Enforcement Services

The City is provided with law enforcement services by the Los Angeles County Sheriff's Department (LASD). LASD provides law enforcement services to more than one million people living within 90 unincorporated communities and more than four million residents living within 40 contract Cities (County of Los Angeles 2025). The LASD also provides services to the superior courts, community colleges, County parks, public transportation, the Los Angeles County Metropolitan Authority, and additional facilities (LASD 2025). The LASD oversees general law and traffic enforcement within the City, while the California Highway Patrol has jurisdiction over traffic on State highways and in unincorporated County areas.

The project site would be served by the LASD Santa Clarita Valley Station at 26201 Golden Valley Road, approximately 5.5 miles southwest of the project site. The Santa Clarita Valley Station's service area covers 656 square miles, including both City and County areas and portions of the Angeles National Forest. In 2021, the Santa Clarita Valley Sheriff's Station had a service population of approximately 310,000 and was staffed by 205 sworn personnel and 34 civilian employees (City of Santa Clarita 2022). Staffing levels and standards vary based on needs, performance level, and service modeling. Based on local conditions, the stations deploy an average of 12 deputies on morning shifts, 14 deputies on evening shifts, and 11 deputies on early morning shifts in patrol.

4.15.1.3 Public Schools

School districts within the Santa Clarita Valley include Acton/Agua Dulce Unified School District, Castaic Unified School District, Newhall School District, Saugus Union School District, Sulphur Springs Unified School District (SSUSD), and William S. Hart Union High School District (Hart District) (City of Santa Clarita 2025a). The project site is within the SSUSD and the Hart District.

The SSUSD serves students in kindergarten through sixth grade. The SSUSD consists of nine elementary schools and a State preschool program that functions through selected schools within the SSUSD. As of 2025, the SSUSD serves 5,150 students throughout the Santa Clarita Valley. The nearest public elementary school to the project site is Sulphur Springs Community School, approximately 0.7 mile southwest of the project site. Sulphur Springs Community School serves students in kindergarten through sixth grade and had a total enrollment of 600 students for the 2023–2024 school year (California Department of Education 2025).

The Hart District serves students in seventh grade through twelfth grade and consists of 10 high schools, six junior high schools, and one adult school. The Hart District currently serves 20,967 students throughout Santa Clarita Valley (Hart District 2025). The nearest public middle school to the project site is Sierra Vista Junior High School located approximately 3.5 miles west of the project site. Sierra Vista Junior High School serves students in seventh grade and eighth grade and had a total enrollment of 974 students for the 2023–2024 school year (Sierra Vista Junior High School 2025). The nearest public high school is Canyon High School, approximately 3.3 miles northwest of the project site. Canyon High School serves students in ninth grade through twelfth grade and had a total enrollment of 1,966 students during the 2023–2024 school year (Canyon High School 2025).

The Gorman Learning Center Santa Clarita Resource Center, which is a public charter school serving students in transitional kindergarten through twelfth grade, is located 0.11 mile west of the project site.

4.15.1.4 Parks and Recreational Facilities

The different types of parkland recognized by the City are defined as follows:

- Neighborhood parks generally range between five and 10 acres and provide active recreational areas intended to serve a population of up to 5,000 within a 0.5-mile radius.
- Community parks generally range between 10 and 40 acres and provide both passive and active recreation facilities intended to serve a population of up to 20,000 within a two-mile radius.
- Regional parks are generally over 50 acres in size and offer a wide range of specialized recreational activities to serve the population within a one-hour drive.
- Recreation parks are generally at least 50 acres in size and designed to handle large-scale multiple-participant sports programs and tournaments.
- Reservations are lands set aside in order to protect scenic resources, biological resources, geological features, and/or open space, and provide only passive recreational facilities such as hiking and picnicking.

The City manages approximately 448 acres across 40 parks, over 13,000 acres of open space, and approximately 136 miles of off-street trails.

The *City of Santa Clarita General Plan* requires five acres of active parkland per 1,000 in population (City of Santa Clarita 2011b, 2023a). Based on the City's 2025 population of 230,428 residents, the 448 acres of existing parkland is 704 acres less than the General Plan goal of five acres of parkland per 1,000 residents; accordingly, there is a Citywide shortage of local parkland. This existing parkland is also 243 acres less than the Quimby Act standard of three acres per 1,000 residents (City of Santa Clarita 2023a).

The project site encompasses approximately 193.8 acres of land in the easternmost portion of Santa Clarita. The project site is currently vacant, has no existing facilities, and does not support any developed or undeveloped recreational land; however, a variety of public parks are within proximity[1] to the project site. There are four parks within two miles of the project site, totaling approximately 132 acres of parkland.

In addition to parks, the City provides the following community centers:

- Canyon Country Community Center at 18410 Sierra Highway, Santa Clarita, approximately 3.2 miles east of the project site; and
- Newhall Community Center at 22421 Market Street, Newhall, approximately 9.3 miles southwest of the project site.

These community centers provide services such as after-school programs, teen programs, an open gym, and a farmer's market.

[1] Per the 2025 CEQA Statute and Guidelines, "proximal" to an amenity means within 2 miles of a public park or community center.

4.15.1.5 Other Public Services

The Santa Clarita Public Library serves the City with library service and materials through three library branches:

- Canyon Country Jo Anne Darcy Library at 18601 Soledad Canyon Road, Santa Clarita, approximately 3.4 miles northeast of the project site;
- Old Town Newhall Library at 24500 Main Street, Santa Clarita, approximately 9.5 miles southwest of the project site; and
- Valencia Library at 23743 West Valencia Boulevard, Valencia, approximately 9.5 miles west of the project site.

The three library branches offer a variety of services to the community, such as book clubs and career resources for adults; study spaces and crafts for teens; and reading lists and games for younger children.

4.15.2 Regulatory Setting

4.15.2.1 Federal

No Federal regulations or planning programs regarding public services apply to the project.

4.15.2.2 State

LEROY F. GREENE SCHOOL FACILITIES ACT

The Leroy F. Greene School Facilities Act of 1998 (Education Code § 17070.10 et seq.) establishes the Statewide School Facility Program, which governs the allocation of State bond funds for the construction of new public school facilities and the modernization of existing facilities. The act, implemented through regulations adopted by the State Allocation Board (California Code of Regulations, Title 2, § 1859 et seq.), sets eligibility formulas, funding categories, and application procedures for school districts and qualifying charter schools, as well as State–local cost-sharing and related program requirements. The act is relevant to housing development projects because it governs how new school facilities in California are funded and expanded to accommodate student population growth generated by new residential development, often through mechanisms such as developer impact fees and State–local funding programs.

CALIFORNIA GOVERNMENT CODE § 65995

Government Code § 65995, et seq. authorizes school districts to collect development impact fees to help offset the cost of new school facilities needed to serve new development. The fees are levied on a per-square-foot basis of new construction and must be supported by a Fee Justification Study that establishes the connection between the development coming into the district and the assessment of fees to pay for the cost of the facilities needed to house future students. The following three levels of impact fees may be levied:

- Level I is assessed if a Fee Justification Study documents the need for new school facilities and associated costs.
- Level II is assessed if a district makes a timely application to the State Allocation Board for new construction funding, conducts a School Facility Needs Analysis pursuant to Government Code § 65995.6, and satisfies at least two of the four requirements listed in Government Code § 65995.5(b)(3) that relate to the characteristics of current enrollment and district efforts to fund school facility construction.

- Level III is assessed if State bond funds are exhausted, and the district may impose a developer's fee up to 100% of the School Facilities Program (SFP) new construction project cost.

In addition, Government Code § 65995(h) states that the payment of required fees for schools ". . . is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Government Code § 65995 is relevant to housing development projects because it authorizes school districts to levy statutory developer impact fees on new residential construction to help fund school facilities needed to accommodate students generated by the development, and under CEQA, the payment of these fees is deemed full mitigation for impacts to school facilities.

QUIMBY ACT (CALIFORNIA GOVERNMENT CODE § 66477)

The Quimby Act (Government Code § 66477) authorizes the legislative body of a county or city to require the dedication of land or to impose fees for park and recreational purposes as a condition of the approval of a tentative or parcel subdivision map if specified requirements are met. Existing laws require fees collected to be committed within five years after the payment of fees or issuance of building permits on half of the lots created by the subdivision, whichever occurs later. Existing law also requires fees not committed to be distributed and paid to the then-record owners of the subdivision, as specified. The Quimby Act allows fees to be collected for up to three acres of parkland per 1,000 residents to serve the needs of residents of the county. The Quimby Act is relevant to housing development projects because it authorizes cities and counties to require residential subdivisions to dedicate land or pay in-lieu fees for the acquisition and development of park and recreational facilities needed to serve new residents generated by the development.

MITIGATION FEE ACT (CALIFORNIA GOVERNMENT CODE § 66000)

The Mitigation Fee Act (Government Code § 66000 et seq.) allows fees to be established and imposed on development projects and provides local agencies with guidelines regarding imposition and enforcement of fees. The Act is relevant to housing development projects because it establishes the legal framework under which local agencies may impose development impact fees to fund public facilities and services needed to accommodate growth, requiring that such fees have a demonstrated nexus and be reasonably related to the impacts of new development.

4.15.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Safety Element* (City of Santa Clarita 2022) discloses natural and human-made hazards that have the potential to affect existing and future residents. The Safety Element provides objectives, goals, and policies related to fire hazards, law enforcement, and healthy neighborhoods intended to be used as guidelines for protecting public health and safety and to minimize risk from hazards to acceptable levels. In scenarios where the unsafe and hazardous conditions cannot be predicted or avoided, the Safety Element describes the emergency response services available and includes policies designed to reduce disruption and ensure recovery can take place following exposure to the unsafe or hazardous conditions.

The *Santa Clarita General Plan Conservation and Open Space Element* (City of Santa Clarita 2011b) establishes a framework for policy development pertaining to the long-term preservation of open space within the City, and addresses community concerns and benefits derived from open space. Additionally,

the Conservation and Open Space Element is intended to provide a framework for open space planning for outdoor recreation, public health and safety, and preservation of natural resources.

Table 4.15-2 provides goals and policies within the General Plan that are relevant to the project.

Table 4.15-2. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Safety Element	
Policy S 3.1.3	Require adequate fire flow and adequate fire protection as a condition of approval for all new development. (Change required to meet Board of Forestry standards)
Policy S 3.2.5	Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.
Policy S 3.3.2	Require the installation and maintenance of street name signs on all new development and the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets. (combined two existing policies)
Policy S 3.3.3	Identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios, and plan for the evacuation needs of developments with only one point of access. (Required to meet Board of Forestry standards)
Policy S 3.4.1	Ensure that all new development and redevelopment in Fire Hazard Severity Zones comply with Board of Forestry requirements, Fire Safe Regulations, and current versions of the California Building Code (CBC), California Fire Code (CFC), and Title 14 of the California Code of Regulations (CCR). (Required to meet Board of Forestry standards)
Policy S 3.4.4	Require new development in Very High Fire Hazard Severity Zones to develop fire protection plans and enter into long term vegetation landscape maintenance agreements, and maintain access for emergency response vehicles, and require new residential development to maintain Fuel Modification Plans (Required to meet Board of Forestry standards)
Objective S 5.2	Cooperate with the Sheriff's Department on crime prevention programs to serve residents and businesses.
Policy S 5.2.2	Promote and support Neighborhood Watch programs to assist residents in establishing neighborhood crime prevention techniques.
Goal S 7	Protection of the public through planning for disaster response and recovery, in order to minimize damage from emergency incidents or terrorist activities.
Policy S 7.1.3	Ensure that evacuation routes are clearly posted throughout the Santa Clarita Valley
Conservation and Open Space Element	
Goal CO 9	Equitable distribution of park, recreational, and trail facilities to serve all areas and demographic needs of existing and future residents.
Objective CO 9.1	Develop new parklands throughout the Santa Clarita Valley, with priority given to locations that are not now adequately served, and encompassing a diversity of park types and functions (including passive and active areas) in consideration of the recreational needs of residents to be served by each park, based on the following guidelines:
Policy CO 9.1.1	Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population.
Policy CO 9.1.3	Provide local and community parks within a reasonable distance of residential neighborhoods.
Policy CO 9.1.9	Ensure that new development projects provide a fair share towards park and recreational facilities, phased to meet needs of residents as dwelling units become occupied, pursuant to the Quimby Act (California Government Code § 66477) and local ordinances as applicable.

4.15.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to public services if the project would:

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

This threshold is discussed under Section 4.15.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.15.4 Impact Assessment Methodology

This impact assessment provides an evaluation of the potential for the project to result in the need for new or physically altered public service facilities. Existing conditions and significance thresholds were identified using applicable planning documents and agency information, including the Southern California Association of Governments (SCAG) demographics and growth forecast technical report (SCAG 2024), the City's General Plan (City of Santa Clarita 2011c), and LACoFD and LASD statistics. The project would have a significant environmental impact if it were to directly result in the need for new or expanded public service facilities. The project's potential to result in the need for new or physically altered public service facilities was evaluated by determining if growth associated with the project would exceed service goals or other criteria established by the City and applicable agencies.

4.15.5 Project-Specific Impacts and Mitigation Measures

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Parks, Other public facilities?

FIRE PROTECTION

The project site is served by LACoFD Station 132 at 29310 Sand Canyon Road in Canyon Country, approximately 1.3 miles northwest of the project site. As previously identified, the LACoFD has a goal response time of eight minutes or less for suburban areas. The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a recreation center; and public and private trails in a suburban area, which would result in an incremental increase in demand on LACoFD services.

Construction

The project is anticipated to be constructed over a five-year period, commencing in 2027 and ending by 2032, with a full operational buildout in 2032. Construction activities would require a five-year construction period.

Proposed construction activities would be limited to the project site and would not require full closure of any proximate roadways that could impede LACoFD response times in the City. If any temporary traffic controls would be necessary to complete construction activities, the construction contractor, in coordination with the City, would be required to install traffic control devices to direct traffic and maintain vehicle movement in accordance with the City's Traffic and Transportation Planning Division. Following construction activities, any temporary traffic controls would be removed, and proximate roadways would continue to provide paths of travel for fire department emergency vehicles.

Construction activities would also have the potential to increase on- and off-site accidents or urban fire risks that could increase calls for fire protection services, including ambulances, to the project site. Construction contractors would be required to comply with Federal, State, and local regulations for contractor safety and local laws, including U.S. Department of Labor Occupational Safety and Health Administration regulations, to reduce the potential for on-site health and safety concerns. Further, building plans would be required to be reviewed and approved by the LACoFD to ensure fire safety during all stages of the project. Therefore, project construction would not interfere with the LACoFD goal response times for the fire department in a manner that would require the construction of new or expanded fire protection facilities to serve the project.

Operation

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a recreation center; and public and private trails, and would also generate approximately 614 new residents.

The LACoFD has a goal response time of eight minutes or less for suburban areas. According to the *Fire Protection Plan: Belcaro at Sand Canyon* (Dudek 2025), the response time from Station 132 to the project site is calculated at approximately seven minutes and 19 seconds to seven minutes and 55 seconds to the furthest lot. As a result, the response time from Station 132 to the project site conforms with the response time standard of eight minutes or less. Additionally, Station 123 is available to provide a secondary response to the project site, if needed. The response time from Station 123 to the project site is calculated at approximately eight minutes and 41 seconds.

Using LACoFD's estimated per capita call volume of 0.11 (110 annual calls per 1,000 population), the project would generate approximately 75 calls (approximately six calls per month). Station 132 responded to 2,213 incidents in 2023, which equates to approximately six calls per day. The project's incremental increase of approximately 75 calls per year would represent an increase of approximately 3.4% over the station's existing annual call volume. This incremental increase would not require the construction of a new fire station, expansion of an existing facility, or substantial physical alteration of fire protection facilities to maintain service levels. As demonstrated in the Fire Protection Plan (Dudek 2025), emergency response times from Station 132 to the furthest lot within the project site would range from approximately seven minutes and 19 seconds to seven minutes and 55 seconds, which meets LACoFD's eight-minute suburban response time objective. Because existing facilities can accommodate the projected increase in demand without expansion, the project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities; therefore, impacts would be less than significant.

The project site would be accessed by Lost Canyon Road from the north and Robinson Ranch Road from the south, which would connect to the proposed internal roadways. The project would include a railroad undercrossing to provide access between the northern and southern portions of the project site. The project would have gated entries on proposed A Street (just south of the proposed railroad undercrossing) and on proposed J Street (north of the J Street intersection with Oak Spring Canyon Road), restricting public access to the project site. However, the proposed extension of Lost Canyon Road and portions of J Street outside the project site would be open for public vehicular access. Existing and proposed roadways, including gated private roads, would be required to comply with the California Fire Code (CFC) and other applicable law for emergency and other vehicle access requirements (e.g., width and clearance, grade, gate access, signage). Proposed roadway improvements would be limited to access and internal roadways intended to serve the project site; therefore, the project would not result in off-site roadway improvements in a manner that could permanently alter adjacent roadways and impede LACoFD emergency response times to surrounding areas. Therefore, the project would not include features that could impede long-term LACoFD response times to the project site or the surrounding area.

Conclusion

As evaluated in Section 4.14, *Population and Housing*, growth associated with the project would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on the fire department. The project would be subject to the payment of development impact fees in accordance with the terms of the development agreement to address the incremental increase in demand on fire department services. In addition, the project would ultimately increase long-term fire safety at the project site because the new development would be built to current building and fire codes, including, but not limited to, the CFC, California Building Code, California Residential Code, which would reduce the potential for calls for fire protection to the project site as compared to existing conditions. The project would include the implementation of vegetation management activities during construction and operation in accordance with Chapter 33 of the CFC. Further, the project includes the provisions of a wildfire education program intended to inform residents

of evacuation planning, defensible space guidelines, how to maintain fire protection features, and activities in a fire risk area.

For these reasons, the project would not interfere with short- or long-term LACoFD response times in a manner that would require the construction of new or physically altered fire service facilities. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact PS-1
The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities.
Mitigation Measures
Mitigation is not necessary. Impact PS-1 would be less than significant.

LAW ENFORCEMENT

The project site would be served by the LASD Santa Clarita Valley Station at 26201 Golden Valley Road in Santa Clarita, approximately 5.5 miles southwest of the project site. The LASD does not have a service threshold for police protection services. The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes and associated amenities.

During the 5-year construction period, construction activities would have the potential to increase on- and off-site accidents that could increase calls for police protection services to the project site. Construction contractors would be required to comply with Federal, State, and local regulations for contractor safety and local laws, including U.S. Department of Labor Occupational Safety and Health Administration regulations, to reduce the potential for on-site health and safety concerns. Further, the Transportation Assessment prepared for the project analyzed the effects of project construction on the surrounding roadways and sidewalks. Construction activities would be limited to the project site, other than for the extension of Lost Canyon Road, the connection between Oak Spring Canyon Road and Robinson Ranch Road, and the public multi-use path. Temporary lane closures may be necessary on Lost Canyon Road or Oak Spring Canyon Road near the project access points to construct off-site improvements and to connect the access points to the existing streets. Any lane closures would require temporary traffic control plans that would be individually reviewed and approved by the City during the construction permitting process. According to the *Transportation Assessment for Belcaro at Sand Canyon, Santa Clarita, California*, project construction would not prevent pedestrian or vehicular access to any neighboring properties (Gibson Transportation Consulting, Inc. [Gibson] 2026). If any temporary traffic controls would be necessary to complete construction activities, the construction contractor, in coordination with the City, would be required to install traffic control devices to direct traffic and maintain vehicle movement in accordance with the City's Traffic and Transportation Planning Division. Following construction activities, any temporary traffic controls would be removed, and proximate roadways would continue to provide paths of travel for LASD emergency vehicles.

As evaluated in Section 4.14, *Population and Housing*, growth associated with the project would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on the LASD. In addition, the future residents would be anticipated to employ individual safety measures, such as security gates, security lighting, alarm systems, video cameras, and other safety measures to reduce the potential for criminal activity at the project site and reduce demand on police protection services. Further, the project would be subject to the payment of development impact fees in accordance with the terms of the development agreement to address the

incremental increase in demand on LASD services. The project would ultimately increase long-term safety at the project site because the new land uses would include new security measures that would reduce the potential for long-term calls for police protection. The project would not require new or physically altered governmental facilities for police protection services; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact PS-2
The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities.
Mitigation Measures
Mitigation is not necessary. Impact PS-2 would be less than significant.

SCHOOLS

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a recreation center; and public and private trails. The project would provide homes for residents aged 55 and above; therefore, the project would not result in additional students that could affect school facilities, and *no impacts* would occur.

Impact PS-3
The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public school facilities.
Mitigation Measures
Mitigation is not necessary. No impacts would occur.

PARKS AND RECREATIONAL FACILITIES

The City has adopted a standard of five acres of parkland per 1,000 residents. In addition, the County of Los Angeles has adopted a standard of three acres per 1,000 residents, which is consistent with the Quimby Act standard. Based on the City's 2025 population of 230,428 residents and the existing amount of 448 acres of parkland, the City currently provides an average of 1.94 acres of parkland per 1,000 residents, which is below the City's and County's standards (City of Santa Clarita 2023a).

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes within the 193.8-acre project site. According to the Transportation Assessment prepared for the project, the average size of a household for senior detached housing is 1.8 persons (Gibson 2026).

Using an estimate of 1.8 persons per household, the project would generate approximately 614 residents. Although the project would result in a permanent population increase, the project would provide a 3.1-acre recreation center for residents, which would provide recreational opportunities to new residents and community members on-site. Based on a project-generated population of 614 residents, the 3.1-acre recreation center would result in approximately 5.05 acres of parkland per 1,000 residents, which is greater than the current Citywide parkland to population ratio. In addition to the recreation center, the project would also provide over 100 acres of open space, which includes public trails, private trails, and

conservation areas that would provide additional recreational and open space for the residents of the project, as well as other members of the community.

Given the nature of the proposed age-restricted housing, the on-site recreational opportunities are expected to reduce the demand for other nearby parks and trails within the City, as new residents are not expected to regularly use off-site recreational facilities. The City has identified an existing need for new park facilities and has developed a master plan to prioritize actions needed to expand parkland and services. The project would be subject to the payment of development impact fees in accordance with the terms of the development agreement, which would offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities to serve residents in the City. Further, due to the nature of age-restricted housing and the construction of new on-site recreational trails and facilities, new residents are not expected to regularly use off-site recreational facilities. The project would not result in the need for new or physically altered park facilities; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact PS-4
The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public park facilities.
Mitigation Measures
Mitigation is not necessary. Impact PS-4 would be less than significant.

OTHER PUBLIC FACILITIES

The proposed development would result in an incremental increase in demand on libraries, post offices, and other governmental facilities. As evaluated in Section 4.14, *Population and Housing*, growth associated with the project would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on other governmental facilities. Further, the project would be subject to the payment of development impact fees to address the incremental increase in demand on other governmental facilities in the City. The project would not require new or physically altered governmental facilities for other public services; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact PS-5
The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities.
Mitigation Measures
Mitigation is not necessary. Impact PS-5 would be less than significant.

4.15.6 Cumulative Impacts

As provided in Chapter 3, *Environmental Setting*, a list of cumulative development projects in the vicinity of the project site also details nearby related projects, which consist of a variety of land uses, including residential, assisted living/nursing home, commercial, hotel, office, and mixed-use.

As evaluated in Section 4.14, *Population and Housing*, growth associated with the project, in combination with other cumulative projects, would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on existing public facilities in the City beyond planned growth projections. Further, project-specific impacts related to the increase in demand on public services would be further reduced through the payment of development impact fees, and other cumulative projects would be subject to the payment of development impact fees to offset individual increases in demand on public facilities. Therefore, the project, in combination with cumulative projects, would not result in an increase in demand on existing public services in a manner that would require the construction of new governmental facilities elsewhere, and impacts would be less than cumulatively considerable.

Impact PS-6 (Cumulative Impacts)
The project would not result in a cumulatively considerable impact associated with the provision of new or physically altered governmental facilities.
Mitigation Measures
Mitigation is not necessary. Impact PS-6 would be less than significant.

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4.16 RECREATION

This section of the EIR describes the existing conditions and regulatory setting for park and recreational facilities related to the project and evaluates potential environmental impacts to nearby parks and recreational facilities that would result from implementation of the project. For the purposes of the information and analysis provided in this section, it is noteworthy that while the project site provides passive recreational opportunities that benefit the public, such as recreational amenities and private and public spaces, it is not managed by the City's Neighborhood Services Department.

4.16.1 Existing Conditions

The different types of parkland recognized by the City are defined as follows:

- Neighborhood parks generally range between five and 10 acres in size and provide active recreational areas intended to serve a population of up to 5,000 within a 0.5-mile radius.
- Community parks generally range between 10 and 40 acres in size and provide both passive and active recreation facilities intended to serve a population of up to 20,000 within a two-mile radius.
- Regional parks are generally over 50 acres in size and offer a wide range of specialized recreational activities to serve the population within a one-hour drive.
- Recreation parks are generally at least 50 acres in size and designed to handle large-scale multiple-participant sports programs and tournaments.
- Reservations are lands set aside in order to protect scenic resources, biological resources, geological features, and/or open space, and provide only passive recreational facilities such as hiking and picnicking.

Within the City of Santa Clarita, the Neighborhood Services Department manages most parkland and trails, including approximately 246 acres across 20 parks that offer a variety of recreational amenities (City of Santa Clarita 2011). This network of parks includes 12 neighborhood and five community parks, as well as special-use and passive parks, which are commonly used for open space greenbelts and vista points. The City's Neighborhood Services Department also operates approximately 80 miles of trails, 20 miles of paseos designed for commuting and recreational use, and over 3,000 acres of open space, which includes areas for natural resources preservation, the managed production of resources, outdoor recreation, and public health and safety (City of Santa Clarita 2011).

According to the City's Neighborhood Services Department, there is a citywide shortage of local parkland. Based on the City's 2025 population of 232,377 residents, the 246 acres of existing parkland falls 916 acres short of the General Plan goal of five acres of parkland per 1,000 residents (City of Santa Clarita 2025). This existing parkland also falls 451 acres short of the Quimby Act standard of three acres per 1,000 residents.

The project site includes approximately 193.8 acres of land in the easternmost portion of the City of Santa Clarita. The project site is currently vacant, has no existing facilities, and does not support any developed or undeveloped recreational land; however, a variety of public parks are located within proximity[1] of the project site. There are four parks within two miles of the project site. Table 4.16-1 lists the park names, addresses, distances to the project site, amenities, and approximate acreage of the parks.

[1] Per the 2026 CEQA Statute and Guidelines, "proximal" to an amenity means within two miles of a public park or community center.

Table 4.16-1. Parks Within a Two-Mile Radius of the Project Site

Name	Address	Distance to Project Site (miles)	Amenities	Acreage
Oak Spring Canyon Park	28920 Oak Springs Canyon Road Santa Clarita, CA 91387	0.32	Basketball court – half, child play area, picnic tables, public restrooms	5
Vista Canyon Park	16950 Lost Canyon Road Santa Clarita, CA 91387	0.79	Basketball court – full (lighted), child play area, community room, kitchen facilities, pickleball (lighted), picnic tables, public restrooms, tennis court (lighted)	11
Begonias Lane Park	14911 Begonias Lane Santa Clarita, CA 91387	1.21	Basketball court – full (lighted), child play area, picnic tables, public restrooms	4.6
Canyon Country Park	17615 Soledad Canyon Road Santa Clarita, CA 91387	1.41	Ball diamond, barbecues, child play area, fitness zone, Inclusive playground, picnic tables, public restroom	105
Fair Oaks Park	17468 Honey Maple Street Santa Clarita, CA 91387	1.25	Basketball court – full, barbecues, child play area, picnic tables, public restroom, sand volleyball court	6.3

Source: City of Santa Clarita (2025).

The largest active recreational area adjacent to the project site is Sand Canyon Country Club, which spans over 400 acres and is directly south and east of the project site. The Sand Canyon Country Club provides some private recreational opportunities, including golf.

4.16.2 Regulatory Setting

4.16.2.1 Federal

There are no Federal recreation regulations applicable to the project.

4.16.2.2 State

QUIMBY ACT

The Quimby Act, enacted in 1975 (Government Code § 66477), allows local agencies to require developers of residential subdivisions to either donate land or pay an in-lieu fee for parkland. Revenues generated through the Quimby Act may not be used for the operation and maintenance of park facilities. The 1982 amendment to the act further defined acceptable uses of or restrictions on these funds, provided acreage/population standards and formulas for determining the exaction, and indicated that the exactions must be tied to a project's impacts. The Quimby Act requires every City to provide a minimum of three acres of parkland per 1,000 residents. The City's General Plan exceeds this requirement by recommending five acres of parkland per 1,000 residents be provided; this is the highest standard allowed under the Quimby Act. The Quimby Act and General Plan standards are incorporated into the SCMC.

4.16.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

Conservation and Open Space Element

The *Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011). Table 4.16-2 provides goals and policies within the Conservation and Open Space Element that are relevant to the project.

Table 4.16-2. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Objective CO 9.2	Recognize that trails are an important recreational asset that, when integrated with transportation systems, contribute to mobility throughout the Santa Clarita Valley.
Policy CO 9.2.1	Plan for a continuous and unified multi-use (equestrian, bicycling and pedestrian/hiking) trail network for a variety of users, to be developed with common standards, in order to unify Santa Clarita Valley communities and connect with County, regional, State trails and Federal such as the Pacific Crest Trail.
Policy CO 9.2.4	Ensure that new development projects provide trail connections to local and regional trail systems, where appropriate.
Goal CO 10	Preservation of open space to meet the community's multiple objectives for resource preservation.
Objective CO 10.1	Identify areas throughout the Santa Clarita Valley which should be preserved as open space in order to conserve significant resources for long-term community benefit.
Policy CO 10.1.2	The Santa Clara River corridor and its major tributaries shall be preserved as open space to accommodate storm water flows and protect critical plant and animal species, as follows: a. Uses and improvements within the corridor shall be limited to those that benefit the community's use of the river in its natural state. b. Development on properties adjacent to, but outside of the defined primary river corridor shall be: i. Located and designed to protect the river's water quality, plants, and animal habitats by controlling the type and density of uses, drainage runoff (water treatment) and other relevant elements; and ii. Designed to maximize the full range of river amenities, including views and recreational access, while minimizing adverse impacts to the river.
Policy CO 10.1.7	Acquire adequate open space for recreational uses, coordinating location and type of open space with master plans for trails and parks.
Objective CO 10.2	Ensure the inclusion of adequate open space within development projects.
Policy CO 10.2.1	Encourage provision of vegetated open space on a development project's site, which may include shallow wetlands and ponds, drought tolerant landscaping, and pedestrian hardscape that includes vegetated areas.

4.16.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to recreation if the project would:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Each of these thresholds is discussed under Section 4.16.5, *Project-Specific Impacts and Mitigation Measures*.

4.16.4 Impact Assessment Methodology

The impact assessment was based on a desktop review of existing parks and recreational facilities near the project site and a qualitative evaluation of the anticipated demand for increased use of these facilities upon project implementation. In addition, the proposed development of 341 age-restricted, detached single-family homes; a 3.1-acre recreation center; private trails within the project site; and public trails was evaluated for the potential to result in adverse physical effects on the environment.

4.16.5 Project-Specific Impacts and Mitigation Measures

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a 3.1-acre recreation center; and 1.7 miles (9,120 linear feet) of private trails within the 193.8-acre project site. The project would also develop 2.5 miles (13,357 linear feet) of public trails that would connect to the City's existing trail network (Figure 4.16-1), which includes native soil and decomposed granite trails. The project would have a significant environmental impact related to parks and recreation if implementation of the project were to result in a significant change to the existing environment in a manner that would physically deteriorate existing neighborhood and regional parks or other recreational facilities or result in other physical effects to the environment. Typically, a project's potential to result in physical deterioration is determined by evaluating how an increase in population generated by the project would affect existing recreational facilities.

The project would add 341 age-restricted single-family homes, which would result in an increase in the residing population. According to the *Transportation Assessment for Belcaro at Sand Canyon*, the average size of a household for senior detached housing is 1.8 persons (Gibson 2026; EIR Appendix I). Using an estimate of 1.8 persons per household, the project would generate approximately 614 residents. Therefore, this analysis quantitatively considers the project's potential to impact the use of existing neighborhood and regional parks or other recreational facilities by an increased residing population, construction workers, and employees during project construction and operation.

A large portion of the project site would be preserved as open space and would feature both active and passive recreational amenities. In addition to the proposed publicly accessible recreational areas and preserved open space provided within the project site, there are several existing parks located close to the project site (see Table 4.16-1).

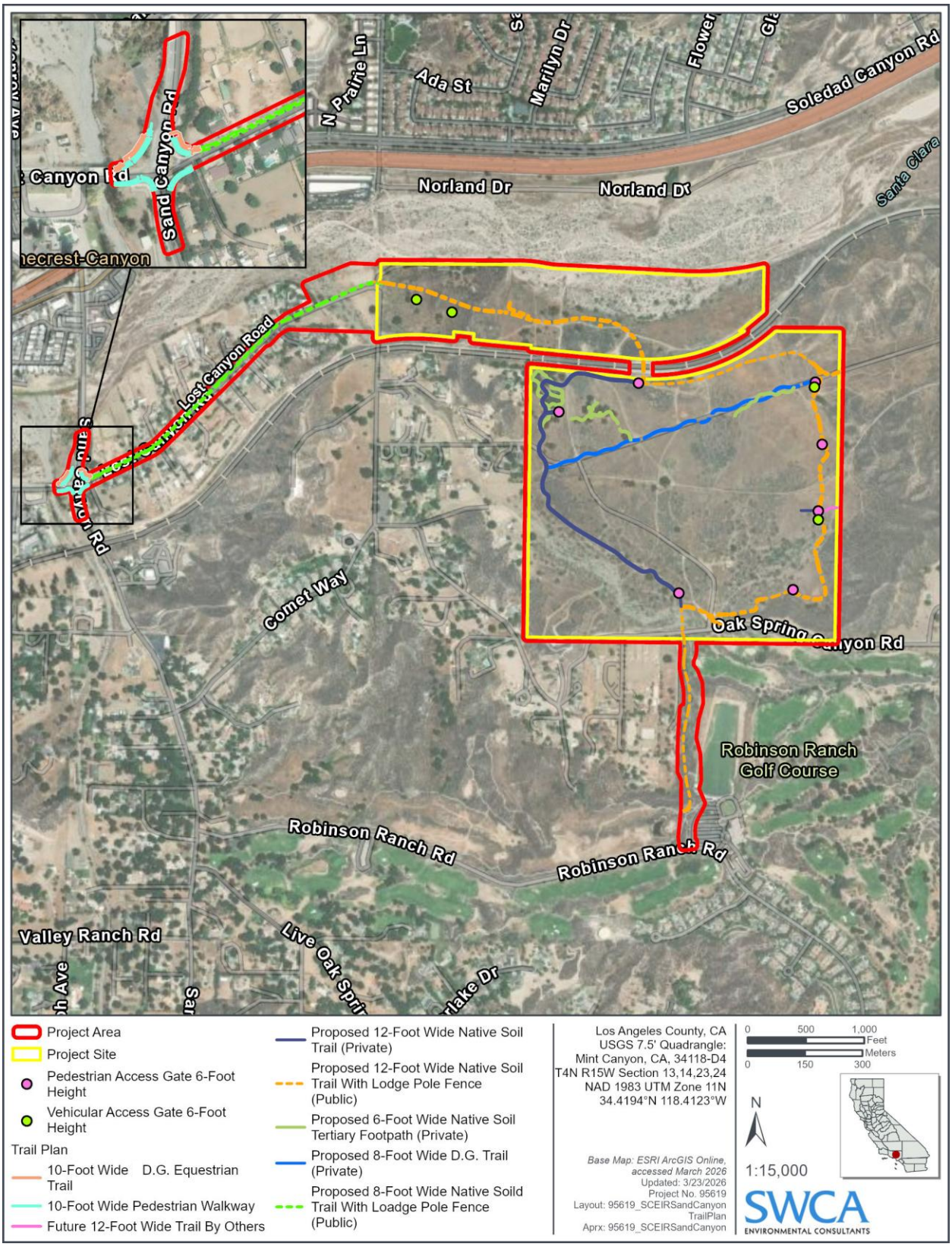


Figure 4.16-1. Proposed Trails Map.

CONSTRUCTION

During the five-year construction period, temporary construction workers would be active at the construction site. Proposed construction activities have the potential to generate short-term employment opportunities; however, project construction would be temporary in nature and is expected to use workers from the local employment force and would not require workers to relocate to the project area. Therefore, project construction would not result in substantial or unplanned population growth or increase the use of existing recreational facilities. Further, construction activities would not impede access to existing, nearby public recreational facilities in a manner that would require existing residents of or visitors to the area to increase the use of other parks in the City. Construction of the project would not result in an increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; therefore, impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

The project would result in 341 new age-restricted, detached single-family homes that would introduce a new and permanent population. This would result in an increase in the use of nearby parks or recreational facilities. Based on the City's 2025 population of 232,377 residents and 246 acres of existing parkland, the City currently provides an average of 1.06 acres of parkland per 1,000 residents. The project would result in approximately 614 residents and an additional 3.1 acres of parkland in the City, which would result in a total population of approximately 232,991 residents and a total of 249.1 acres of parkland within the City. Therefore, following implementation of the project, the City would provide an average of 1.07 acres of parkland per 1,000 residents, which is greater than existing conditions, yet remains below the City's and County's standards.

As shown in Table 4.16-1, there are currently four parks located within a two-mile radius of the project site, totaling 131.9 acres of parkland. Although the project would result in a population increase, the project would provide a 3.1-acre recreation center and 1.7 miles of private trails that would provide ample recreational opportunities to new residents on-site. Based on a project-generated population of 614 residents, the 3.1-acre recreation center would result in approximately 5.05 acres of parkland per 1,000 residents, which is greater than the current Citywide parkland to population ratio. The private trails would provide additional recreational space for the residents of the project. Given the nature of the proposed age-restricted housing, the on-site recreational opportunities are expected to reduce the demand for other nearby parks and trails within the City as new residents are not expected to regularly utilize off-site recreational facilities. Further, the project would be subject to the payment of Quimby Fees, which require new residential developments to offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities in the City to serve residents. Although the project is not anticipated to result in the physical deterioration of recreational facilities, payment of the park fee ordinances pursuant to the Quimby Act would provide the City with resources for additional parkland acquisition and development. Based on the nature of the project, the provision of on-site recreational facilities, and payment of Quimby Fees, operation of the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact REC-1
The project would not result in substantial physical deterioration of existing parks and recreation facilities during either project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact REC-1 would be less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project includes the construction of a recreation center within the project site and the expansion of active recreational areas, including on- and off-site trails. The recreation center would be constructed on 3.1 acres within the southern parcel of the project site, and the trail network would be expanded to cover publicly accessible trails. The recreation center would include a clubhouse, which may include a club room, kitchen, lobby, flex space, fitness center, yoga room, and restrooms, as well as a courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, pickleball courts, horseshoe pits, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop. Additionally, other recreational amenities would be provided throughout the project site, including a pickleball court, horseshoe pits, a dog park, gathering areas, and community gardens. A trailhead would be located at the northern portion of the project site to provide trail connectivity to the proposed Lost Canyon Road trail and perimeter trails.

Construction activities for the proposed recreational facilities would be conducted entirely within the project footprint. The potential for adverse physical effects on the environment during project construction are evaluated throughout the environmental resource areas presented in Chapter 4, *Environmental Impact Analysis*, of this EIR, and mitigation measures have been identified where necessary to reduce impacts to less-than-significant levels. Other than the impacts identified elsewhere in this EIR, no additional impacts would occur as a result of construction or operation of the proposed recreational facilities. As a result, the project would not have an additional adverse physical effect on the environment related to construction of the project; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact REC-2
The construction of the recreation center and expansion of existing passive recreational areas within the 193.8-acre project site would not have an adverse physical effect on the environment.
Mitigation Measures
Mitigation is not necessary. Impact REC-2 would be less than significant.

4.16.6 Cumulative Impacts

The geographic context for the cumulative impact analysis of parks and recreational facilities considers facilities within a two-mile distance of the project site[2] (see Table 4.16-1). As provided in Chapter 3, *Environmental Setting*, the list of cumulative development projects in the vicinity of the project site identifies nearby related projects consisting of a variety of land uses, including residential, assisted living/nursing home, commercial, hotel, office, and mixed use.

As described in Impact REC-1, the project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. In addition, other reasonably foreseeable future development projects would also be subject to the payment of Quimby Fees, which would offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities in the City's parks master plan. Other reasonably foreseeable future projects would also be subject to subsequent environmental review to determine if individual projects would result in physical deterioration of existing parks or other recreational facilities or result in potential adverse physical effects on the environment.

As described in Impact REC-2, construction of the project includes the construction of a 3.1-acre recreation center, 1.7 miles of on-site private trails, and 2.5 miles of off-site public trails; however, no new potentially significant impacts would occur as a result of the on-site recreational facilities. As a result, project-specific impacts would be less than significant and would not be cumulatively considerable. Reasonably foreseeable future projects that include the development of recreational facilities would also be subject to environmental review and implementation of mitigation measures would be required to reduce any potential short- or long-term environmental impacts that may result from the project. Therefore, impacts associated with the project would not be cumulatively considerable.

Impact REC-3 (Cumulative Impacts)
The project would not result in a cumulatively considerable impact to recreational facilities.
Mitigation Measures
Mitigation is not necessary. Impact REC-3 would be less than significant.

[2] Per the 2026 CEQA Statute and Guidelines, "proximal" to an amenity means within two miles of a public park or community center.

4.17 TRANSPORTATION

This section of the EIR describes the existing conditions and regulatory setting for transportation as it pertains to the project and evaluates potential environmental impacts to transportation that would result from implementation of the project. Unless otherwise indicated, the information in this section is taken from the *Transportation Assessment for Belcaro at Sand Canyon* (Transportation Assessment) (Gibson Transportation Consulting, Inc. [Gibson] 2026; EIR Appendix I) and the Evacuation Analysis included as Appendix C of the Transportation Assessment (Gibson 2026; see EIR Appendix I).

4.17.1 Existing Conditions

4.17.1.1 Existing Roadway Network

The project site is served by the following network of freeways and major roadways:

- **State Route 14 (SR-14)** is a freeway that generally runs in the northeast–southwest direction approximately 1.5 miles north of the project site via Lost Canyon Road and Sand Canyon Road. In the vicinity of the project area, SR-14 provides three travel lanes in each direction with one westbound lane and one eastbound lane designated as a high occupancy vehicle lane in the morning and afternoon peak hours, respectively. Access to and from SR-14 is available via interchanges at Placerita Canyon Road, Golden Valley Road, Via Princessa, Sand Canyon Road, and Soledad Canyon Road. SR-14 carries an average daily traffic volume between 155,000 and 170,000 in the project vicinity (Gibson 2026).
- **Sand Canyon Road** is a designated Major Highway by the City's Circulation Element from Soledad Canyon Road to Lost Canyon Road that runs in the north–south direction west of the project site. It provides three travel lanes, with additional right-turn and left-turn lanes at key intersections. On-street parking is generally not provided within the project vicinity. It is designated a Limited Secondary Highway from Lost Canyon Road to Little Tujunga Canyon Road, providing two travel lanes, one in each direction, with additional right-turn and left-turn lanes at some intersections.
- **Soledad Canyon Road** is a designated Major Highway by the City's Circulation Element that runs in the east–west direction north of the project area. It provides four to six travel lanes, two to three in each direction, with additional right-turn and left-turn lanes. On-street parking is generally not provided within the project vicinity.
- **Lost Canyon Road** is a designated Limited Secondary Highway by the City's Circulation Element that runs in the east–west direction. An easterly extension of Lost Canyon Road would connect the Sand Canyon Road corridor to the north section of the project site. It provides two travel lanes, one in each direction. On-street parking is generally not provided within the project vicinity; however, dirt shoulders adjacent to the existing roadway are utilized for parking.

4.17.1.2 Existing Pedestrian, Bicycle, and Transit Facilities

A comprehensive inventory was conducted for the Transportation Assessment to document existing pedestrian, bicycle, and transit facilities within a 0.5-mile radius of the project site (Gibson 2026; see EIR Appendix I).

PEDESTRIAN FACILITIES

A range of commercial, institutional, recreational, and residential land uses are in the vicinity of the project site, which would attract pedestrians. These destinations are predominately located at the intersection of Lost Canyon and Sand Canyon Roads, the intersection of Soledad Canyon and Sand Canyon Roads, and the surrounding residential neighborhoods. Pedestrian crosswalks are located at the intersection of Sand Canyon Road and the SR-14 on/off-ramps and school pedestrian crosswalks are located at the intersection of Lost Canyon and Sand Canyon Roads. See Figure 5 in the Transportation Assessment for a depiction of pedestrian destinations.

BICYCLE FACILITIES

Bicycle facilities in the project vicinity include on-street bicycle lanes and multi-use trail segments along nearby roadways. Sand Canyon Road provides a southbound bicycle lane that extends to the Lost Canyon Road bridge and a northbound bicycle lane that begins near the northbound SR-14 on-ramp intersection. Soledad Canyon Road also includes bicycle lanes in both the eastbound and westbound directions. Segments of a multi-use trail are located along portions of Sand Canyon Road south of Lost Canyon Road. In addition, a trail segment is located near the southeastern portion of the project site. The terminus of Lost Canyon Trail is located approximately 1.5 miles west of the project site.

TRANSIT FACILITIES

Santa Clarita Transit provides transit services to the City. The project would be served by Santa Clarita Transit Route 6, which provides transit stops at the intersection of Soledad Canyon and Sand Canyon Roads, approximately 1.8 miles northwest of the project site.

Additionally, the project site is located near the City's Vista Canyon Multi-Modal Center. This includes Vista Canyon Metrolink Station, which operates the Antelope Valley Line and provides transportation between Lancaster and Union Station in downtown Los Angeles. The Vista Canyon Metrolink Station is on Mitchell Drive, approximately 1.5 miles west (approximately 2.3 miles via roadway connections from the northern project access point) of the project site. The multi-modal center also includes a bus transfer station directly north of the Metrolink Station.

4.17.2 Regulatory Setting

4.17.2.1 Federal

No Federal regulations related to transportation are applicable to the project.

4.17.2.2 State

SENATE BILL 743

CEQA Guidelines § 15064.3(b) establishes vehicle miles traveled (VMT) as the primary metric for evaluating transportation impacts under CEQA. Under this framework, transportation analyses focus on the amount and distance of vehicle travel generated by a project rather than roadway congestion or delay. VMT may be evaluated as total VMT or VMT per capita (or per resident for residential projects), and is used to determine whether a proposed development would result in a significant transportation impact based on applicable thresholds and screening criteria.

CALIFORNIA GREEN BUILDING STANDARDS CODE

The California Code of Regulations (24 CCR §§ 5.106.4.1.1 and 5.106.4.1.2) detail the bicycle parking requirements for new development projects. These on-site bicycle parking supply regulations apply to the project.

4.17.2.3 Regional

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The City is within the jurisdiction of the Southern California Association of Governments (SCAG), the regional planning agency responsible for coordinating transportation and land use planning across Southern California. In September 2020, SCAG adopted *Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments* (RTP/SCS) (SCAG 2020). The RTP/SCS establishes a long-range regional framework for transportation investments and land use patterns intended to improve mobility, enhance system reliability, and support sustainable growth throughout the region. The plan identifies strategies and funding priorities for maintaining and improving the regional transportation network.

4.17.2.4 Local

CITY OF SANTA CLARITA GENERAL PLAN

Circulation Element

The *City of Santa Clarita General Plan Circulation Element* establishes policies and programs that guide the development and operation of the City's transportation system (City of Santa Clarita 2011a). The Circulation Element provides a framework for maintaining an efficient, safe, and coordinated circulation network that supports planned land uses and accommodates future growth. In addition to identifying roadway classifications and improvements, the Circulation Element promotes a balanced transportation system that includes pedestrian, bicycle, transit, and vehicular travel. The Circulation Element also encourages coordination between land use planning and transportation infrastructure to improve system efficiency and mobility. These policies guide the evaluation of transportation conditions and improvements associated with new development projects within the City.

TRANSPORTATION ANALYSIS GUIDELINES

The City established updated procedures and thresholds for evaluating transportation impacts based on VMT. The City's guidance document, *Transportation Analysis Updates in Santa Clarita* (TAU), adopted in May 2020, outlines the methodology and screening criteria used to assess transportation impacts for proposed projects (City of Santa Clarita 2020a). The guidance incorporates VMT screening thresholds consistent with recommendations provided in the California Governor's Office of Planning and Research (OPR; now the Office of Land Use and Climate Innovation [LCI]) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (LCI 2018). These guidelines inform the preparation of transportation analyses and determine whether a project's transportation-related impacts would be considered significant.

NON-MOTORIZED TRANSPORTATION PLAN

The *City of Santa Clarita 2020 Non-Motorized Transportation Plan* (NMTP) provides a Citywide framework for improving and expanding infrastructure that supports walking and bicycling (City of Santa Clarita 2020b). The NMTP identifies existing and planned pedestrian and bicycle facilities and establishes

policies and strategies to enhance connectivity, accessibility, and safety for non-motorized travel. By promoting improvements to trails, sidewalks, bike lanes, and related facilities, the NMTP supports a more integrated multimodal transportation system and encourages alternatives to automobile travel. Relevant policies and planned improvements identified in the NMTP are considered in evaluating how new development may connect to and support the City's non-motorized transportation network.

SANTA CLARITA MUNICIPAL CODE

The SCMC establishes development standards that influence circulation and access associated with residential development. These standards address elements such as subdivision design, roadway access, grading requirements, and site layout, which collectively affect the location and configuration of streets, driveways, and internal circulation systems. Through these provisions, the SCMC helps ensure that new residential development is integrated with the City's circulation network and is developed in a manner consistent with adopted planning and infrastructure policies.

4.17.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to transportation if the project would:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d) Result in inadequate emergency access.

Each of these thresholds is discussed under Section 4.17.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.17.4 Impact Assessment Methodology

The following impact discussion is based on the Transportation Assessment prepared for the project (Gibson 2026). The Transportation Assessment analyzed the potential transportation impacts of the proposed in conformance with the *Transportation Analysis Updates in Santa Clarita* (TAU) (City of Santa Clarita 2020a), which provides screening criteria to determine when a project may have a significant VMT impact. Based on the screening criteria to be exempt from a VMT analysis, the project does not screen out from further analysis, as the project exceeds the 110 daily trip threshold, the project has a greater daily home-based VMT per resident than the City baseline, the project site is not located in a Transit Priority Area, and the project does not include any affordable housing units. Therefore, the VMT analysis for the project is provided below.

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes; a 3.1-acre recreation center; and private trails within the 193.8-acre project site. As detailed in Figure 4.17-1 and Table 4.17-1, infrastructure improvements would include the development of an internal network of private streets and trails as well as off-site traffic improvements.

Access to the project area would be via Lost Canyon Road, which would be extended to connect to the proposed A Street within the project site, and Robinson Ranch Road, which would connect via the proposed J Street. Pedestrian sidewalks are proposed throughout the project site.

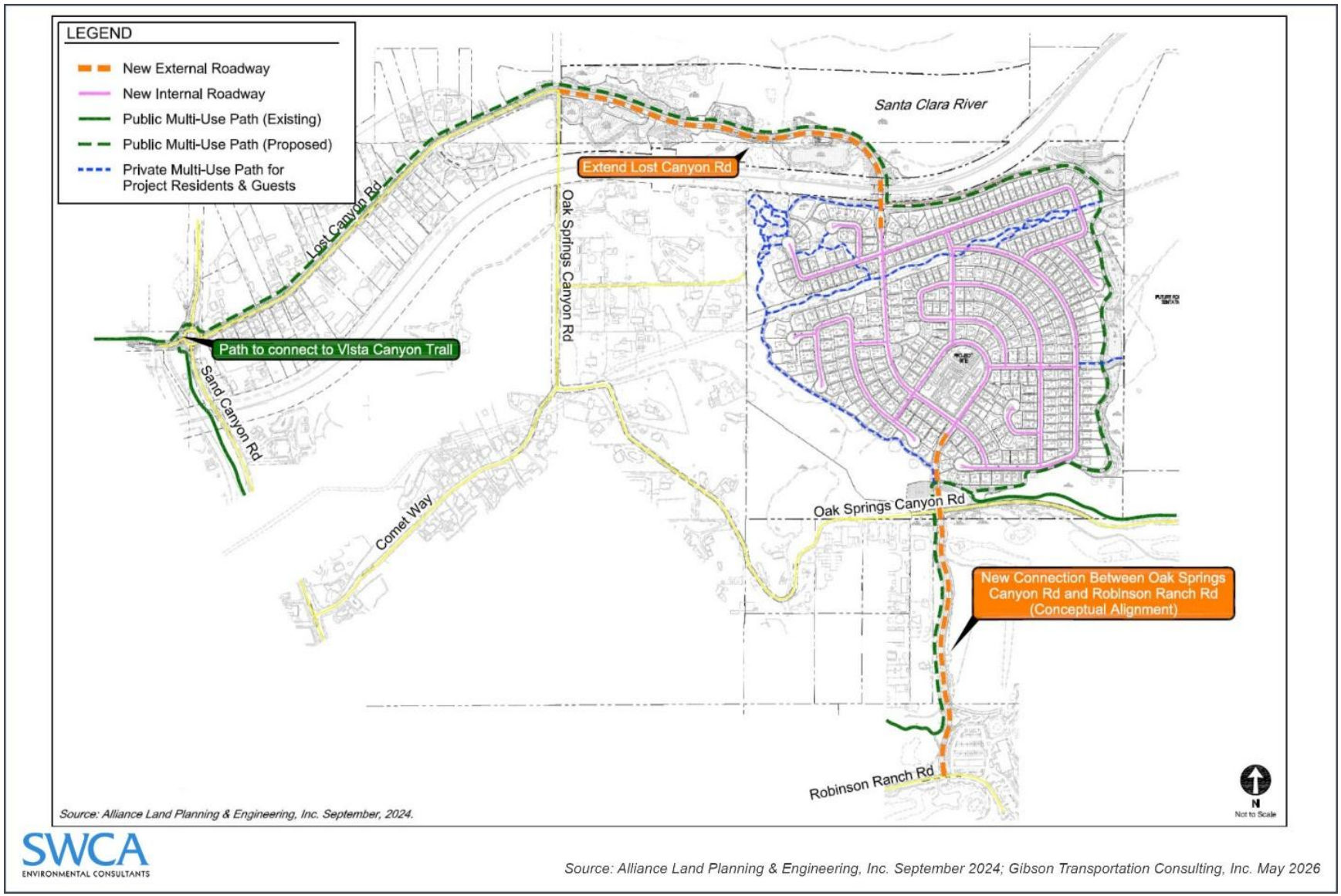


Figure 4.17-1. Project Transportation Improvements.

The project would have gated entries on the proposed A Street (just south of the proposed railroad undercrossing) and proposed J Street (north of the J Street intersection with Oak Spring Canyon Road). Accordingly, public access to the project site would be restricted behind the gated entries on A and J Streets. However, the proposed extension of Lost Canyon Road and portions of J Street outside of the project site would be open for public vehicular access.

Table 4.17-1. Transportation-Related Project Design Features and Improvements

Description	Notes
Project Design Features	
Extension of Lost Canyon Road *from Oak Spring Canyon Road to the northern project site entrance*	The extension of Lost Canyon Road would result in a new three-way intersection of Oak Spring Canyon Road and Lost Canyon Road.
Development of the proposed J Street *from Oak Spring Canyon Road to Robinson Ranch Road*	The new J Street would result in a new four-way intersection with Oak Spring Canyon Road at the southern project site entrance. The new J Street would also result in a new three-way intersection at Robinson Ranch Road.
Private Internal Roadways	Private internal roadways would provide internal circulation roads for project residents and guests.
Internal Sidewalks and Landscaping	Internal sidewalks and landscaping would provide an internal pedestrian circulation network for project residents and guests.
Public Multi-Use Trail *from Lost Canyon Road to Robinson Ranch Road around the north and east sides of the project site*	The public multi-use trail would connect to the existing north–south trail along Sand Canyon Road to the project site and the existing east–west trail along Oak Spring Canyon Road east of J Street.
Private Internal Trails	The private internal trails would be reserved for use by project residents and guests.
Private Garages	Each home would be equipped with a private garage for vehicle and bicycle parking.
Improvements the Project Would Be Conditioned to Implement [1]	
Install a roundabout at the intersection of Sand Canyon Road & Lost Canyon Road	This improvement consists of extending the southbound right-turn lane over the Santa Clara River bridge. This improvement would also reconfigure the existing intersection of Sand Canyon and Lost Canyon Roads with a roundabout, which would consist of a single circulating lane and a southbound to westbound bypass lane.

Sources: City of Santa Clarita (2011); Gibson (2026)

[1] The responsibility to construct these improvements is shared with the previously-entitled Vista Canyon development project which was also conditioned to construct these improvements. The project applicant will work with the City and the Vista Canyon project applicant to allocate cost, timing, and responsibilities for these improvements. The improvements would be implemented before the building official issues the first building permit final or as otherwise agreed with the City.

4.17.5 Project-Specific Impacts and Mitigation Measures

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Planning documents applicable to the project include the City's Circulation Element, City's NMTP, SCMC, and City's Community Character and Design Guidelines, as well as CALGreen. The project's consistency with the identified transportation and circulation planning documents is described in detail, below.

CITY OF SANTA CLARITA GENERAL PLAN CIRCULATION ELEMENT

The Circulation Element identifies the following seven transportation priorities: Multi-Modal Circulation Network; Street and Highway System; Vehicle Trip Reduction; Rail Service; Bus Transit; Bikeways; and Pedestrian Circulation. Table 4.17-2 details the project's consistency with the applicable objectives of the Circulation Element.

Table 4.17-2. Project Consistency with Applicable Objectives of the Circulation Element

Objective	Analysis of Project Consistency
Area 1: Multi-Modal Circulation Network	
Objective C 1.1: Provide multi-modal circulation systems that move people and goods efficiently while protecting environmental resources and quality of life.	**Consistent.** The project would include a network of internal low-volume residential streets and private and public recreational trails, and would comply with any City bicycle requirements to help support this objective.
Objective C 1.2: Coordinate land use and circulation planning to achieve greater accessibility and mobility for users of all travel modes.	**Consistent.** The project would provide a senior housing complex with on-site amenities connected via sidewalks and low-volume residential streets, as well as public multi-use trails beyond the project site, which would connect to existing trails.
Objective C 1.3: Ensure conformance of the Circulation Plan with regional transportation plans.	**Consistent.** The project would not preclude the implementation of the current Circulation Plan or any regional transportation plans.
Area 2: Street and Highway System	
Objective C 2.1: Implement the Circulation Plan (as shown on Exhibit C-2 of the Circulation Element) for streets and highways to meet existing and future travel demands for mobility, access, connectivity, and capacity.	**Consistent.** The project would include a network of private low-volume residential streets for internal circulation. The project would extend Lost Canyon Road to the east to provide access to the project site and would construct J Street to provide access to the project site from Robinson Ranch Road. Lost Canyon Road is designated as a Limited Secondary Highway in the City's Circulation Element (Table C-2), and the proposed extension would be consistent with its planned function within the City's circulation network. The project would not preclude the implementation of the current Circulation Plan or the roadway classifications identified in the Circulation Element.
Objective C 2.2: Adopt and apply consistent standards throughout the Santa Clarita Valley for street design and service levels, which promote safety, convenience, and efficiency of travel.	**Consistent.** The project would be consistent with the current applicable street standards.
Objective C 2.3: Balance the needs of congestion relief with community values for aesthetics and quality of life.	**Consistent.** The project would support congestion relief by providing a new off-site roadway connection between Oak Spring Canyon Road and Robinson Ranch Road. This new connection would provide alternate routes for neighborhood traffic and facilitate access and evacuation during emergencies.
Objective C 2.4: Allow trucks to utilize only major and secondary highways as through routes, to minimize impacts of truck traffic on surface streets and residential neighborhoods.	**Consistent.** Once constructed, the project would not generate commercial truck trips given it is a residential project.
Objective C 2.5: Consider the needs for emergency access in transportation planning.	**Consistent.** The project would comply with all emergency access needs and standards, including the provision of fire lanes, adequate turning radii, project driveways, and internal intersections. In addition, the proposed J Street would provide a new connection between Oak Spring Canyon Road and Robinson Ranch Road. An analysis of emergency evacuation conditions is provided in Appendix C of the Transportation Assessment.
Objective C 2.6: Ensure that funding and phasing of new transportation improvements is coordinated with growth.	**Not Applicable.** The project would not require the funding or phasing of new transportation improvements aside from those included in the project

Objective	Analysis of Project Consistency
Objective C 2.7: Pursue the safety, efficiency and tranquility of existing and future residential streets by properly planning for local, collector and arterial roadways and limiting residential driveway access onto collector or arterial roadways.	**Consistent.** The project would extend Lost Canyon Road—a Secondary Highway—to provide the primary access to the project site and develop J Street to connect Oak Spring Canyon Road and Robinson Ranch Road, both of which are local streets. The project would include a network of internal low-volume residential streets for internal circulation.
Area 3: Vehicle Trip Reduction	
Objective C 3.1: Promote the use of travel demand management strategies to reduce vehicle trips.	**Consistent.** The project would provide on-site amenities for residents, including a recreation area and pedestrian and bicycle-friendly connections throughout the project site. The project would also provide public and private trails within and around the project site.
Objective C 3.2: Encourage reduction in airborne emissions from vehicles through use of clean vehicles and transportation system management.	**Consistent.** While the project does not include specific transportation system management measures on City streets, it would comply with all applicable building code requirements related to electric vehicle (EV) charging infrastructure. In addition, the project includes golf cart parking and golf cart garages within certain residential floor plans, which would support the use of lower-emission neighborhood vehicles for local trips.
Objective C 3.3: Make more efficient use of parking and maximize economic use of land, while decreasing impervious surfaces in urban areas, through parking management strategies.	**Consistent.** The project would include private parking within on-site residential garages and driveways. The project would also comply with any landscaping requirements, which would decrease impervious surfaces.
Area 4: Rail Service	
Objective C 4.1: Maximize the effectiveness of Metrolink's commuter rail service through provision of support facilities and land planning.	**Not Applicable.** The project would not be located within walking distance of any Metrolink station and would not affect rail operations.
Objective C 4.2: Access to a high speed rail system connecting the Santa Clarita Valley with other regions, and other regional rail service connections.	**Not Applicable.** The project would not be located within walking distance of any rail station and would not affect rail operations.
Area 5: Bus Transit	
Objective C 5.1: Ensure that street patterns and design standards accommodate transit needs.	**Consistent.** The streets and intersections within the project area would be constructed to City standards; however, there are no current transit services within walking distance of the project site and it is not anticipated that any transit services would use streets built by the project.
Objective C 5.2: Maximize the accessibility, safety, convenience, and appeal of transit stops.	**Not Applicable.** The project would not affect any existing or proposed public transit service. The project would provide a multi-use trail that would connect to the intersection of Sand Canyon and Lost Canyon Roads. Existing sidewalks located west of Sand Canyon Road provide access for most of the route to the Vista Canyon Metrolink Station.
Objective C 5.3: Explore opportunities to improve and expand bus transit service.	**Not Applicable.** The project site is located in a low-density rural area that is not economically practical for bus service. The project site is located approximately 1.3 miles walking distance to the nearest major roadway (Sand Canyon Road) and 1.8 miles walking distance to the nearest existing transit stop (at Sand Canyon Road and Soledad Canyon Road).
Objective C 5.4: Provide adequate funding to expand transit services to meet the needs of new development in the Valley.	**Not Applicable.** This objective is not applicable to the project because the project would not be responsible for transit funding and would not affect any existing or proposed transit service. The applicant would be conditioned to pay the City's Transit Impact Fee (currently $216 per unit).

Objective	Analysis of Project Consistency
Area 6: Bikeways	
Objective C 6.1: Adopt and implement a coordinated master plan for bikeways for the Valley, including both City and County areas, to make bicycling an attractive and feasible mode of transportation.	**Consistent.** The project would not preclude the implementation of any planned bike facility. The project would add to the existing bicycle network by providing public and private multi-use trails within and around the project site.
Objective C 6.2: Encourage provision of equipment and facilities to support the use of bicycles as an alternative means of travel.	**Consistent.** The project would provide ample space for private bike parking facilities as well as a network of low-volume residential streets appropriate for biking. The project would also provide public and private multi-use trails within and around the project site.
Area 7: Pedestrian Circulation	
Objective C 7.1: A continuous, integrated system of safe and attractive pedestrian walkways, paseos and trails linking residents to parks, open space, schools, services, and transit.	**Consistent.** The project would provide sidewalks within the project site that comply with current Americans with Disabilities Act (ADA) requirements. The project would also provide public and private multi-use trails within and around the project site.

Sources: City of Santa Clarita (2011); Gibson (2026)

CITY OF SANTA CLARITA NON-MOTORIZED TRANSPORTATION PLAN

Table 4.17-3 details the project's consistency with the applicable goals and objectives of the City's NMTP.

Table 4.17-3. Project Consistency with Applicable Goals and Objectives of the Non-Motorized Transportation Plan

Goals and Objectives	Analysis of Project Consistency
Goal 1. Safety & Health: This NMTP will empower residents to live a more active lifestyle by providing a network of safe and comfortable walking routes and bikeways for everyone to enjoy. **Objective A:** Reduce bicycle and pedestrian collisions through safe and comfortable facilities **Objective B:** Promote an active lifestyle that includes biking and walking **Objective C:** Reduce air pollution, asthma rates, and greenhouse gas emissions	**Consistent.** The project would provide sidewalks within the project site that comply with current Americans with Disabilities Act (ADA) requirements. The project would provide ample space for private bike parking facilities as well as a network of low-volume residential streets appropriate for biking. The project would also provide a multi-use trail extension through the project site. These facilities would be designed to improve safety for all road users and help promote active transportation within the City.
Goal 2. Access & Comfort: This NMTP will support increased access to neighborhood destinations such as parks, shopping and employment centers, libraries, schools, recreation centers, and transit stops. Pedestrian and bicycle facilities will be accessible and comfortable for people of all ages and abilities to use. **Objective A:** Increase access to jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations **Objective B:** Address barriers so that disadvantaged populations can take part in improvements **Objective C:** Reduce air pollution, asthma rates, and greenhouse gas emissions **Objective D:** Reduce travel times for disadvantaged households **Objective E:** Prioritize the needs and trip patterns of disadvantaged populations **Objective F:** Serve people with disabilities.	**Consistent.** The project would develop an on-site park and recreation center as well as a multi-use trail extension though the project site.

Goals and Objectives	Analysis of Project Consistency
Goal 3. Maintain & Expand the Network: This NMTP will help out community identify, develop, and maintain a complete and convenient bicycle and pedestrian network. **Objective A:** Integrate bicycle and pedestrian network and facility needs into all city planning documents and capital improvement projects **Objective B:** Leverage existing funding to maximize project delivery **Objective C:** Maintain designated facilities to be comfortable and free of hazards to biking and walking **Objective D:** Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments.	**Not Applicable.** This objective is not applicable to the project because the project would not be responsible for planning and maintaining the transportation network.

SANTA CLARITA MUNICIPAL CODE

The project would provide residential parking in private garages and driveways for each residential unit in compliance with the SCMC.

CALIFORNIA GREEN BUILDING STANDARDS CODE

In compliance with 24 CCR §§ 5.106.4.1.1 and 5.106.4.1.2, the project would provide ample private bicycle parking for each residential unit.

CONCLUSION

As detailed in the project consistency analyses above, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including mass transit; nonmotorized travel, such as bicycle and pedestrian facilities; and roadways, including, but not limited to, intersections, streets, highways, and freeways. As such, impacts would be *less than significant*, and mitigation is not necessary.

Impact TR-1
The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
Mitigation Measures
Mitigation is not necessary. Impact TR-1 would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

The City uses the SCAG regional travel demand forecasting model to evaluate VMT, which is calibrated to 2020 baseline conditions and forecasts regional growth in population, housing, and employment through 2045 by traffic analysis zone (TAZ).

Consistent with the City's TAU, the Transportation Assessment evaluated the project based on home-based VMT per capita, which represents the total distance of trips that begin or end at a residence. A residential project would have a less-than-significant impact if home-based VMT per capita is at least 15% below the Citywide average. The Citywide average home-based VMT per capita is 22.7 miles, resulting in a significance threshold of 19.3 miles.

The project site is located in TAZ 20276100, which has an existing population of approximately 2,520 residents and an average home-based VMT per capita of 30.6 miles. However, existing residential uses in this TAZ consist primarily of conventional single-family housing, which typically generates higher VMT than senior housing due to differences in travel behavior.

Senior housing communities generally generate fewer and shorter trips because residents are less likely to commute, household sizes are smaller, and on-site amenities reduce the need for off-site travel. For standard housing, the average household size in 2020 was approximately 2.53 persons, with an average daily trip generation rate of 9.09 trips per household. When daily trips are divided by the average household size, standard housing results in approximately 3.59 trips per capita. In comparison, senior detached housing typically has a smaller average household size of about 1.8 persons and a lower average daily trip generation rate of 4.16 trips per household. When daily trips are divided by the average household size, senior housing generates about 2.31 trips per capita, or about 36% fewer trips. In addition, trips made by senior households are approximately 7% shorter on average. Combined, these factors result in an estimated 40% reduction in VMT per capita compared to conventional housing.

Applying this reduction to the TAZ average of 30.6 miles results in an estimated home-based VMT per capita of approximately 18.2 miles for the project. Because this value is below the City's significance threshold of 19.3 miles, the project would result in a less-than-significant transportation impact related to VMT.

Based on the analysis provided in the Transportation Assessment and summarized above, the project would not generate VMT in a manner that would exceed State or local thresholds; therefore, the project would not conflict with or be inconsistent with CEQA Guidelines § 15064.3(b). As such, impacts would be *less than significant*, and mitigation is not necessary.

Impact TR-2
The project would not conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).
Mitigation Measures
Mitigation is not necessary. Impact TR-2 would be less than significant.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

This analysis evaluates whether the project would substantially increase transportation hazards due to geometric design features (e.g., sharp curves or unsafe intersections) or incompatible uses. The evaluation considers potential conflicts among vehicles, pedestrians, and bicyclists, as well as operational issues such as delays or capacity reductions related to project site access. The assessment is based on accepted traffic engineering standards, including sight distance, roadway geometry, pedestrian and bicycle activity at access points, and proximity to Safe Routes to School (SRTS) facilities.

The project would be designed in accordance with accepted traffic engineering standards, and final roadway, intersection, and access designs would be reviewed by the City during site plan review to ensure safe operations for vehicles, pedestrians, and bicyclists. Additionally, the project site does not front a designated SRTS route; therefore, the project would not affect school-related pedestrian travel.

The project would provide two gated access points. The primary access would be a private extension of Lost Canyon Road extending east from Oak Spring Canyon Road, forming a T-intersection designed to meet applicable standards for sight distance, turning movements, and roadway width. A secondary access at the south end of the project site would connect to Oak Spring Canyon Road and the proposed private road to Robinson Ranch Road, forming a four-way intersection. Both access points would accommodate expected vehicle types and volumes, and internal streets would provide circulation to individual homes with all loading occurring on-site. All new roadways and intersections would be required to meet all applicable public works standards and would require design approval from the City Engineer before construction began. The project would also construct a new roundabout at Sand Canyon Road and Lost Canyon Road; the roundabout design would be required to meet the requirements of the Traffic Engineering Division, including, without limitation, appropriate geometry and curves, signage, striping, and line-of-sight diagrams. Given the low anticipated traffic volumes and adequate design features, the project would not create vehicular safety hazards on-site or on adjacent roadways.

Sidewalks along internal streets and a proposed multi-use path along the east and north project site boundaries would provide pedestrian connectivity and help minimize conflicts between pedestrians and vehicles. Bicycle access would be supported by low-speed internal roadways, and on-site bicycle parking would be provided within each residential unit. The multi-use path would connect project bicycle trips to the City-wide bicycle network.

Based on the proposed site design and compliance with applicable roadway and access standards, the project would not introduce geometric design hazards related to traffic circulation, sight distance, pedestrian or bicycle conflicts, or access. The project would not increase roadway hazards; therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact TR-3
The project would not substantially increase hazards due to a geometric design feature or incompatible uses.
Mitigation Measures
Mitigation is not necessary. Impact TR-3 would be less than significant.

d) Would the project result in inadequate emergency access?

This section presents an emergency access analysis consistent with the California Department of Transportation (Caltrans) *Local Development Review Safety Review Practitioner's Guidance* (Caltrans Safety Guidance) (Caltrans 2024). It also summarizes the Evacuation Analysis prepared for the project (Gibson 2026; see EIR Appendix I).

OPERATIONAL FREEWAY SAFETY ANALYSIS

The Caltrans Safety Guidance provides a method for evaluating potential safety impacts at freeway off-ramps due to additional traffic from development projects. The analysis considers whether increased queueing could create unsafe speed differentials between freeway traffic and vehicles queued at an off-ramp.

Under the guidance, analysis is required for any freeway off-ramp where a project would add 25 or more peak-hour trips. A significant impact would occur if: 1) the 95th percentile queue under future conditions with project traffic extends into the freeway mainline lanes; 2) the project contributes at least two vehicle lengths (approximately 50 feet) to the queue; and 3) average freeway speeds adjacent to the ramp exceed 30 miles per hour.

The freeway safety analysis uses traffic forecasts developed for the project's operational analysis. The project would add fewer than 25 peak-hour trips to the SR-14 southbound off-ramp at Sand Canyon Road during both peak periods and to the SR-14 northbound off-ramp during the morning peak hour. During the afternoon peak hour, the project would add 28 trips to the SR-14 northbound off-ramp at Sand Canyon Road, requiring additional evaluation.

This off-ramp has approximately 1,780 feet of storage. Forecast 95th percentile queues are approximately 360 feet in each left-turn lane and 530 feet in the right-turn lane, for a combined queue of about 1,250 feet. Because the projected queue remains well within the available storage length, it would not extend to the freeway mainline lanes. Therefore, the project would not result in a freeway safety impact.

CALTRANS SAFETY REVIEW

The Caltrans Safety Guidance recommends that lead agencies review local roadway safety plans to determine whether a project could adversely affect safety conditions or the implementation of planned improvements. Relevant programs include the Local Roadway Safety Plan (LRSP), Systemic Safety Analysis Report Program (SSARP), and Highway Safety Improvement Program (HSIP).

A review of LRSP and SSARP documentation indicates that no funded roadway safety improvement projects have been identified within the City. HSIP funding cycles 7 through 10 include several projects within the City; however, none affect the transportation network in the vicinity of the project area. In addition, the City maintains programs such as SRTS to address traffic safety. As discussed above, the project would not introduce new traffic hazards or interfere with implementation of these programs. Accordingly, the project would not adversely affect transportation safety planning or improvement efforts.

EVACUATION ANALYSIS

An Evacuation Analysis prepared for the project evaluated three routes capable of carrying project and background traffic out of the area during an emergency evacuation, including scenarios in which one or more routes were unavailable (Gibson 2026; see EIR Appendix I). The analysis included travel time estimates for evacuees from multiple zones, including the project site, to reach designated safe areas, as well as a total evacuation time analysis estimating the time required for the entire area to evacuate. Each analysis was conducted both with and without project-generated traffic. The results indicate that the addition of project traffic would only marginally increase travel times and overall evacuation duration.

Travel time analysis also shows that the intersection of Sand Canyon and Lost Canyon Roads would have sufficient capacity to accommodate evacuation traffic with the proposed single-lane roundabout and a southbound-to-westbound bypass right-turn lane. The roadway network would allow the project site and surrounding area to evacuate within a reasonable timeframe, even if evacuation were limited to only the north and west routes or solely the south route.

Overall, the Evacuation Analysis concludes that the available routes serving both the project site and the surrounding area are adequate and consistent with the *City of Santa Clarita General Plan Safety Element* (City of Santa Clarita 2022), as well as the California Fire Code (CFC), with respect to evacuation routes and street design standards. The project would also be consistent with the *County of Los Angeles Operational Area Emergency Operations Plan* (OAEOP), which facilitates multiagency and multijurisdictional coordination during emergency operations, public information functions, resource management, and recovery efforts (County of Los Angeles 2023).

CONCLUSION

As discussed in greater detail in Section 4.20, *Wildfire*, of this EIR, the project would include an emergency staging area and facilitate efficient evacuation procedures. The project would not result in inadequate emergency access. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact TR-4
The project would not result in inadequate emergency access.
Mitigation Measures
Mitigation is not necessary. Impact TR-4 would be less than significant.

4.17.6 Cumulative Impacts

Existing and foreseeable future development projects within the project region are identified in Chapter 3, *Environmental Setting.* Reasonably foreseeable future projects in and around the project area have the potential to contribute to an increase in vehicle congestion and VMT, geometric and land use hazards, and emergency access.

VMT

A development project would result in a cumulative VMT impact if it were inconsistent with the RTP/SCS. However, pursuant to the City's TAU, a project that does not exceed the City's VMT significance threshold is considered consistent with the RTP/SCS and, therefore, would not result in a cumulative VMT impact.

In combination with related projects in the area, many of which include conventional residential development, the project would likely reduce the average home-based VMT per capita in the project area because senior housing typically generates approximately 40% lower VMT per capita than traditional single-family housing. Therefore, impacts related to VMT would be less than cumulatively considerable.

GEOMETRIC DESIGN AND LAND USE HAZARDS

A project could contribute to a cumulatively significant impact related to geometric design if, in combination with related projects proposing access points along the same block(s), it would create safety or operational issues. However, because the project would not result in a significant geometric design impact, it would not contribute to a cumulatively significant impact. Therefore, impacts related to geometric design and land use hazards would be less than cumulatively considerable.

EMERGENCY ACCESS

Buildout of existing and reasonably foreseeable development projects would increase traffic on local roadways and could affect evacuation conditions. The project's Evacuation Analysis includes a 2030 future scenario reflecting anticipated land uses and travel patterns in the project area.

Under future conditions without the project, the worst-case total evacuation time is estimated at approximately 2 hours 39 minutes with a roundabout. With the project, total evacuation time would increase by approximately 18 minutes. Although this represents a modest increase in clearance time, the project would not alter evacuation routes, evacuation plans, or emergency response procedures.

The total evacuation time analysis provides a conservative estimate assuming simultaneous evacuation and evaluates whether the project would substantially worsen evacuation conditions. Because the project would only slightly increase evacuation time and would not affect evacuation routes or emergency access, it would not substantially impair evacuation or emergency response.

The project would provide emergency access consistent with City, PRC, and CAL FIRE requirements. Future projects would be subject to similar requirements. In addition, installation of the proposed HeloPod® would improve aerial firefighting efficiency by providing a nearby water refill point. Therefore, impacts related to emergency response and evacuation would be less than cumulatively considerable.

CONCLUSION

Reasonably foreseeable future projects would be subject to separate environmental review to determine potential impacts related to consistency with applicable transportation planning documents, VMT, roadway hazards, and emergency access. Therefore, transportation impacts would be less than cumulatively considerable.

Impact TR-5 (Cumulative Impacts)
The project would not have potential to result in cumulatively considerable impacts associated with transportation.
Mitigation Measures
Mitigation is not necessary. Impact TR-5 would be less than significant.

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4.18 TRIBAL CULTURAL RESOURCES

This section of the EIR describes the existing conditions and regulatory setting for tribal cultural resources as it pertains to the project, evaluates potential environmental impacts to tribal cultural resources that would result from implementation of the project, and provides mitigation measures that would reduce these impacts. Unless otherwise indicated, the information in this section is taken from the *Cultural Resources Inventory and Evaluation Report; Belcaro at Sand Canyon Project, City of Santa Clarita, Los Angeles County, California* (Cultural Resources Inventory and Evaluation Report; Dudek 2025).

The analysis in this section is based on the results of the consultation with affiliated California Native American Tribes being conducted by the City to comply with CEQA, specifically the requirements stated in PRC § 21080.3.1, and research presented in the Cultural Resources Inventory and Evaluation Report, which will remain part of the confidential administrative record because of the detail describing the specific location of the archaeological sites (California Government Code §§ 6254(r) and 7927.005; 14 California Code of Regulations [CCR] § 15120 (d); PRC §§ 5097.9, 5097.993, and 21082.3(c)).

In response to a request from Dudek, the California Native American Heritage Commission (NAHC) provided a list of 23 individuals affiliated with Tribal organizations who are included on a contact list for all of Los Angeles County. As lead agency, the City maintains a list of California Native American Tribes that requested to receive notifications pursuant to PRC §§ 21080.3.1 and 21080.3.2. The Fernandeño Tataviam Band of Mission Indians was the only Tribe that requested to receive notifications. The City sent a letter describing the project and providing information regarding consultation to one representative of the Fernandeño Tataviam Band of Mission Indians via certified mail on July 11, 2025. The City received a request for consultation with respect to the project from the Fernandeño Tataviam Band of Mission Indians on July 16, 2025.

This section includes the results of the consultation, as well as mitigation measures to address potential impacts to tribal cultural resources. As described in Section 4.18.2, *Regulatory Setting*, PRC § 21074 states that "tribal cultural resources" are defined as 1) sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a Tribe that are listed in, or determined to be eligible for listing in, the national or State register of historical resources, or listed in a local register of historic resources; or 2) resources that the lead agency determines, in its discretion, are tribal cultural resources. For the purposes of this EIR and as a result of the AB 52 consultation process, the extant data indicates that there is moderate potential for the inadvertent discovery of tribal cultural resources within the project area.

4.18.1 Existing Conditions

Section 4.5, *Cultural Resources*, describes the Native American archaeological and historical record for the project area. This overview covers the period beginning with the earliest accepted dates for occupation on the coast of Southern California during the Early Man period (approximately 12,000–16,000 years ago) and extends to the American period when Los Angeles County transitioned from ranchos to townships in the nineteenth century.

4.18.1.1 The Tataviam in Santa Clarita

The project area is located within the traditional territory of the Tataviam people, but there are several neighboring Tribes who interacted with the Tataviam, including the Ventureño Chumash to the west, the Gabrielino to the southeast, the Serrano to the east, and Kitanemuk to the north.

Tataviam lands encompassed the upper Santa Clara River drainage east of Piru Creek, the Sawmill Mountains to the north, and parts of the southwestern Antelope Valley. Several key Tataviam villages have been identified, including *tsawayung* near Castaic Junction at the site of Rancho San Francisquito (Newhall Ranch), *tikatsing* on upper Castaic Creek, and *pi'ing* at the junction of Castaic Creek and Elizabeth Lake Canyon. *Tochonaga*, another significant village, appears on an 1843 land grant map southeast of Newhall. Other documented sites include *akure'eng*, at the original Newhall townsite; *apatsitsing*, located on upper Castaic Creek; and *naqava'atang*, east of Townsend Peak. Additional villages and rancherias were also located along Piru Creek at the northern edge of Tataviam territory.

Historical accounts, such as Pedro Fage's report from the 1769 Portolá expedition, note that the first Chumash settlement encountered after leaving Tataviam territory was west of the mouth of Piru Creek. The village of *kamulus* (Camulos), east of Piru Canyon, had a Chumash name and likely consisted of a mixed Chumash-Tataviam population.

4.18.1.2 Sacred Lands File Search

The NAHC is charged with identifying, cataloging, and protecting Native American cultural resources, which include ancient places of special religious or social significance to Native Americans, and known ancient graves and cemeteries of Native Americans on private and public lands in California. The NAHC's inventory of these resources is known as the Sacred Lands Files (SLF). In addition, the NAHC maintains a list of Tribal contacts affiliated with the various geographic regions of California. The contents of the SLF are strictly confidential, and SLF search requests return positive or negative results in addition to a list of Tribal contacts with affiliation to the specified location. On April 17, 2024, Dudek submitted a request for a search of the SLF to the NAHC and received the results in a letter on May 6, 2024. Results of the SLF are included in Appendix C of the Cultural Resources Inventory and Evaluation Report (Dudek 2025; EIR Appendix J).

The results of the SLF search were negative. The letter from the NAHC noted that the SLF is not an exhaustive inventory of resources that may be present in any given area and that the absence of specific site information in the SLF does not indicate the absence of cultural resources. The letter further stated that other sources of cultural resources should be contacted for information regarding known or recorded sites and a list of 23 Native American Tribal representatives was provided, representing 14 Tribal organizations that may have knowledge of cultural resources in the area. All informational outreach to California Native American Tribes for the project was limited to the noticing and consultation conducted pursuant to the provisions of AB 52. The individual contacts and their affiliated Tribal organizations are listed in Appendix C of the Cultural Resources Inventory and Evaluation Report (Dudek 2025; see EIR Appendix J).

4.18.1.3 Existing Tribal Cultural Resources

No previously recorded archaeological resources that may also be tribal cultural resources have been identified within the project area. Although searches of the California Historical Resources Information System (CHRIS) and SLF were both negative for potential tribal cultural resources within the project area, CHRIS records indicate three prehistoric archaeological resources and a multicomponent resource with prehistoric materials have been documented within one mile of the project area (see Table 4.5-2 in Section 4.5, *Cultural Resources*, of the EIR). In addition, Dudek archaeologists conducted an intensive pedestrian survey for the Mancara Project area in September 2014, which corresponds to the project area. Updated surveys were carried out by Dudek staff on April 8 and 9 and November 21, 2024. No potential tribal cultural resources were identified during the pedestrian surveys. Based on the presence of prehistoric archaeological resources within one mile of the project area; the project's proximity to the Santa Clara River, which may have been used by Indigenous peoples prior to European contact; and no

previous disturbances within the project area, there is moderate potential for the discovery of subsurface archaeological resources that may also be tribal cultural resources.

4.18.2 Regulatory Setting

4.18.2.1 Federal

NATIONAL HISTORICAL PRESERVATION ACT AND NATIONAL REGISTER OF HISTORIC PLACES

The National Historic Preservation Act (NHPA) established both the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation (ACHP). Under the NHPA, significant cultural resources, or historic properties, include prehistoric or historic districts, sites, buildings, structures, or objects listed in or eligible for the NRHP. These properties may also include artifacts, records, and remains associated with them, and can encompass properties of traditional religious or cultural importance to Native American Tribes or Native Hawaiian organizations. Some historic properties are further recognized as National Historic Landmarks, indicating their exceptional national significance.

The NRHP is the official Federal list of places considered worthy of preservation, managed by the National Park Service (NPS) within the U.S. Department of the Interior. It includes National Historic Landmarks and other historic sites overseen by NPS.

To be listed in or deemed eligible for the NRHP, a property must meet at least one of the following criteria (36 CFR § 60.4):

A. Associated with events that have made a significant contribution to the broad patterns of our history; or

B. Associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important in prehistory or history.

Additionally, a property must retain historic integrity, meaning it can effectively convey its significance. Integrity is evaluated through seven aspects: location, design, materials, workmanship, setting, feeling, and association. Most eligible properties possess several, if not all, of these qualities.

4.18.2.2 State

While certain State laws and regulations governing cultural resources are also applicable to tribal cultural resources (see Section 4.5.2.2, *State*, in Section 4.5, *Cultural Resources*, of the EIR), the following section is limited to those laws and regulations that are specific to tribal cultural resources.

CALIFORNIA HEALTH AND SAFETY CODE §§ 7050 AND 7052

California Health and Safety Code § 7050.5 requires that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the County Coroner must be notified. California Health and Safety Code § 7052 makes it a felony for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

NATIVE AMERICAN HISTORICAL CULTURAL SITES

Under PRC § 5097, Native American burials are protected. The law outlines specific procedures to follow if Native American human remains are uncovered during ground-disturbing activities and establishes the NAHC to help resolve any disputes over the handling of such remains. Additionally, the Native American Historic Resource Protection Act makes it a misdemeanor, punishable by up to one year in jail, to deface or destroy a Native American historic or cultural site that is listed or potentially eligible for listing in the California Register of Historical Resources (CRHR).

CALIFORNIA NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

The California Native American Graves Protection and Repatriation Act (California Health and Safety Code §§ 8010–8029.5) assigns State-funded schools, museums, and agencies with several core responsibilities. They must carefully look through all of their collections to find any Native American human remains or cultural items, such as funerary objects or sacred objects; compile clear lists and descriptions of what they hold; and share this information with the appropriate Native American Tribes and State officials. These institutions are required to coordinate with Tribes to determine which community the items belong to and how they should be returned or reburied. While these remains and items are in their care, schools and museums are not allowed to use them for teaching displays or research, and they must store the items in a secure and respectful manner until repatriation is complete.

CALIFORNIA STATE ASSEMBLY BILL 52

AB 52 established the category of tribal cultural resources for purposes of environmental review and formalized the government consultation process between the lead agency and California Native American Tribes, which includes confidentiality protections for information shared during the consultation. While CEQA requires assessment of tribal cultural resources independently from archaeological resources, some tribal cultural resources may be archaeological in nature and require consideration as both types of resources.

Tribal cultural resources are defined in PRC § 21074. PRC § 21074(a) defines two classes of tribal cultural resources as follows:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:
    a. Included or determined to be eligible for inclusion in the CRHR.
    b. Included in a local register of historical resources as defined in PRC § 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC § 5024.1(c). In applying the criteria set forth in PRC § 5024.1(c) for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American Tribe.

In addition to the above, PRC § 21074(b) adds that a tribal cultural resource may also be a cultural landscape provided it meets the criteria of PRC § 21074(a), so long as the landscape is geographically defined in size and scope. PRC § 21074(c) clarifies that so long as the criteria in PRC § 21074(a) are satisfied, the status as a unique or non-unique archaeological resource is not factored into the determination of whether a resource is a tribal cultural resource.

PRC § 21084.2 states that "a substantial adverse change to a tribal cultural resource has a significant effect on the environment." PRC § 21080.3.2 states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." PRC § 20184.3 requires public agencies to avoid damaging tribal cultural resources when feasible, and gives the following examples of mitigation measures: 1) avoidance and preservation in place through various methods; 2) treatment through culturally appropriate means that protect the cultural character, integrity, traditional use, and confidentiality; 3) permanent conservation or easements; or 4) unqualified protection.

4.18.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

The *Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the benefits to tribal cultural resources protection that open spaces provide (City of Santa Clarita 2011). Table 4.18-1 provides goals and policies within the General Plan that are relevant to the project.

Table 4.18-1. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 5	Protection of historical and culturally significant resources that contribute to community identity and a sense of history.
Objective CO 5.3	Encourage conservation and preservation of Native American cultural places, including prehistoric, archaeological, cultural, spiritual, and ceremonial sites on both public and private lands, throughout all stages of the planning and development process.
Policy CO 5.3.2	For any proposed development project that may have a potential impact on Native American cultural resources, provide notification to California Native American tribes on the contact list maintained by the Native American Heritage Commission that have traditional lands within the City's jurisdiction, and consider the input received prior to a discretionary decision.
Policy CO 5.3.3	Review and consider a cultural resources study for any new grading or development in areas identified as having a high potential for Native American resources and incorporate recommendations into the project approval as appropriate to mitigate impacts to cultural resources.

4.18.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to tribal cultural resources if the project would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Each of these thresholds is discussed under Section 4.18.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.18.4 Impact Assessment Methodology

This impact analysis is based on the results of the AB 52 consultation and the confidential Cultural Resources Inventory and Evaluation Report (Dudek 2025). The Cultural Resources Inventory and Evaluation Report contains information acquired through the following methods: 1) CHRIS records search by the South Central Coastal Information Center (SCCIC); 2) SLF search by the NAHC; 3) archival information and literature review by Dudek; and 4) cultural resources pedestrian surveys by Dudek. The presence of potential tribal cultural resources and the potential for impacts also considers information provided during consultation between the City and the Fernandeño Tataviam Band of Mission Indians pursuant to AB 52. As previously discussed, the City sent a notification letter to a representative from the Fernandeño Tataviam Band of Mission Indians and received a response requesting consultation. A summary of the City's consultation with the Fernandeño Tataviam Band of Mission Indians is included below. PRC § 21084.2 states that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. The CEQA Guidelines do not define what constitutes a significant adverse change that is specific to tribal cultural resources, but the criteria for historical resources given in CEQA Guidelines § 15064.5(b) provide an appropriate analog for assessing potential impacts to tribal cultural resources, especially where the tribal cultural resource is designated based on its eligibility or listing on the CRHR.

Applying the definitions given in CEQA Guidelines § 15064.5(b) from historical resources to tribal cultural resources, a substantial adverse change would occur if the project results in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the tribal cultural resource would be materially impaired. Material impairment could occur when a project:

- demolishes or materially alters in an adverse manner those physical characteristics of a tribal cultural resource that justify its inclusion in, or eligibility for inclusion in, the CRHR, or in a local register of historical resources as defined in PRC § 5020.1(k); or
- demolishes or materially alters in an adverse manner those characteristics of a tribal cultural resource that justify its eligibility for inclusion in the CRHR as determined by a lead agency for the purposes of CEQA.

4.18.5 Project-Specific Impacts and Mitigation Measures

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

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, the lead agency shall consider the significance of the resource to a California Native American tribe.

The project includes the development of 341 single-family homes, a recreation center, and off-site improvements on existing vacant land. No cultural resources listed in or eligible for listing in the CRHR or the City's List of Historic Resources were identified within the project area.

According to the Cultural Resources Inventory and Evaluation Report, the CHRIS records search did not identify any cultural resources within the project area (Dudek 2025); however, three prehistoric resources and a multicomponent resource containing prehistoric materials have been documented within one mile of the project area. The NAHC's SLF search returned negative results for Native American cultural resources within one mile of the project area. One previous historic residential site recorded during a 2014 pedestrian survey was identified within the project area. Three new archaeological resources were identified during the 2024 pedestrian survey, but they were historic-era resources and not Native American in origin. A review of Native American settlements identified the project area as traditional territory of the Tataviam people. There are also records of several neighboring Tribes who interacted with the Tataviam, including the Ventureño Chumash, Gabrielino, Serrano, and Kitanemuk.

Dudek conducted archival research and a review of the geomorphological context of the project area to characterize the potential for subsurface cultural resources that have not been previously identified, which includes Native American sites, features, and objects that may also be a tribal cultural resource. Dudek found that the presence of underlying alluvial deposits has a moderate potential for supporting subsurface archaeological deposits. Due to the previously documented prehistoric archaeological resources within one mile of the project area and the project's proximity to the Santa Clara River, the project area was likely inhabited by Native Americans prior to Euro-American contact. Potential resources within the project area could occur as isolated artifacts, remains of short-term camps, or remains of longer-term settlements. While the presence of any such resources has not been materially confirmed, such that the significance could be determined, if present, these resources could be used to answer important research questions and would therefore be considered eligible for listing in the CRHR under Criterion 4. In designating any such resources as a tribal cultural resource, the lead agency would be required to also consider the value to a California Native American Tribe. Accordingly, the extant data indicate that there is moderate sensitivity for buried tribal cultural resources in the areas where excavation would reach naturally deposited sediments beneath areas of fill.

The City, as the lead agency under CEQA, provided written notification to California Native American Tribes affiliated with the project area pursuant to AB 52. Responses were received from one Tribe, the Fernandeño Tataviam Band of Mission Indians, which requested consultation for the project. No specific tribal cultural resources were identified within the project area. The Fernandeño Tataviam Band of Mission Indians requested three mitigation measures to address potentially significant impacts resulting from ground-disturbing activities from the project. Mitigation Measure (MM) TCR-1.1 would require the City to retain a Tribal Monitor to observe all ground-disturbing activities, MM TCR-1.2 addresses the unanticipated discovery of tribal cultural resources, and MM TCR-1.3 addresses human remains and associated funerary or ceremonial objects.

Because the excavation required to complete the project would involve ground-disturbing activities within sediments assessed as having moderate sensitivity for tribal cultural resources, the project could result in a potentially significant impact to a tribal cultural resource. The implementation of mitigation measures would ensure compliance with existing regulations and CEQA guidelines; therefore, impacts would be *less than significant with mitigation*.

Impact TCR-1	
During construction, the project could cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC §§ 5020.1(k) and 5024.1.	
Mitigation Measures	
MM TCR-1.1	***Full Time Monitoring, Multiple Monitors.*** *The project applicant must retain professional Tribal Monitors provided by the Fernandeño Tataviam Band of Mission Indians to observe all ground-disturbing activities in native soil as described in the following paragraphs, including, without limitation, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, or similar activities.* *During mass grading there must be one Tribal Monitor per 20 acres of active disturbance. Following mass grading, if ground-disturbing activities occur in native soil to a depth of five feet in areas not previously subject to mass grading, one Tribal Monitor per 20 acres must be assigned to monitor such ground-disturbing activity.* *If tribal cultural resources are encountered at any point, Tribal Monitors must observe all remaining ground-disturbing activities until all ground-disturbing activities are complete.* *Tribal monitoring must continue until the project applicant provides written confirmation to the Tribe that all mass grading and ground-disturbing activities in areas not subject to mass grading have been completed. If the project applicant pauses mass grading and ground-disturbing activities such that Tribal Monitors are no longer on site, before commencement of grading, the project applicant shall provide five days' notice before the start of further ground-disturbing activities.* *Upon discovery of tribal cultural resources, the Tribal Monitor may stop ground-disturbing activities within 60 feet of the discovery. A qualified archaeologist meeting Secretary of the Interior standards, retained by the project applicant, and the Tribal Monitor must assess the find before the Tribal Monitor allows further grading in that area.*
MM TCR-1.2	***Disposition and Treatment of Inadvertent Discoveries.*** *The lead agency and/or project applicant must, in good faith, consult with the Fernandeño Tataviam Band of Mission Indians on the disposition and treatment of any tribal cultural resource encountered during all ground-disturbing activities.*
MM TCR-1.3	***In the Event of Inadvertent Discovery, Human Remains.*** *If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) must cease and the Los Angeles County Coroner must be contacted pursuant to California Health and Safety Code § 7050.5.*

Impact TCR-1
Inadvertent discoveries of human remains and/or funerary object(s) are subject to Health and Safety Code § 7050.5, and the subsequent disposition of those discoveries must be decided by the Most Likely Descendant, as determined by the Native American Heritage Commission, should those findings be determined as Native American in origin.
Impacts Following Mitigation
MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3 were developed considering input from the Fernandeño Tataviam Band of Mission Indians. With implementation of MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3, impacts during construction would be reduced to less than significant.

4.18.6 Cumulative Impacts

For the purpose of this EIR analysis, the geographic context for cumulative impacts to tribal cultural resources is defined as the Soledad Canyon Area within the Santa Clarita Valley, which is bordered by the Los Padres and Angeles National Forests to the north, the Angeles National Forest to the east, the San Fernando Valley to the south, and Ventura County to the west. The impacts associated with the project are localized and limited to the immediate project area. The project area is in an area historically occupied by the Tataviam people. Surrounding groups include the Ventureño Chumash to the west, the Gabrielino to the southeast, the Serrano to the east, and Kitanemuk to the north.

Tribal cultural resources are nonrenewable, irreplaceable, and inherently important to the Native American descendants, and their destruction prevents further study of past lifeways and history. Projects that could be developed in the Soledad Canyon Area within the Santa Clarita Valley include the development projects listed in Chapter 3, *Environmental Setting*, as well as additional development projects beyond the geographic limit of the cumulative project listing in Chapter 3. As a result of the Great Depression in 1929, Santa Clarita was primarily a rural community, with development mostly consisting of dispersed ranches and farms. Due to evidence of Native Americans within the project area and surrounding the Santa Clarita River, there is moderate potential for the inadvertent discovery of Native American archaeological sites within the Santa Clarita Valley. Therefore, the development of projects in the Santa Clarita Valley could result in the destruction of tribal cultural resources and would have the potential to result in cumulative impacts associated with the loss of tribal cultural resources. Given the potential for tribal cultural resources in the Santa Clarita Valley and the number of construction activities that involve disturbance of areas sensitive for tribal cultural resources, cumulative impacts to tribal cultural resources could occur through physical demolition, destruction, relocation, or alteration to a resource such that it would cause an adverse change in the significance of tribal cultural resources—CRHR-eligible resources as defined in PRC § 2020.1(k) or resources considered by the City to be tribal cultural resources pursuant to PRC § 5024.1.

The project has the potential to contribute to a loss of tribal cultural resources that could combine with impacts from past, present, and reasonably foreseeable projects prior to implementation of the mitigation measures outlined previously in this section. The project's contribution toward cumulative effects on tribal cultural resources in the region could be significant if mitigation measures were not required and implemented to address the potential for direct impacts and the potential for the project to contribute to cumulative impacts.

As provided in the environmental impacts analysis in Section 4.18.5, *Project-Specific Impacts and Mitigation Measures*, mitigation measures were drafted to address the project's potential for impacts to tribal cultural resources. These mitigation measures build upon and enhance the process put forward in MM CR-2.1 (see Section 4.5, *Cultural Resources*) and not only address direct impacts of project

implementation but also the project's contribution to cumulative tribal cultural resource impacts. Implementation of MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3—which provide for the retention of a Tribal Monitor and the disposition and treatment of inadvertent tribal cultural resources and human remains—would ensure that tribal cultural resources impacts, both direct and contributions to cumulative impacts, are reduced to less than significant with mitigation. Implementation of MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3 would also ensure that any tribal cultural resources will be identified, inventoried, evaluated for significance in terms of their value to a California Native American Tribe and will be treated appropriately if found to be a contributing element. Collectively, implementation of these mitigation measures would ensure that the project would have less-than-significant impacts related to tribal cultural resources, as well as address the project's potential for significant contributions to potential cumulative tribal cultural resources impacts in the Santa Clarita Valley; therefore, impacts related to the project would not be cumulatively considerable.

Impact TCR-2 (Cumulative Impacts)
Prior to the consideration of proposed mitigation measures, construction of the project could result in significant contributions to cumulative impacts related to the disturbance and destruction of tribal cultural resources.
Mitigation Measures
Implement MM TCR-1.1, MM TCR-1.2, and MM TCR-1.3.
Impacts Following Mitigation
With implementation of MM TCR-1.1, MM TCR-1.2, MM TCR-1.3, the project's contribution to cumulative impacts to known and potentially unknown tribal cultural resources would be reduced to less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

This section of the EIR evaluates the potential environmental effects associated with the provision of utilities and service systems required to serve the project. Utilities and service systems evaluated in this section include electricity, natural gas, telecommunications, water supply, wastewater collection and treatment, stormwater drainage, and solid waste services. The analysis is based on information obtained from applicable utility providers, adopted planning documents, and project-specific engineering studies, and evaluates project impacts in accordance with Appendix G of the CEQA Guidelines.

4.19.1 Existing Conditions

4.19.1.1 Electricity

The City is provided with electric service by Southern California Edison (SCE), which is one of the largest electric utility providers in the United States, serving approximately 15 million people through five million customer accounts. SCE operates within a service territory spanning 50,000 square miles across Central, Coastal, and Southern California, excluding the City of Los Angeles and some other Cities. Its service area includes portions of 15 Counties and more than 180 incorporated Cities. SCE represents that it seeks to deliver reliable, clean, and affordable electricity, with a strong focus on sustainability and supporting California's goal of achieving net-zero GHG emissions by 2045. According to the 2022 SCE Power Content Label, solar energy accounts for 17% of SCE's overall energy resources. SCE reported an annual electrical consumption of approximately 107,876 million kilowatt-hours (kWh) in 2022, with the majority going to residential (39,400 million kWh) and commercial uses (42,241 million kWh) (Dudek 2026; EIR Appendix H).

SCE monitors and maintains a vast electricity system made up of 12,635 miles of transmission lines, 91,375 miles of distribution lines, 720,800 distribution transformers, and 2,959 substation transformers. SCE is currently upgrading and expanding its electric distribution, including replacing well-worn poles, replacing transformers and underground cables, constructing new substations in high-growth areas, and investing in safe, reliable, and affordable power for tomorrow (SCE 2025).

4.19.1.2 Natural Gas

The City is provided natural gas services by the Southern California Gas Company (SoCalGas), which provides Los Angeles County (including the City of Santa Clarita) with natural gas service. SoCalGas's service territory encompasses approximately 20,000 square miles and more than 500 communities. In the California Energy Demand mid-energy demand scenario, natural gas demand is projected to have an annual growth rate of 0.03% in SoCalGas's service territory (Dudek 2026; see EIR Appendix H).

4.19.1.3 Telecommunication Facilities

The project site is within the American Telephone & Telegraph Company (AT&T) and Charter Communications service areas. The project site is vacant and undeveloped and is not currently served by any telecommunication facilities. Telecommunication infrastructure is generally extended incrementally to serve new development and does not typically result in regionally significant environmental effects.

4.19.1.4 Water Supply and Demand

The project site is provided with water by the Santa Clarita Valley Water Agency (SCVWA). SCVWA serves a service area that encompasses nearly the entire City of Santa Clarita and unincorporated portions of Los Angeles County. SCVWA also serves as a wholesale water provider to Los Angeles County Waterworks District (LACWWD) No. 36, which includes the unincorporated communities of Hasley Canyon and Val Verde. LACWWD 36, which is in the SCVWA service area, relies primarily on its own groundwater, and SCVWA provides imported water as a supplemental supply.

SCVWA provides water service to residential, commercial, industrial, institutional, recreational, and agricultural users and for environmental and other uses, such as fire protection and landscaping. As of 2025, the SCVWA service area consisted of a valley-wide population of approximately 332,100. The population of the SCVWA service area is projected to grow at an average annual rate of approximately 1.3% per year over the 30-year planning period to buildout in 2050, resulting in a valley-wide population of approximately 432,200 in 2050. The total demand for water supplies is expected to continue to rise within the Santa Clarita Valley area (along with most of California) because of population growth, planned development, economic activity, environmental and water quality needs, and regulatory requirements.

SCVWA's existing water resources include imported supplies, local groundwater, water from transfers and exchanges, water from existing groundwater banking programs, and recycled water. Planned supplies include new groundwater production and additional banking programs. Imported water supplies are derived primarily from the State Water Project (SWP) and the Sacramento-San Joaquin Delta. The sole source of local groundwater in the Santa Clarita Valley is the Santa Clara River Valley Groundwater Basin East Subbasin, which is composed of two aquifer systems—the Alluvium and the Saugus Formation.

- **Imported Water Supplies.** SCVWA's imported water supplies consist primarily of SWP supplies, which were first delivered to SCVWA (Castaic Lake Water Agency [CLWA] at the time) in 1980. From the SWP, SCVWA also has access to water from Flexible Storage Accounts in Castaic Lake, which are planned for dry-year use, but are not strictly limited as such. In addition to its SWP supplies, SCVWA has an imported surface supply from the Buena Vista Water Storage District and Rosedale Rio-Bravo Water Storage District in Kern County, which was first delivered to SCVWA (CLWA at the time) in 2007. Further, Newhall Land and Farming Company (now also referred to as Five Point) has a water transfer supply from a source in Kern County, referred to as Nickel Water, that, for planning purposes, is anticipated to be available beginning in 2035.
- **Local Groundwater.** The sole source of local groundwater for urban water supply in the valley is the East Subbasin, listed in California Department of Water Resources (DWR) Bulletin 118 as Basin No. 4-4.07. The East Subbasin is comprised of two aquifer systems—the Alluvium and the Saugus Formation. The Alluvium Formation generally underlies the Santa Clara River and adjacent areas, including its several tributaries, to maximum depths of about 200 feet; and the Saugus Formation underlies practically the entire Upper Santa Clara River area, to depths of at least 2,000 feet. There are also some scattered outcrops of Terrace deposits in the East Subbasin that likely contain limited amounts of groundwater.
- **Transfers and Exchanges.** An opportunity available to SCVWA to increase water supplies is to participate in voluntary water transfer programs. Since the drought of 1987 to 1992, the concept of water transfer has evolved into a viable supplemental source to improve supply reliability. Up to 27 million acre-feet of water are delivered for agricultural use every year. Over half of this water use is in the Central Valley, and much of it is delivered by, or adjacent to, SWP and Central

Valley Project conveyance facilities. This proximity to existing water conveyance facilities could allow for the voluntary transfer of water to many urban areas, including SCVWA, via the SWP. Such water transfers can involve water sales, conjunctive use, groundwater substitution, and water sharing. They usually occur as a form of spot, option, or core transfer agreements. The costs of a water transfer would vary depending on the type, term, and location of the transfer.

- **Groundwater Banking Programs.** Groundwater banking programs involve storing available SWP surface water supplies during wet years in groundwater basins in, for example, the San Joaquin Valley. Water would be stored either directly by surface spreading or injection, or indirectly by supplying surface water to farmers for their use in lieu of their intended groundwater pumping. During periods of water shortage, stored water could be pumped out and conveyed through the California Aqueduct to SCVWA as the banking partner, or used by participating farmers in exchange for their surface water allocations, which would then be delivered to SCVWA through the California Aqueduct. SCVWA is a partner in two existing groundwater banking programs, including the Semitropic Banking Program and Rosedale-Rio Bravo Water Supply District Banking Program.
- **Recycled Water.** SCVWA's source of supply for current and planned recycled water consists of flows coming from the Valencia Water Reclamation Plant and the future Newhall Ranch Water Reclamation Plant, as well as the Vista Canyon Ranch Water Factory (Vista Canyon WF). SCVWA recently extended the term of its recycled water purchase agreement with the Santa Clarita Valley Sanitation District (SCVSD) and is currently negotiating a recycled water purchase agreement with the City for supplies from the Vista Canyon WF. An additional recycled water purchase agreement with the Newhall Ranch Sanitation District is anticipated when it becomes operational.
- **Planned Water Supplies.** SCVWA prepared the Water Resources Reconnaissance Study (Carollo 2015), which discusses the potential for acquiring additional water supplies. The study also evaluated a series of supply measures in the hopes that an additional 10,000 acre-feet per year (AFY) of supply could be made available to the service area. The study identified two local measures that might enable SCVWA to get at least partway to that goal: 1) a groundwater recharge project using recycled water, and 2) an imported water injection project during wet years to augment Saugus Formation groundwater storage. Both of these projects were evaluated at the conceptual level, but significantly more investigation would need to be completed before either would be implemented.

Tables 4.19-1 through 4.19-3 summarize the existing and planned supplies and projected demand in the service area during average/normal years, during single-dry years, and during multiple-dry years, respectively.

Table 4.19-1. Existing and Planned Supply and Demand within Service Area in Average/Normal Years (AFY)

Supply Category[1]	2025	2030	2035	2040	2045	2050
Existing Supplies						
Groundwater	23,340	15,290	14,410	14,410	14,410	14,410
Recycled Water	450	450	450	450	450	450
Imported Water	67,220	64,310	64,017	62,107	62,107	62,107
Banking/Exchange Programs	0	0	0	0	0	0
Total Existing Supply	*91,010*	*80,050*	*78,877*	*76,967*	*76,967*	*76,967*
Planned Supplies						
Groundwater	15,540	22,660	26,280	26,280	26,280	26,280
Recycled	1,849	3,696	5,091	6,498	7,499	8,511
Banking Programs	0	0	0	0	0	0
Total Planned Supply	*14,694*	*26,356*	*31,371*	*32,778*	*33,779*	*34,791*
Total Existing and Planned Supplies	**108,399**	**106,406**	**110,248**	**109,745**	**110,746**	**111,758**
Total Projected Demand[2]	**76,400**	**81,700**	**88,700**	**93,600**	**97,500**	**101,000**

Source: SCVWA (2021)

Notes:

[1] LACWWD No. 36 is included for purposes of providing regional completeness.

[2] Demands include savings from plumbing code/standards and active conservation. Demands account for estimated increase from climate change.

Table 4.19-2. Existing and Planned Supplies and Demands within Service Area in Single-Dry Years (AFY)

Supply Category[1]	2025	2030	2035	2040	2045	2050
Existing Supplies						
Groundwater	23,930	22,960	22,220	22,220	22,220	22,220
Recycled Water	450	450	450	450	450	450
Imported Water	22,820	20,440	22,047	22,047	22,047	22,047
Banking/Exchange Programs	15,000	15,000	19,950	19,950	19,950	19,950
Total Existing Supply	*62,200*	*58,850*	*64,667*	*64,667*	*64,667*	*64,667*
Planned Supplies						
Groundwater	22,060	32,940	36,420	36,420	36,420	36,420
Recycled	1,849	3,696	5,091	6,498	7,499	8,511
Banking Programs	0	10,000	10,000	10,000	10,000	10,000
Total Planned Supply	*23,909*	*46,636*	*51,511*	*52,918*	*53,919*	*54,931*
Total Existing and Planned Supplies	**86,109**	**105,486**	**116,178**	**117,585**	**118,586**	**119,598**
Total Projected Demand[2,3,4]	**81,000**	**86,600**	**94,000**	**99,200**	**103,400**	**107,100**

Source: SCVWA (2021)

Notes: Values are rounded to the nearest hundred.

[1] LACWWD No.36 is included for purposes of providing regional completeness.

[2] Demands include savings from plumbing code/standards and active conservation. Demands account for estimated increase from climate change.

[3] Demands assume a 6% increase above normal demand during dry years.

[4] Future demands include that of the project.

Table 4.19-3. Projected Water Demand within Service Area in Multiple-Dry Years (AFY)

Supply Category[1]	2025	2030	2035	2040	2045	2050
Existing Supplies						
Groundwater	25,180	24,330	23,500	23,200	23,200	23,200
Recycled Water	450	450	450	450	450	450
Imported Water	40,620	39,770	40,774	41,467	41,467	41,467
Banking/Exchange Programs	15,550	15,550	17,970	19,950	19,879	16,809
Total Existing Supply	*81,800*	*80,100*	*82,694*	*85,067*	*84,996*	*81,806*
Planned Supplies						
Groundwater	17,680	24,330	27,820	28,520	28,520	28,520
Recycled	1,823	3,603	5,045	6,498	7,499	8,389
Banking Programs	0	6,000	10,000	10,000	10,000	10,000
Total Planned Supply	*19,503*	*33,933*	*42,865*	*45,018*	*46,019*	*46,909*
Total Existing and Planned Supplies	**101,303**	**114,033**	**125,559**	**130,085**	**131,015**	**128,715**
Total Projected Demand[2,3]	**77,830**	**83,620**	**90,570**	**95,780**	**99,670**	**102,870**

Source: SCVWA (2021)

Notes: Values are rounded to the nearest hundred.

[1] LACWWD No. 36 is included for purposes of providing regional completeness.

[2] Demands include savings from plumbing code/standards and active conservation. Demands account for estimated increase from climate change.

[3] Demands assume a 6% increase above normal demand during dry years.

According to the *Water Service Analysis for the Belcaro Project in the Santa Clarita Valley Water Agency* (WSA), the current average water demand within the SCVWA potable water service area is approximately 50.44 million gallons per day (mgd) (Dexter Wilson Engineering, Inc. 2026; EIR Appendix O).

4.19.1.5 Wastewater

The City's Public Works Department oversees the sanitary sewer collection system, which serves a population of approximately 213,000 residents and comprises roughly 450 miles of gravity sewer lines and three pump stations (City of Santa Clarita 2020). Maintenance and field operations for the City's sanitary sewer infrastructure are performed under contract by the Consolidated Sewer Maintenance District (CSMD), which is managed by the County of Los Angeles Department of Public Works (LACDPW). The CSMD provides wastewater collection services to more than two million customers, including unincorporated areas of Los Angeles County, 37 member Cities, and two additional contracted Cities. The CSMD's infrastructure includes over 4,600 miles of sanitary sewers, 155 pump stations, and four wastewater treatment plants (LACDPW 2025).

Wastewater collected within the City's local sewer network is conveyed to the Los Angeles County Sanitation Districts (LACSD) system for further transport, treatment, and disposal. The LACSD is composed of 24 separate special districts, collectively serving about 5.5 million people in Los Angeles County. The LACSD's service area encompasses about 850 square miles, including 78 Cities and various unincorporated communities in Los Angeles County. The regional wastewater collection system managed by LACSD consists of approximately 1,400 miles of sewers, 49 pumping plants, and 11 wastewater treatment plants, and is responsible for transporting and treating nearly half the County's wastewater (LACSD 2025).

Within the City, wastewater and associated solids originating from local sewer lines—owned by either the City or County—are conveyed to the Saugus and Valencia Water Reclamation Plants (WRPs) for treatment (LACSD 2025). The Saugus WRP, located at 26200 Springbrook Avenue in Santa Clarita, provides primary, secondary, and tertiary treatment for 6.5 mgd of wastewater and serves a population of nearly 80,000 (LACSD 2025). The Valencia WRP, located at 28185 The Old Road in the unincorporated community of Valencia, provides primary, secondary, and tertiary treatment for 21.6 mgd of wastewater and serves a population exceeding 200,000 people (LACSD 2025). In addition to wastewater treatment, the Valencia WRP is also equipped with solids processing facilities and is responsible for processing all wastewater solids generated in the SCVSD.

These facilities are interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS), which has a capacity of 28.1 mgd and currently processes an average flow of 18.2 mgd (LACSD 2024).

4.19.1.6 Solid Waste

Solid waste collection services within the City are currently provided by Burrtec Waste Industries (Burrtec), the City's franchised waste hauler. Burrtec is responsible for the collection of mixed waste, organics, and recyclables from all residential, commercial and industrial properties citywide (Green Santa Clarita 2025). In addition to collection, Burrtec operates multiple material recovery facilities and transfer stations across Southern California, as well as the Salton City Landfill.

Solid waste generated by the City is primarily disposed of at the following regional landfills (City of Santa Clarita 2011a):

- **Antelope Valley Landfill (Palmdale Landfill)** is a 185-acre facility, located at 1200 West City Ranch Road in the City of Palmdale, that is permitted to accept up to 3,600 tons of solid waste per day. As of January 2026, , the landfill had a remaining capacity of 43,900,000 cubic yards following a permit revision that increased the permitted disposal area from 125 acres to 181 acres.
- **Sunshine Canyon Landfill** is a 1,036-acre facility, located at 14747 San Fernando Road in the City of Los Angeles, that is permitted to accept up to 12,100 tons of solid waste per day. As of May 6, 2024, the landfill had a remaining capacity of 66,200,000 cubic yards.

Additionally, the Salton City Landfill, operated by Burrtec and located at 935 West Highway 86 in Salton City, is permitted for a maximum throughput of 6,000 tons per day and had a remaining capacity of 62,540,915 cubic yards as of December 31, 2023 (California Department of Resources Recycling and Recovery [CalRecycle] 2025).

4.19.2 Regulatory Setting

4.19.2.1 Federal

CLEAN WATER ACT OF 1972

The federal Water Pollution Control Act (Clean Water Act [CWA]) was created with the goal of restoring and preserving the chemical, physical, and biological integrity of the nation's waterways by preventing pollution from entering waterways, including wetlands, and assisting publicly owned wastewater treatment facilities to improvement of wastewater treatment. The CWA regulates the water quality of all discharges into waters of the United States, including wetlands and perennial and intermittent stream channels.

In 1972, the CWA was amended to prohibit the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. At that time, the CWA focused on tracking point sources, primarily from wastewater treatment facilities and industrial waste dischargers, and required implementation of control measures to minimize pollutant discharges. The CWA was amended again in 1987, adding Section 402(p), to provide a framework for regulating municipal and industrial stormwater discharges. In November 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish application requirements for specific categories of industries, including construction projects that encompass greater than or equal to five acres of land. The Phase II Rule became final in December 1999, expanding regulated construction sites to those greater than or equal to one acre. The regulations require that stormwater and non-stormwater runoff associated with construction activity that discharges either directly to surface waters or indirectly through Municipal Separate Storm Sewer Systems (MS4s) must be regulated by an NPDES permit.

SAFE DRINKING WATER ACT OF 1974

The purpose of the Safe Drinking Water Act of 1974 (SDWA) is to protect public health by regulating the nation's public drinking water supply. The SDWA authorizes the USEPA to set national health-based standards for drinking water to protect against both naturally occurring and human-made contaminants that may be found in drinking water. Potential contaminants include improperly disposed chemicals, animal wastes, pesticides, human threats, waste injected underground, and naturally occurring substances. In addition, water that is not properly treated may pose a threat to drinking water. The SDWA applies to all public water systems across the nation. The USEPA, individual States, and water systems work in coordination to ensure that these standards are met. The USEPA identifies potential contaminants, determines an allowable maximum contaminant level, and enforces the set standards.

4.19.2.2 State

SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) is comprised of a three-bill legislative package, including AB 1739, SB 1168, and SB 1319, and subsequent Statewide regulations. The SGMA provides a Statewide framework for the long-term protection of groundwater resources by requiring local agencies to form Groundwater Sustainability Agencies for high- and medium-priority basins. Those Groundwater Sustainability Agencies are required to develop and implement a Groundwater Sustainability Plan to mitigate overdraft of groundwater resources. The DWR is responsible for assessing existing conditions and prioritizing groundwater basins within the State. There are two high- and medium-priority groundwater basins located partially or entirely within Los Angeles County—the Santa Clara River Valley East Subbasin and Santa Monica Basin.

URBAN WATER MANAGEMENT PLANNING ACT OF 1983

The Urban Water Management Planning Act of 1983 (California Water Code §§ 10610, et seq.) requires that every supplier providing water for municipal purposes to more than 3,000 customers or suppliers supplying more than 3,000 acre-feet of water annually to prepare an Urban Water Management Plan (UWMP) every five years. The UWMP must include a description of the service area, existing and planned sources of water available to the supplier, how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan. In addition, every urban water supplier must prepare and adopt a water shortage contingency plan as part of its UWMP that includes, without limitation, an analysis of water supply

reliability over a 20-year planning timeframe, the procedures used in conducting an annual water supply and demand assessment, definitions of standard water shortage levels corresponding to progressive ranges of up to 50% shortages and greater than 50% shortages, and shortage response actions that align with the defined shortage levels.

CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT OF 1989

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to require Cities and Counties in the State of California to divert 25% of their waste streams by the year 1995 and 50% by the year 2000. Later legislation mandates the 50% diversion requirement to be achieved each year. Specifically, the act requires Counties and Cities to adopt a Source Reduction and Recycling Element of their Waste Management Plans to describe actions to be implemented to achieve waste reduction goals (PRC § 41750). CalRecycle oversees and provides assistance to local governments as they develop and implement plans to meet the mandates of the Integrated Waste Management Act and subsequent legislation.

CALIFORNIA SOLID WASTE REUSE AND RECYCLING ACCESS ACT OF 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327) requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdiction's ordinance. If no such ordinance exists within the jurisdiction, the CalRecycle model ordinance shall take effect.

MANDATORY COMMERCIAL RECYCLING PROGRAM

The Mandatory Commercial Recycling Program (AB 341) authorizes CalRecycle to develop and adopt regulations for mandatory commercial recycling and requires all commercial businesses and public entities that generate four cubic yards or more of waste per week to have a recycling program in place. In addition, all multifamily homes with more than five units are also required to have a recycling program in place.

CALIFORNIA SENATE BILL 1374

SB 1374 was implemented to assist jurisdictions with diverting construction and demolition waste material. Per SB 1374, PRC § 41821 requires public agencies to include a summary of the progress made in diverting construction and demolition waste according to diversion goals included in AB 939. Per SB 1374, PRC § 41850 authorizes CalRecycle to fine jurisdictions that do not meet the required goals. Additionally, per SB 1734, PRC § 42912 requires that CalRecycle adopt a model ordinance for diverting 50% to 75% of all construction and demolition waste from landfills.

4.19.2.3 Local

SANTA CLARITA VALLEY WATER AGENCY 2020 URBAN WATER MANAGEMENT PLAN

The SCVWA adopted its *2020 Urban Water Management Plan* (2020 UWMP) in June 2021. The 2020 UWMP serves as comprehensive planning tool that guides water supply and resource management within the SCVWA service area. The 2020 UWMP provides a detailed assessment of present and future water resources and resource needs, incorporating water supply and demand forecasts based on population

projections consistent with the general plans of the jurisdictions within the service area (SCVWA 2021). The 2020 UWMP covers a 30-year planning horizon, presented in 5-year increments, and identifies the water supplies required to meet both current and anticipated future demands. Population and water projections through 2050 were made based on existing land uses and planned land use development compiled for the SCVWA service area, including the City and County land use plans. In addition, the 2020 UWMP addresses supply reliability planning, drought risk assessment, and the implementation of water conservation and recycling measures.

SANTA CLARITA MUNICIPAL CODE

Chapter 9.38 – Water Conservation

SCMC §§ 9.38.010 through 9.38.050 establish water use guidelines and restrictions that support the water use reduction objectives set forth in the adopted Water Shortage Contingency Plan (City of Santa Clarita 2020). These regulations specify water use restrictions to be implemented during drought conditions, as well as ongoing practices for the efficient use of water. SCMC Chapter 9.38 includes requirements for drought-tolerant landscaping, low-flow plumbing fixtures, and other measures designed to promote water conservation in both irrigation and indoor water use.

Section 10.04.070 – Construction Activity Stormwater Measures

SCMC § 10.04.070 establishes requirements for managing water runoff and discharges during construction activities within the City. This section mandates the implementation of a grading and construction activity runoff control program designed to achieve the following objectives: 1) retain on-site all sediments generated on or brought to the project site through the use of treatment control or structural best management practices (BMPs); 2) retain construction-related materials, wastes, spills, and residues at the project site and prevent their discharge to streets, drainage facilities, the MS4, receiving waters, or adjacent properties; 3) contain non-stormwater runoff from equipment and vehicle washing at the project site; and 4) control erosion from slopes and channels by employing effective BMPs, including limiting grading during the wet season, inspecting graded areas during rain events, planting and maintaining vegetation on slopes, and covering any slopes susceptible to erosion.

Section 17.51.030 – Landscaping and Irrigation Standards

SCMC § 17.51.030 establishes irrigation and landscaping standards for all new development within the City and codifies the requirements of the State Model Water Efficient Landscape Ordinance (MWELO). The purpose of this section is to promote the efficient use of water through the selection of low-water-use plant materials, water-conserving irrigation systems, and the regular maintenance of landscaped areas. The section further encourages the proper design, installation, maintenance, and management of landscapes to reduce water demand, retain runoff, and minimize flooding, while maintaining the quality and quantity of landscaping. In addition, this section supports the conservation of potable water by maximizing the use of recycled water and other water-saving technologies where appropriate.

Section 17.51.070 – Road Dedication, Improvements and Other Requirements

SCMC § 17.51.070 establishes requirements for road dedication, improvements, and other related obligations for development projects. This section stipulates that no building or structure may be used on any lot or parcel abutting an alley, street, or highway unless one-half of the adjacent right-of-way has been dedicated and improved with curbs, gutters, sidewalks, base pavement, streetlights, street trees, and drainage structures. Additionally, the section requires that all new and existing utilities be placed underground along the project street frontage. Where underground placement is not feasible, utilities must be screened from view to the satisfaction of the City Engineer.

Chapter 17.95 – Standard Urban Stormwater Mitigation Plan Implementation

SCMC Chapter 17.95 establishes requirements for post-construction stormwater management for development projects to ensure compliance with the NPDES and MS4 permits. This chapter mandates that each project prepare and implement a mitigation plan to reduce water quality impacts associated with development. Projects are required to employ smart growth practices and BMPs as well as incorporate low impact development (LID) design principles to replicate pre-development hydrology conditions through infiltration, evapotranspiration, rainfall harvesting, and beneficial reuse of stormwater.

CITY OF SANTA CLARITA GENERAL PLAN

The *City of Santa Clarita General Plan Conservation and Open Space Element* establishes a policy framework for the designation and long-term preservation of open space within the planning area and addresses the various benefits that open spaces provide to the community (City of Santa Clarita 2011b). The *City of Santa Clarita General Plan Land Use Element* establishes a policy framework for planning future growth within the planning area and addresses existing development patterns (City of Santa Clarita 2011a). Table 4.19-4 provides goals, objectives, and policies within the General Plan that are applicable to water supply, wastewater, stormwater facilities, solid waste, and dry utilities and are relevant to the project.

Table 4.19-4. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Conservation and Open Space Element	
Goal CO 4	An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.
Objective 4.1	Promote water conservation as a critical component of ensuring adequate water supply for Santa Clarita Valley residents and businesses.
Policy 4.1.3	Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turfgrass.
Policy 4.1.5	Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.
Policy 4.1.7	Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.
Objective CO 4.2	Work with water providers and other agencies to identify and implement programs to increase water supplies to meet the needs of future growth.
Policy 4.2.2	Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.
Policy 4.2.6	Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.
Objective CO 4.3	Limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, and managing stormwater runoff at the source.
Policy CO 4.3.1	On undeveloped sites proposed for development, promote onsite stormwater infiltration through design techniques such as pervious paving, draining runoff into bioswales or properly designed landscaped areas, preservation of natural soils and vegetation, and limiting impervious surfaces
Goal CO 8	Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

Goal/Objective/ Policy	Description
Objective CO 8.4	Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.
Policy CO 8.4.4	Promote commercial and industrial recycling, including recycling of construction and demolition debris.
Policy CO 8.4.5	Develop and implement standards for refuse and recycling receptacles and enclosures to accommodate recycling in all development.
Land Use Element	
Goal LU 6	A scenic and beautiful urban environment that builds on the community's history and natural setting.
Objective LU 6.3	Beautify streetscapes and gateways to the community.
Policy LU 6.3.4	Require undergrounding of utilities lines for new development where feasible and plan for undergrounding of existing utility lines in conjunction with street improvement projects where economically feasible.
Goal LU 7	Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.
Objective LU 7.2	Ensure an adequate water supply to meet the demands of growth.
Policy LU 7.2.3	Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.
Objective LU 7.3	Protect surface and ground water quality through design of development sites and drainage improvements.
Policy LU 7.3.2	Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.
Policy LU 7.3.3	Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.
Objective LU 7.4	Promote water conservation through building and site design.
Policy LU 7.4.1	Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.
Policy LU 7.4.2	Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.
Goal LU 9	Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.
Objective LU 9.1	Coordinate land use planning with provision of adequate public services and facilities to support development.
Policy LU 9.1.1	Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.
Policy LU 9.1.2	Coordinate review of development projects with other agencies and special districts providing utilities and other services.
Objective LU 9.2	Coordination of City and County sewer master planning and sewer mitigation to support future development and avoid fiscal impacts to local government or the existing community.
Policy LU 9.2.2	Require that all new development mitigates its impact on existing sewer capacity by upgrading facilities when warranted or payment of a fee to allow construction of new facilities when needed.
Policy LU 9.2.4	Facilitate the efficient construction of sewer infrastructure by sizing facilities to accommodate anticipated future sewer flows within the sewershed.
Policy LU 9.2.5	Cooperate with the development community to allow reimbursement for the cost of constructed sewer facilities with a capacity that exceeds what would be required to mitigate a project's own sewer impact.
Policy LU 9.2.6	Coordinate to ensure that new development projects have agreed to mitigate both City and County sewer impacts prior to project approval.

CITY OF SANTA CLARITA SEWER SYSTEM MANAGEMENT PLAN

On May 2, 2006, the State Water Board adopted Statewide General Waste Discharge Requirements and Monitoring and Reporting Program (WDRs) through Order No. 2006-0003. The WDRs require that owners and operators of publicly owned sewer collection systems one mile or greater in length apply for coverage under the WDRs and develop and implement a Sewer System Management Plan (SSMP). The City's SSMP is designed to minimize sanitary sewer overflows (SSOs) to the greatest extent practicable throughout the City's sanitary sewer collection system. The SSMP outlines specific goals and actions to ensure the proper maintenance and operation of the City's sewer system, prevent SSOs, and manage SSOs should they occur. As the CSMD provides operation and maintenance services for the City's sewer facilities, the City's SSMP aligns closely with the CSMD's SSMP.

CONSTRUCTION AND DEMOLITION RECYCLING ORDINANCE

The City has adopted Construction and Demolition regulations that establish recycling requirements for various types of construction activities. The regulations apply to all demolition projects, commercial projects valued at more than $200,000, new commercial projects exceeding 1,000 square feet, all new residential construction projects, and residential additions or improvements that increase building area, volume, or size. Under this ordinance, a minimum of 65% of all inert materials and 65% of all other materials generated by these projects must be recycled.

4.19.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to utilities and service systems if the project would:

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.

b) Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

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.

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.

e) Conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.

Each of these thresholds is discussed under Section 4.19.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.19.4 Impact Assessment Methodology

The following impact assessment evaluates the potential for the project to require new or relocated utility infrastructure or exceed existing utility infrastructure capacities. The assessment in this section is based in part on information found within the SCVWA 2020 UWMP, LACPDW *Sewer System Management Plan*

(LACDPW 2025), the project's WSA (Dexter Wilson Engineering, Inc. 2026), and other State and local databases. The project's potential to result in significant impacts related to utilities and service systems was evaluated by determining if growth associated with the project would require the construction of new or relocated utility infrastructure or exceed existing infrastructure capacity.

4.19.5 Project-Specific Impacts and Mitigation Measures

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The project includes the installation of new sources of lighting and infrastructure improvements, including curb and gutter, storm drain, and water and sewer connections to existing facilities within the local vicinity. The project infrastructure would connect to and utilize existing utilities and service systems surrounding the project site and nearby development. The project would be served by the following utility service providers:

- **Potable water:** SCVWA
- **Sanitary sewer:** LACSD
- **Natural gas:** SoCalGas
- **Electricity:** SCE
- **Cable TV:** Charter Communications
- **Telephone:** AT&T

The project infrastructure would connect to existing sewer and water lines located to the west of the project site along Lost Canyon Road. Water supply for the project would be provided by tying into a Zone 1976 16-inch water line at the southern tract boundary in Oak Spring Canyon Road. A secondary connection would be made in Lost Canyon Road to a Zone 1797 8-inch water line, approximately 670 feet west of the project site. In addition, storage for the Zone 1976 would need to be upgraded by adding a new 1-million-gallon tank at the existing off-site Live Oak Reservoir. When the Live Oak Reservoir was constructed, the site was designed so that an additional tank could be added in the future, the location of which would be on top of the existing concrete pad at the current reservoir site. A Reservoir Management System (RMS) building would also be a requirement of SCVWA when the new 1-million-gallon additional tank is constructed; the RMS building would also be constructed within the boundaries of the existing concrete pad. A sewer connection would be provided in Lost Canyon Road with connection to an existing 18-inch vitrified clay pipe sewer line approximately 670 feet from the western boundary of the project site.

The project also includes the installation of three water retention basins, two debris basins, and a debris swale. Two of the water retention basins would be installed on the northern portion of the project site, north of the Metro railroad line. These basins would be maintained by the project's homeowner's association (HOA). The two debris basins and the third water retention basin would be installed in the southern portion of the project site. The debris swale would be located along the proposed residences on the eastern side of the project site and would be separated by a proposed trail running north–south between the homes and debris swale. These features would be managed by the HOA. Proposed relocation

and installation of utility infrastructure would be installed within the project site as defined in Chapter 2, *Project Description*; therefore, the impacts of construction activities at the project site have been analyzed throughout this EIR, and no new impacts would occur as a result of construction activities for utility extensions.

The project would increase the use of water, sewer, electricity, telecommunications, and other utilities and would require the installation of utility extensions to connect to existing City and other utility provider infrastructure to serve the project. SCVWA, LACSD, SoCalGas, Edison, AT&T, and Charter Communications have provided will-serve letters for the project. The will-serve letters do not indicate the need to construct new or expanded facilities to serve the project.

The only potential project-related improvement that would not be within the 208-acre project site is the potential for a new 1-million-gallon capacity concrete water storage tank and associated facilities that would be located at the existing Live Oak Storage Reservoir site. The Live Oak Storage Reservoir site is located southeast of the intersection of Live Oak Spring Canyon and Canyon End Roads. Neither the tank nor the RMS building that would result in ground disturbance as the new features would be constructed atop the existing cement foundation at the Live Oak Storage Reservoir site. For this reason, these features would not cause significant environmental effects.

The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact USS-1
The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
Mitigation Measures
Mitigation is not necessary. Impact USS-1 would be less than significant.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The project would develop a gated senior community consisting of 341 age-restricted, detached single-family homes, a recreation center, and other recreational amenities. The project is projected to be fully constructed in 2032. The project would increase water demand and associated water use, which would be supplied by SCVWA. The project's estimated water demand on SCVWA supply was calculated using the City's water demand factors for single-family residential and commercial development, as well as estimates for dedicated irrigation, as shown in Table 4.19-5.

Table 4.19-5. Estimated Potable Water Demand

Project Component	Quantity	Water Demand Factor	Average Day Demand (gallons per day)	Average Demand (AFY)[1]
Single Family Residential	341	480 gallons per day/account	163,680	183.35
Commercial (Recreation Center)	1	2,125 gallons per day/account	2,125	2.38
Dedicated Irrigation	--	--	32,825	36.77
Total Average Daily Demand	**--**	**--**	**198,630**	**222.49**
Total Maximum Daily Demand	**--**	**--**	**413,150**	**462.79**
Total Peak Hourly Demand	**--**	**--**	**911,712**	**1,021.25**

Source: Dexter Wilson Engineering, Inc. (2026; see EIR Appendix O)

[1] Conversion factor: 1 acre-foot per year equals 892.742 gallons per day.

As shown in Table 4.19-5, the total projected average daily water demand is 198,630 gallons per day (gpd) (222.49 AFY), with a projected maximum daily demand of 413,150 gpd (462.79 AFY) and the projected peak hour demand of 911,712 gpd (1,021.25 AFY) (Dexter Wilson Engineering, Inc. 2026; see EIR Appendix O).

Based on the single dry year condition, which reflects the worst-case water supply scenario, at the time of full project construction in 2032, SCVWA would have a minimum of 105,486 to 116,178 AFY of water, as shown in Table 4.19-6.

Table 4.19-6. Projected Water Supply for the SCVWA Service Area (2025–2035)

	2025	2030	2035
Average/Normal Year (acre-feet)	108,399	106,406	110,248
Single-Dry Year (acre-feet)	86,109	105,486	116,178
Multiple-Dry Years (acre-feet)	101,303	114,033	125,559

Source: SCVWA (2021)

In addition to water supply projections shown in Table 4.19-6, SCVWA also provides water demand estimates for its entire service area based on projected growth scenarios, including a water demand of 77,830 AFY in 2025, 83,620 AFY in 2030, and 90,570 AFY in 2035 (SCVWA 2021).

The project's WSA (Dexter Wilson Engineering, Inc. 2026; see EIR Appendix O) evaluated the project's incremental water demand within the context of these adopted, service-area-wide demand projections. The WSA determined that the project would generate an estimated average daily water demand of approximately 0.20 mgd, equivalent to approximately 224 AFY. This demand represents a nominal increment relative to SCVWA's projected long-term service area demands and would not materially alter regional water supply planning assumptions.

The WSA further concluded that the project's water demand is consistent with growth forecasts and water demand assumptions incorporated into SCVWA's adopted Water Master Plan and related planning documents, and that no new water supply sources, imported water entitlements, or regional treatment or conveyance facilities would be required to serve the project (Dexter Wilson Engineering, Inc. 2026; see EIR Appendix O). Accordingly, the project would be accommodated within SCVWA's existing and planned water supply portfolio as contemplated under projected service-area growth conditions.

In order to conservatively estimate the project's demand on SCVWA, the analysis considers both the project's average water demand and higher short-term demand conditions that may occur during peak operational periods. As shown in Table 4.19-5, the project's estimated total average daily demand is 198,630 gpd, which corresponds to approximately 222.49 AFY when converted to annual water use. Table 4.19-5 also identifies a higher peak hourly demand rate of 911,712 gpd. For conservative comparison purposes, this peak hourly demand was converted to an annualized equivalent of approximately 1,021.25 AFY, although such peak demand levels would not occur continuously throughout the year. Accordingly, this annualized peak demand value was compared against the amount of available water projected under the single dry year condition at the time of full project construction, which is estimated to be 105,486 to 116,178 AFY. As a result, the project's new demand estimate would conservatively represent approximately 0.88% to 0.97% of SCVWA's projected water supply, and 1.13% to 1.22% of SCVWA's projected water demand at the time of full project construction. Comparing peak-hour demand to the annual AFY estimate provides a conservative check to ensure that the projected annual demand reasonably accounts for potential operational variability and peak-use conditions. Therefore, the project would be limited to an incremental increase in water supply and demand and would align with SCVWA's projected growth scenario.

In addition, the project would also require a total of 980,679 additional gallons of reservoir storage for equalization, emergency, and fire water supply, which would represent a nominal increase in water supply and demand. Based on the analysis provided above, SCVWA would have adequate water supplies to supply the project and reasonably foreseeable future development during normal, dry and multiple dry years. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact USS-2
The project and reasonably foreseeable future development would be served by adequate water supplies to meet demands during normal, dry, and multiple dry years.
Mitigation Measures
Mitigation is not necessary. Impact USS-2 would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

The City's Public Works Department oversees the sanitary sewer collection system, which conveys wastewater collected within the City's local sewer network to the LACSD system for further transport, treatment, and disposal. Within the City, wastewater and associated solids are conveyed to the Saugus and Valencia WRPs for treatment (LACSD 2025). These facilities are interconnected to form a regional treatment system called the SCVJSS, which has a capacity of 28.1 mgd and currently processes an average flow of 18.2 mgd. Based on the will-serve letter from the LACSD for the project, the project would generate approximately 105,540 gpd of wastewater, which equates to approximately 0.000105 mgd. This increase in wastewater generation would represent a minimal increase in wastewater sent for treatment at the SCVJSS; therefore, the LACSD would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (LACSD 2025). As a result, potential impacts would be *less than significant*, and mitigation is not necessary.

Impact USS-3
The project would be served with adequate capacity to meet its projected wastewater treatment demand in addition to the provider's existing commitments.
Mitigation Measures
Mitigation is not necessary. Impact USS-3 would be less than significant.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction of the project would result in a temporary increase in solid waste, which would be disposed of in accordance with applicable State and local laws and regulations, such as California Green Building Standards Code (CALGreen) §§ 4.408 and 5.408, which require diversion of at least 75% of construction waste. Based on required compliance with CALGreen regulations, construction of the project would not generate solid waste in excess of local infrastructure capacity.

According to the CalRecycle Estimated Solid Waste Generation Rates, operation of 341 single-family residences and the recreation center would generate approximately 8,383.55 pounds per day (lbs/day) of solid waste. Proposed solid waste calculations are shown in Table 4.19-7.

Table 4.19-7. Estimated Operational Solid Waste Generation Rates

Waste Generation Source	Generation Rate	Unit of Measure	Proposed Development	Total (lbs/day)
Residential	12.23	lbs/household/day	341	4,170.43
Other Services (Rec Center)	3.12	lbs/100 square feet/day	135,036 square feet	4,213.12
Total				**8,383.55**

Source: CalRecycle (2019)

As shown in Table 4.19-7, the project would result in an incremental increase in solid waste of approximately 8,383.55 lbs/day (4.2 tons per day). Solid waste would be disposed of at either Antelope Valley Landfill (Palmdale Landfill), which has a daily capacity of 3,600 tons of solid waste per day, or Sunshine Canyon Landfill, which has a daily capacity of 12,100 tons of solid waste per day. The landfills provide a total daily disposal capacity of approximately 15,700 tons per day. The increase of approximately 4.2 tons of solid waste per day associated with the project would represent less than a 1% increase in solid waste. The project would not result in an increase in solid waste that would be in excess of State or local standards or in excess of the capacity of local infrastructure. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact USS-4
The project would not result in an increase in solid waste in excess of State or local standards or the capacity of local infrastructure.
Mitigation Measures
Mitigation is not necessary. Impact USS-4 would be less than significant.

e) Would the project conflict with federal, state, and local management and reduction statutes and regulations related to solid waste?

The project would result in an increase in solid waste. However, the amounts of solid waste generated by the project would not interfere with State or local solid waste reduction statutes and regulations. The project would be required to comply with the provisions of CALGreen and SCMC Chapter 15.44 (Integrated Waste Management) to ensure proper diversion and disposal of short- and long-term solid waste. The project would not conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact USS-5
The project would not conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.
Mitigation Measures
Mitigation is not necessary. Impact USS-5 would be less than significant.

4.19.6 Cumulative Impacts

A cumulative development scenario for the project is provided in Chapter 3, *Environmental Setting*. The project would not result in project-specific impacts related to the construction of new or expanded utility infrastructure to serve the project; therefore, adverse cumulative impacts would be less than significant. As described in detail below, there would be sufficient water supply, wastewater treatment capacity, and solid waste infrastructure to serve the project and existing service commitments.

Development of the project, in combination with other past, present, and reasonably foreseeable future developments, could increase demand for utilities and service systems. However, utility service providers would expand facilities as necessary to accommodate growth. Therefore, cumulative impacts would be less than significant.

WATER SUPPLY

The project, in combination with reasonably foreseeable future projects, would increase water demand and associated water use within the SCVWA jurisdiction. As detailed, the single dry year condition, which reflects the worst-case water supply scenario, for the years between 2025 and 2035, is shown in Table 4.19-8.

Table 4.19-8. Projected Water Supply for the SCVWA Service Area (2025–2035)

	2025	2030	2035
Average/Normal Year (acre-feet)	108,399	106,406	110,248
Single-Dry Year (acre-feet)	86,109	105,486	116,178
Multiple-Dry Years (acre-feet)	101,303	114,033	125,559

Source: SCVWA (2021)

Water supply for the project and cumulative development within the region would be provided by the SCVWA. SCVWA plans for cumulative growth through adoption of long-range demand projections, water supply portfolios, and capital improvement programs that account for anticipated development within its service area. As documented in SCVWA planning data, projected service-area-wide water demands are estimated at approximately 77,830 AFY in 2025, 83,620 AFY in 2030, and 90,570 AFY in 2035 (SCVWA 2021). These projections incorporate cumulative growth assumptions and form the basis for SCVWA's water supply reliability and infrastructure planning.

The project-specific WSA evaluated the project's incremental water demand within this cumulative growth context (Dexter Wilson Engineering, Inc. 2026; see EIR Appendix O). The WSA determined that the project would generate an estimated average annual water demand of approximately 224 AFY, which represents a nominal increment relative to SCVWA's projected cumulative service-area demands.

The WSA concluded that SCVWA's diversified water supply portfolio—including imported water, local groundwater, recycled water, and banking and exchange programs—would provide sufficient supply to meet cumulative demands under normal, single-dry-year, and multiple-dry-year conditions, consistent with adopted planning criteria (Dexter Wilson Engineering, Inc. 2026; see EIR Appendix O). The project would not require the development of new water supply sources or expansion of regional supply entitlements beyond those already contemplated in SCVWA's long-range planning documents.

The project's new demand estimate would conservatively represent approximately 0.88% to 0.97% of SCVWA's projected water supply, and 1.13% to 1.22% of SCVWA's projected water demand at the time of full project construction. Therefore, the project would be limited to an incremental increase in water supply and demand and would align with SCVWA's projected growth scenario. As a result, SCVWA would have adequate water supplies to supply the project and reasonably foreseeable future development during normal, dry and multiple dry years, and project-specific impacts would be less than significant. Additionally, the project, combined with reasonably foreseeable future projects, would have a less than cumulatively considerable impact on SCVWA.

WASTEWATER

The project, in combination with reasonably foreseeable future projects, would increase demand on the City's Public Works Department's sanitary sewer collection system and the SCVJSS. The SCVJSS has a capacity of 28.1 mgd and currently processes an average flow of 18.2 mgd. The project would generate approximately 105,540 gpd of wastewater, which equates to approximately 0.000105 mgd. This increase in wastewater generation would represent a minimal increase in wastewater sent for treatment at the SCVJSS. As a result, project-specific impacts would be less than significant, and the project, combined with reasonably foreseeable future projects, would have a less than cumulatively considerable impact on the City's wastewater infrastructure.

SOLID WASTE

Solid waste would be disposed of at either Antelope Valley Landfill (Palmdale Landfill), which has a daily capacity of 3,600 tons of solid waste per day, or Sunshine Canyon Landfill, which has a daily capacity of 12,100 tons of solid waste per day. The landfills provide a total daily disposal capacity of approximately 15,700 tons per day. The project would result in an increase of approximately 4.2 tons of solid waste per day, which would represent less than a 1% increase in solid waste. As a result, project-specific impacts would be less than significant, and the project, combined with reasonably foreseeable future projects, would have a less than cumulatively considerable impact on the City's landfills.

CONCLUSION

The project's incremental contribution to cumulative water demand would be small relative to SCVWA's projected service-area-wide demands and would be accommodated within existing and planned water supplies and infrastructure. SCVWA's long-range planning framework accounts for cumulative development and includes sufficient capacity to serve projected growth under a range of hydrologic conditions. Further, other reasonably foreseeable future projects would be subject to separate environmental review to determine individual demands on existing utility infrastructure.

Accordingly, the project would not result in a cumulatively considerable impact related to water supply, water infrastructure, wastewater treatment capacity, and solid waste infrastructure. Therefore, impacts related to the project would not be cumulatively considerable.

Impact USS-6 (Cumulative Impacts)
The project would not result in a cumulatively considerable impact associated with the provision of new or expanded utilities.
Mitigation Measures
Mitigation is not necessary. Impact USS-6 would be less than significant.

4.20 WILDFIRE

This section of the EIR describes the existing conditions and regulatory setting for wildfire as it pertains to the project and evaluates potential environmental impacts relating to wildfire that would result from implementation of the project. Unless otherwise indicated, the information in this section is taken from *Fire Protection Plan: Belcaro at Sand Canyon* (FPP) (Dudek 2026; EIR Appendix P) and the Evacuation Analysis included as Appendix C of the *Transportation Assessment for Belcaro at Sand Canyon* (Transportation Assessment) (Gibson Transportation Consulting Inc. [Gibson] 2026; EIR Appendix I).

4.20.1 Existing Conditions

4.20.1.1 Wildfire Fundamentals

For purposes of CEQA analysis, "wildfire" can be described as an unplanned, uncontrolled fire burning in vegetated (wildland) areas that can spread to developed areas and threaten people, structures, and natural resources. Southern California is particularly vulnerable to the threat of wildfire due to its unique topography, climate, and vegetative fuel load that becomes highly flammable in the autumn and the occurrence of strong winds following prolonged periods of drought. The primary components influencing fire behavior are topography, vegetation (fuels), and climate; the condition and interaction of these elements at any given time determine the potential characteristics and behavior of a wildfire. The region's fire history and ongoing development into wildland–urban interface (WUI) zones, where structures are built amongst wildland vegetation, underscore the substantial and recurring risk of periodic wildfires. Wildfires have the potential to transition into urban fires if structures are susceptible to ignition. The likelihood of structure ignition is influenced by multiple factors and can be reduced through a multi-layered approach, including the use of ignition-resistant materials and construction techniques, implementation of fire-resistant landscaping adjacent to buildings, and provision of adequate firefighting infrastructure. According to the Santa Clarita Interactive Geographic Information System (GIS), the entire project area is within an area mapped as Very High Fire Hazard Severity Zone (FHSZ), as identified on the Fire Zone Local Responsibility Area 2025 layer (City of Santa Clarita 2025).

4.20.1.2 Topography

Topography, the natural and artificial physical features of an area, can be classified into two main categories: topographic features, such as canyons, chutes or saddles, rivers, and valleys, and topographic characteristics, including slope (steepness of land), aspect (the cardinal direction of a slope), and elevation. As one of the major components affecting fire behavior, topography can have a significant influence on fire, including the way in which fuels ignite, how flames develop, and how a fire spreads (National Park Service [NPS] 2025). Generally, steep terrain facilitates the rapid spread of fire upslope because the heat generated from a fire rises and preheats fuel sources uphill. Terrain with steep slopes or topographic features, such as canyons, chutes, or saddles, is known to facilitate air currents that create a chimney effect, which increases the overall temperature and burn rate of a fire. In contrast, flat terrain has a limited influence on fire spread, where fire behavior is primarily driven by other factors, including vegetation and wind. Topographic features, such as ridges, rivers, meadows, or rock outcrops, can act as effective barriers for limiting or slowing surface fire spread in all terrain.

The project site is northwest of the San Gabriel Mountains and Angeles National Forest alongside the Santa Clara River. The project site is separated into two developmental areas by the Los Angeles County Metropolitan Transit Authority (Metro) railroad, which runs east–west. The existing topography of the project site and adjacent areas is generally flat with undulating slopes scattered along the Santa Clara River to the north and hills rising to a significant ridgeline along the eastern boundary and in the southwestern corner of the project site.

4.20.1.3 Climate

Southern California's Mediterranean climate creates ideal conditions for wildfire through its distinct pattern of mild, wet winters followed by hot, dry summers. Winter precipitation promotes vegetation growth, which subsequently serves as a source of fuel once seasonal drying occurs. Santa Ana wind events, which occur when high pressure over the Great Basin drives hot, dry air to locations lower in elevation towards a low-pressure system off the California coast, also contribute to fire risk and severity in Southern California by intensifying the combustion process and creating spot fires by transport of embers.

Similar to much of the Southern California region, the project site is influenced by the Pacific Ocean and a seasonal, migratory subtropical high-pressure cell, the Pacific High. The pattern of wet winters and dry summers with mild seasonal changes is intermittently disrupted by extreme periods of hot weather, winter storms, and dry, easterly Santa Ana winds. Regionally, the month of August is the warmest with an average high temperature of 92 degrees Fahrenheit and the month of December is the coolest with an average low temperature of 42 degrees Fahrenheit. Most rainfall occurs between October and April, with the maximum average occurring in January. Fire risk in southern California is generally segmented into three distinct "seasons"—the first and most active season occurs during the summer months, from late May to late September, and is followed by an intense fall season characterized by fewer but larger fires, which begins in late September and extends to early November. The remaining months, from November to late May, comprise the predominantly dormant winter season. Large fires in the region have historically occurred at the end of wet periods and the beginning of droughts (Dudek 2026).

The highest fire danger in Southern California typically coincides with Santa Ana winds, occurring from September to March. Localized wind patterns occurring within the project site are strongly influenced by regional and local topography. The primary wind direction originates from the west (onshore); however, proximity to the Pacific Ocean results in a diurnal wind pattern known as the land/sea breeze system in which winds during the day originate from the southwest (sea) and night winds originate from the land northeast (offshore). Mean annual wind speeds are approximately 10 miles per hour (mph) throughout the year. Hourly gust speeds average approximately 20 mph year-round, with monthly average maximum gusts ranging from approximately 40 to 45 mph between October and April and from 25 to 35 mph between May and September. Typically, the maximum wind velocities are associated with downslope, canyon, and Santa Ana winds. The mountainous areas to the east of the project site consist of topography that has the potential to create unusual weather conditions, as seen throughout the foothill portions of Los Angeles County.

The project site is in the Santa Clarita Valley California Fire Zone 288 of the National Weather Service and National Oceanic and Atmospheric Association zoning system (Dudek 2026). Over the past 20 years, beginning in 2006, 122 red flag warnings (RFWs) were issued within California Fire Zone 288. The National Weather Service defines RFWs as environmental conditions where warm temperatures, very low humidities, and stronger winds are anticipated to synergistically produce an increased fire risk. Historically, the majority of RFWs occurred between October and January.

4.20.1.4 Vegetation

Vegetation plays a significant role in fire behavior. Naturally vegetated open spaces often provide extensive vegetative fuels and ideal conditions for wildfire spread. Vegetative fuels are comprised of all living and decomposing plant material with the potential to be ignited by a fire. The composition of the plant material, including moisture retention, chemical composition, and density, determines the combustion potential. High concentrations of resins, oils, and other volatile compounds increase combustion, while fine leaves and dense branching can facilitate rapid fire spread. Fuel load, including live biomass and accumulated dead material, further determines the energy available for combustion.

Vegetation with low moisture content increases flammability, and the retention of dead flowers, leaves, or branches provides readily available, ignitable fuels. Seasonal phenological changes, including the drying of grasses during seasonal summer drought, further determine fuel availability and fire susceptibility.

Vegetation distribution within the project site differs by location and topography but is primarily comprised of Southern California coastal sage scrub, chaparral, nonnative grasses, and dispersed oak trees (Dudek 2026). Coastal scrub, also referred to as a soft chaparral, is strongly influenced by daily changes in humidity, resulting in a lighter, flashier source of vegetative fuel compared to its hard chaparral species counterparts. Coastal scrub is considered a moderately fine, loosely compacted fuel with a moderate fuel load. Because of its high surface-area-to-volume ratio, less heat is required to remove fuel moisture and raise it to ignition temperature. Coastal scrub vegetation is tolerant of very steep terrain and is susceptible to early seasonal drying in the late spring and early summer. However, coastal scrub does not fully cure as observed in grasses and, compared to chaparral, it tends to have a lower content of volatile organic compounds. Coastal scrub has potential for a high rate of spread, rapid ignition, and extreme fire behavior with live fuel moisture content reaching its low point in the summer and early fall months. Grasses are fine fuels characterized by loose compaction and low fuel load. Similar to coastal scrub, grasses also have a high surface-area-to-volume ratio and are susceptible to early seasonal drying in late spring and early summer. After live fuel moisture content reaches a low point in early summer, grasses begin to cure. Overall, fuel loads from grasses typically result in faster-moving fires with lower heat output and flame lengths. Due to these characteristics, grasses have the highest risk for wildfire ignition for vegetation types within the project site.

4.20.1.5 Fire History

The FPP prepared for the project analyzed the fire history of the project area by using the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) database, which provides a summary of recorded fires greater than 10 acres in size. According to the FRAP database, 172 fires have burned within five miles of the project site since the beginning of the historical fire data record (1878).[1] Six fires have been located directly adjacent to or burned portions of the project site in the past, with the most recent being the 2019 Tick Fire, which was mostly north of State Route (SR-) 14 but burned some limited areas of the project site to the south of the highway; the 2016 Sand Fire, which burned western portions of the project site; and the 1984 Live Oak Fire, which burned central areas of the project site. The most recent fires that have occurred within five miles of the project site are the 2023 Agua Fire (approximately 426 acres), the 2021 Golden Fire (approximately 20 acres), and the 2020 Soledad Fire (approximately 1,525 acres). It is expected that there will be wildland fires within five miles of the project site, at a minimum, on average every year and at a maximum every seven years as observed in the fire history record (Dudek 2026).

While a fire approaching from the south or west is possible during more typical onshore weather patterns, based on fire history, wildfire risk for the project site is associated primarily with a Santa Ana wind-driven wildfire, burning or spotting onto the project site from the north or east. The proximity of the project site to large expanses of open space to the north, east, and northeast, and the terrain within the Angeles National Forest to the east (including multiple subdrainages and canyons), has the potential to funnel Santa Ana winds, thereby increasing local wind speeds and increasing wildfire hazard in the vicinity of the project site.

[1] The data set is a comprehensive fire perimeter geographic information systems (GIS) layer for public and private lands throughout the State and covers fires 10 acres and greater between 1878–2023.

4.20.1.6 Emergency Response Fire Facilities

According to the Consolidated Fire Protection District of Los Angeles County's (LACoFD) Station Locator Map, the nearest fire station to the project site is Fire Station 132, located at 29310 Sand Canyon Road in Canyon Country, across SR-14 from the project site (LACoFD 2026). Fire Station 132 would provide an initial response to the project site; however, Stations 123, 107, 150, and 128 are available to provide a secondary response to the project site, if needed. An emergency response analysis to estimate the travel-time response from the nearest fire station to the project site found that the total response time from Station 132 to the project site, including call and turnout time, was calculated at roughly seven minutes 19 seconds to seven minutes 55 seconds to the farthest proposed lot within the project site (Dudek 2026). This response time conforms to the response time specified in the *City of Santa Clarita General Plan Safety Element* of eight minutes for suburban areas (City of Santa Clarita 2022). Additionally, Station 123 is available to provide a secondary response to the project site, if needed. The response time from Station 123 to the project site is calculated at approximately eight minutes 41 seconds. LACoFD Fire Camp 9 (Los Pinetos Camp 9) provides nearby wildland firefighting resources, including hand crews for fire suppression and vegetation management. The facility may also support helicopter operations during wildfire incidents through the use of helispots or staging areas.

Additionally, fire agencies cooperate under existing regional and Statewide master mutual aid agreements. These include the Los Angeles County Operational Area Mutual Aid Plan, California Fire Master Mutual Aid Agreement, California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement, California Fire Assistance Agreement, and PRC § 4129 (Dudek 2026). The nearest, non-LACoFD stations include the U.S. Forest Service Bear Divide Fire Station, approximately seven miles south of the project site; Los Angeles Fire Department Station 91, south of Newhall Pass, approximately 15 miles south of the project site; and Ventura County Fire Station 28 in Piru, approximately 26 miles west of the project site.

The existing water supply associated with emergency response in the project area includes fire hydrants supplied by the Santa Clarita Valley Water Agency (SCVWA). Fire flow and hydrant spacing requirements are established by the California Fire Code (CFC) as adopted by the City and enforced by LACoFD. Large regional reservoirs provide accessible water sources for aerial firefighting in the Santa Clarita Valley, including Castaic Lake, Pyramid Lake, Quail Lake, and Lake Piru, which may be used by LACoFD helicopters for water-dropping operations during wildfire incidents. The SCVWA also supplies interconnected water mains, pump stations, and numerous storage tanks that maintain system pressure and provide sufficient fire-flow capacity for emergency response per the CFC.

4.20.1.7 Emergency Evacuation

The City's *Local Hazard Mitigation Plan* (2021 LHMP) incorporates and references the City's Emergency Operations Plan (EOP) to address the City's hazard threats and to identify the City's existing hazard mitigation efforts to organize response efforts in the event of an emergency situation (City of Santa Clarita 2021). The EOP was developed in accordance with the Federal-mandated National Incident Management System (NIMS) and State-mandated Standardized Emergency Management System (SEMS). There are three freeway access points in the Santa Clarita Valley that can be utilized in the event of an emergency—I-5, SR-14, and SR-126. Additionally, local surface streets provide alternate evacuation routes. The LASD as well as City and County Departments of Public Works provide traffic controls, temporary signage, and detour routes during active evacuations. The project site is located 0.2 mile south of SR-14.

As discussed further in Section 4.20.5, *Project-Specific Impacts and Mitigation Measures*, an evacuation analysis was conducted in 2026 to determine the existing evacuation times of the study area, which included the project site and the surrounding area (Gibson 2026; see EIR Appendix I). The existing conditions analysis in the evacuation study assumed the use of intersections along the following evacuation routes: Sand Canyon Road, the SR-14 ramps, and the Santa Clara River Bridge north of Lost Canyon Road, as well as a total of 1,080 existing residential dwelling units. As shown in Figure 4.20-1, three evacuation routes were evaluated: the western route along Lost Canyon Road to SR-14 or Via Princessa; the northern evacuation route along Lost Canyon Road to Sand Canyon Road to SR-14, Soledad Canyon Road, or continuation on Sand Canyon Road; and the southern evacuation route using Oak Springs Canyon Road to Robinson Ranch Road, Sand Canyon Road, and Placerita Canyon Road.

The evacuation analysis included two methodologies: a "best-case" scenario, in which an organized, phased evacuation with traffic control occurs ("Travel Time" analysis), and a "worst-case" scenario, in which traffic control is not implemented during evacuation ("Total Evacuation Time" analysis), further described below.

TRAVEL TIME ANALYSIS

The Travel Time analysis represents the best-case evacuation scenario, in which emergency responders may receive advance warning from fire-weather forecasts, fire modeling, and real-time observations, allowing them to implement a phased, zone-based evacuation before major roadways become congested or threatened by the fire. This approach would involve issuing early evacuation warnings followed by mandatory evacuation orders by neighborhood or zone, helping distribute traffic over time and maintain roadway access for both evacuees and emergency responders. The Travel Time analysis is calculated by the amount of time it would take for an individual vehicle from each of a series of Traffic Analysis Zones (TAZs) to reach a safe area (i.e., out of the evacuation zones), considering an organized evacuation, as shown in Figure 4.20-2. It assumed an areawide evacuation order with sufficient notice for residents to gather their essential belongings and evacuate over the course of a few hours rather than an immediate evacuation order requiring everyone to leave as soon as possible. Out of the 10 TAZs, the shortest travel time occurred by evacuating northbound along Sand Canyon Road from TAZ 258 and 259, which both resulted in a four-minute, 17-second evacuation. The longest travel time occurred by evacuating south along Placerita Canyon Road from TAZ 439, which resulted in a 19-minute, 55-second evacuation.

TOTAL EVACUATION TIME ANALYSIS

The Total Evacuation Time analysis represents a conservative, worst-case scenario, in which all residents within the evacuation study area begin evacuating simultaneously following an immediate, areawide evacuation order. Under this approach, evacuation time is estimated based on the rate at which vehicles can pass through key roadway bottlenecks (e.g., major intersections, constrained roadway segments) along the evacuation routes, rather than the travel time for any individual resident to reach a safe location. The location with the slowest vehicle-processing rate controls the overall evacuation time because all evacuating traffic must ultimately pass through that constraint.

Under existing conditions, the fastest-clearing location along the evacuation routes is the intersection of Sand Canyon and Placerita Canyon Roads, where the total evacuation demand could be processed in approximately 33 minutes. However, the controlling bottleneck occurs at the intersection of Sand Canyon and Lost Canyon Roads, where the total evacuation demand would require approximately two hours five minutes to pass through the intersection. An additional three minutes is assumed to account for the final vehicles clearing the intersection, resulting in a total evacuation clearance time of approximately two hours eight minutes for the study area.

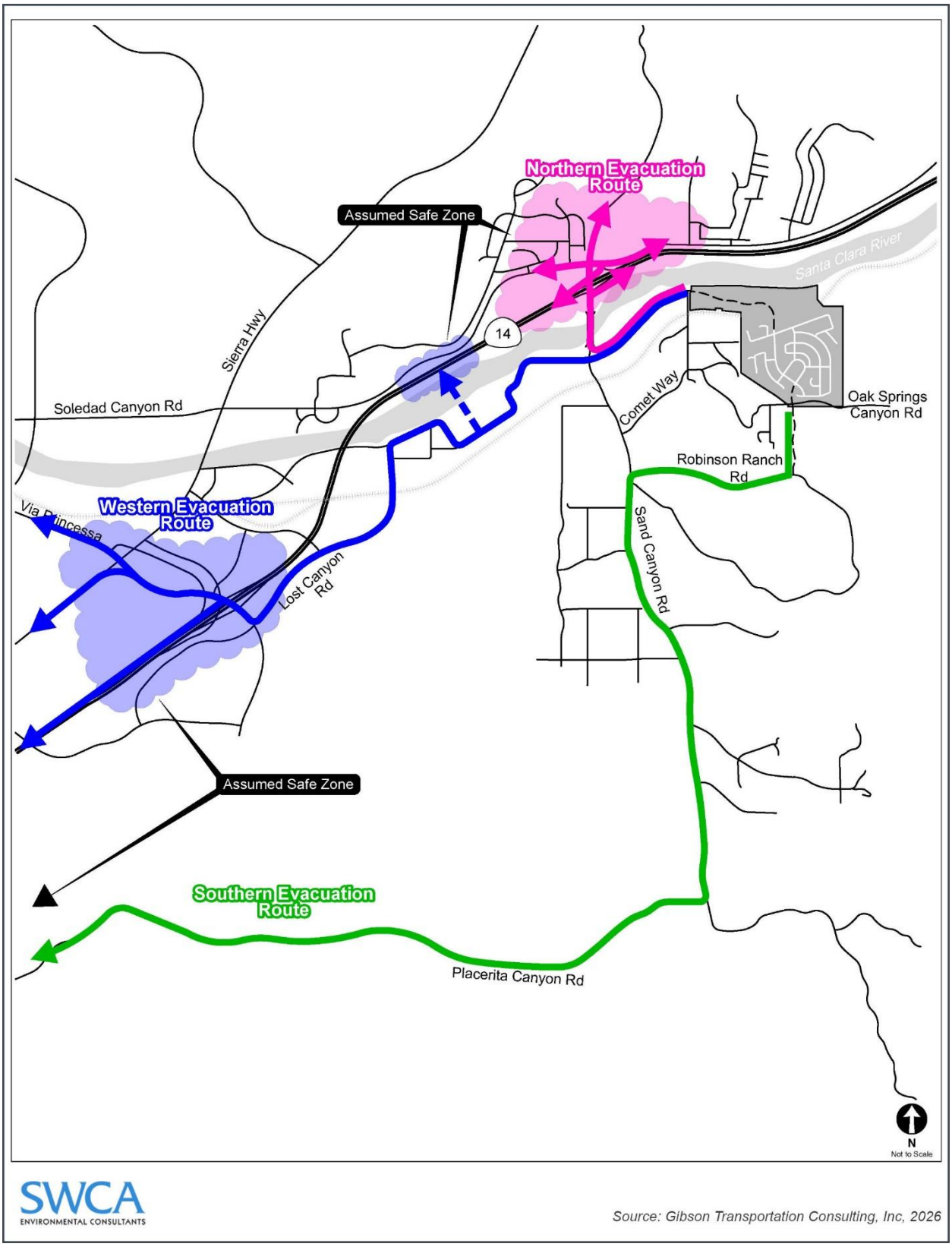


Figure 4.20-1. Evacuation Routes.

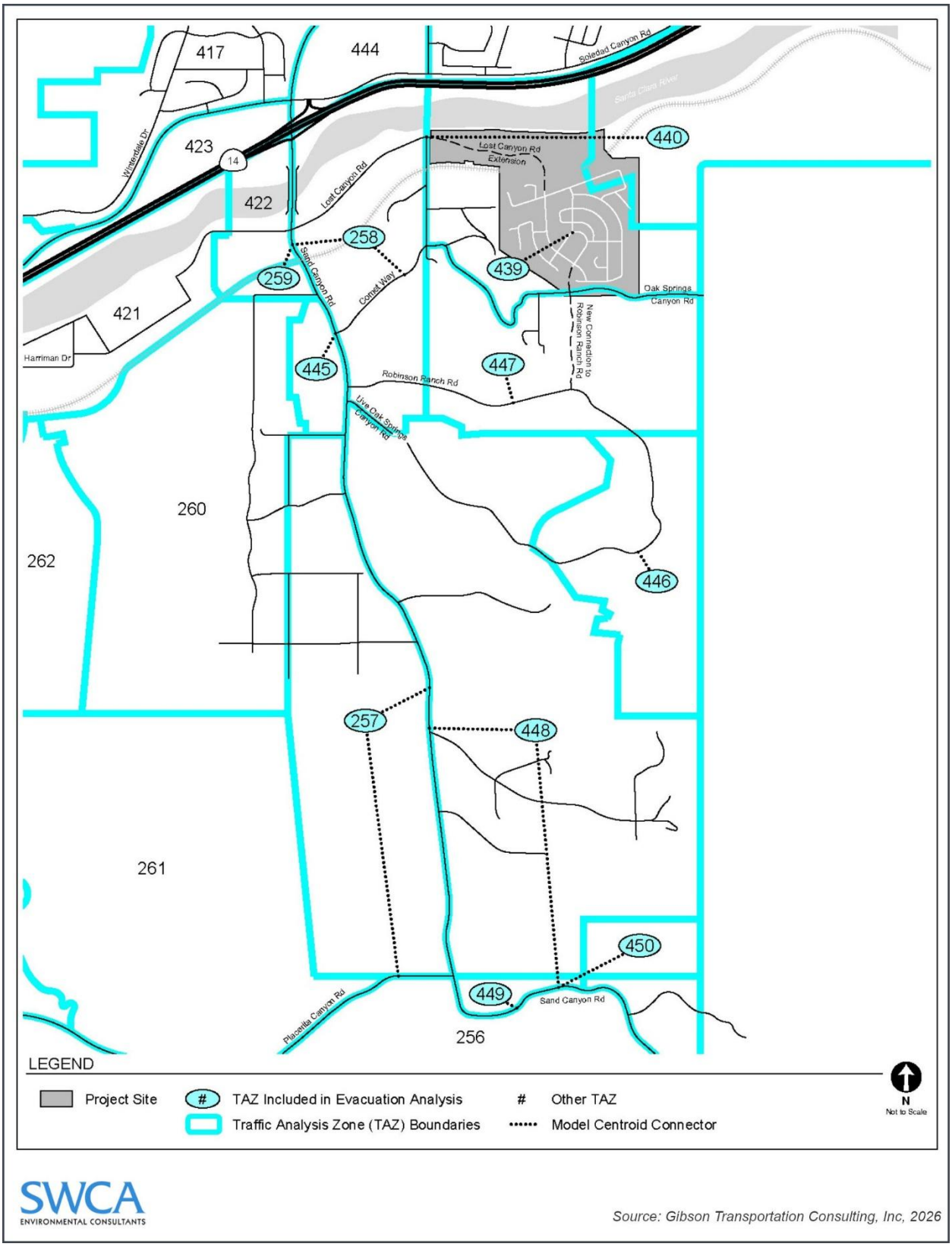


Figure 4.20-2. Traffic Analysis Zone Boundaries.

This Total Evacuation Time represents a conservative planning metric rather than the time it would take an individual resident to leave the area. The analysis assumes worst-case conditions for roadway capacity, population, and vehicle demand and does not reflect the phased, zone-based evacuation procedures typically implemented by emergency officials during wildfire incidents. Therefore, the results are intended to provide a conservative estimate for comparing project conditions rather than predicting how an actual evacuation would occur.

4.20.1.8 Wildfire Behavior

Understanding the expected fire behavior of existing conditions is the first step in considering what effects a contemplated project may have. Fire behavior was modeled using the BehavePlus software package, for which three wildfire scenarios were developed to represent worst-case wildfire conditions (Scenarios 1 and 2) and average wildfire conditions (Scenario 3) for the project area vicinity under existing conditions (Dudek 2026).

Fire behavior modeling was based on observed fuel types that reflect the predominant vegetation on the existing project site and surrounding areas, as well as factors such as slope gradients, wind conditions, and fuel moisture levels. Weather and wind model input variables were determined using local Remote Automated Weather Station data, generated through data weighted average from four Remote Automated Weather Stations using the FireFamilyPlus software package. The BehavePlus fire behavior modeling software package was used to assess fire behavior variables and provide predictions of flame lengths, fire intensities, rates of spread, and spotting distance under three different fire weather and origin scenarios for the existing conditions:

- Scenario 1 is based on 97th percentile extreme weather conditions. This scenario assumes an offshore (wind from the east) fire burning through the Santa Clara Riverbed toward the project site during the fall. However, the likelihood of a fire starting and spreading in this area is low due to the horizontal gaps between fuel sources. If a fire were to occur, it would most likely spread under windy conditions that allow flames to move from one plant to another. The riverbed itself is relatively flat and primarily supports low-density grass and shrub vegetation.
- Scenario 2 is based on 97th percentile extreme weather conditions. This scenario assumes an offshore (wind from the east) fire involving a wildfire originating elsewhere and moving down the eastern mountainsides toward the project site during the fall. In this case, the fire would travel down moderately steep slopes, burning through areas of moderate-load grasses and dense, high-load shrubs as it approaches the project site. The diverse topography in this region may also create localized changes in wind speed, resulting in micro-variations that could intensify fire behavior.
- Scenario 3 is based on 50th percentile average weather conditions. This scenario assumes an onshore (wind from the west) fire burning towards the project site from the southwest during the summer. The vegetation in this area consists of moderate-load grass-shrub vegetation, moderately sloped downhill towards the project site. It is anticipated that the fire would likely originate from the low-density residential development in this area.

Flame length is measured in feet and indicates the ability of emergency response personnel to safely and effectively engage in ground-based fire management tactics, such as handline construction. Flame length increases with wind speed. Fire spread rate represents the speed of fire progress through surface fuels and is measured in miles per hour. Fireline intensity is a measure of heat output from the flaming front, as is measured by heat released per foot per second (British thermal units [Btu]/ft/s). Lastly, fire spotting distance is the distance a firebrand or ember can travel downwind and ignite receptive fuelbeds (Dudek 2026). For a more detailed description of methods and data inputs used to model existing and future fire behavior for the project site, please see the FPP (Dudek 2026; see EIR Appendix P).

The greatest fire threat is from the east, where a sizable expanse of undeveloped, naturally vegetated lands exists and extends to the San Gabriel Mountains (Scenario 2). Though a fire could possibly approach from the Santa Clara Riverbed to the north or the lower-density residential development to the southwest, the area to the east would be the greatest fire hazard.

Scenario fire behavior modeling results are shown in Table 4-20.1. Given the high fuel loads, lack of development, steep slopes, and alignment with strong Santa Ana winds, a fire moving from the San Gabriel Mountain Range to the east as modeled in Scenario 2, would be the greatest fire threat. The wind-driven fire would burn downhill through the moderate-load grass and high-load shrub fuelbeds dominated by chaparral. Within the modeled study area, the fire would exhibit extreme behavior with up to 26.2-foot flame lengths during sustained winds and 44.5-foot flame lengths during gusts in the highest fuel loading. An extreme rate of spread of 2.2 mph during sustained winds is possible as it burns through the high-load chaparral fuels and radiant heat from the flaming front pre-heats the fuelbed. Within the moderate-load grass fuelbeds, the fire would also exhibit extreme fire behavior up to 20.0-foot flame lengths during sustained winds and 38.5-foot flame lengths during gusts, and an extreme rate of spread 4.0 mph during sustained winds. Upon nearing the bottom of the slope, the fire would reach the project site, where the fire behavior would be reduced to 10.7-foot flame lengths during sustained winds and reach 18.0- to 20.4-foot flame lengths during gusts, along with the rate of spread 1.0 to 2.0 mph during sustained winds and 4.2 to 6.2 mph during gusts (Dudek 2026).

Table 4.20-1. Fire Behavior Modeling Results – Existing Conditions

Fuel Model[1]	Flame Length (feet)[2]	Spread Rate (miles per hour)[2]	Fireline Intensity (Btu/ft/s)	Spot Fire (miles)[2]
Scenario 1: 1% Slope, 97th Percentile Fall Offshore Extreme Weather, 19-mph Winds (50-mph Gusts) from the North				
Low-load grasses	10.9 (18.0)	2.1 (6.2)	1,591	0.5 (1.3)
Low-load grass-shrub	7.5 (14.0)	0.8 (3.0)	1,919	0.4 (1.1)
Moderate-load grass-shrub	10.8 (20.5)	1.0 (4.2)	3,113	0.5 (1.4)
Scenario 2: 20% Slope, 97th Percentile Fall Offshore Extreme Weather, 19-mph Winds (50-mph Gusts) from the East				
Low-load grasses	10.7 (18.0)	2.0 (6.2)	1,591	0.5 (1.3)
Moderate-load grasses	20.0 (38.5)	4.0 (16.6)	3,095	0.7 (2.2)
Moderate-load grass-shrub	10.7 (20.4)	1.0 (4.2)	3,113	0.5 (1.4)
High-load shrubs	26.2 (44.5)	2.2 (6.7)	7,202	0.9 (2.4)
Scenario 3: 10% Slope, 50th Percentile Summer Offshore Average Weather, 11-mph Winds from the Southwest				
Low-load grasses	5.0	0.5	1,135	0.2
Moderate-load grass-shrub	5.3	0.3	2,314	0.2

Source: Dudek (2026).

[1] Fuel models used in the analysis: GS2 for low-load grasses, GR1 for low-load gras-shrub, GS2 for moderate-load grass-shrub, and SH 5 for high-load shrubs.

[2] Outputs in parenthesis represent peak 50-mph wind gusts. Fireline intensity is driven by fuel characteristics and not influenced by wind speed.

While Scenario 1 was modeled under extreme weather conditions exactly like Scenario 2, fuel loading in the Santa Clarita Riverbed is lower and on-site relative to the mountains east of the project site. Within the riverbed, fire could likely only spread under windy conditions, such as those modeled to enable spread between plants. Vegetation within the riverbed would produce moderate flame lengths up to 7.5 feet during sustained winds and up to 14.0 feet during 50-mph gusts and move at a very high rate of spread up to 0.8 mph during sustained winds and up to 3.0 mph during 50-mph gusts. Upon exiting the riverbed and entering the project site, fire behavior would slightly increase, with flame lengths of 10.9 feet during sustained winds and up to 20.5 feet during 50-mph gusts, and with very high to extreme rates of spread ranging from 1.0 to 2.1 mph during sustained winds and 4.2 to 6.2 mph during 50 mph-gusts (Dudek 2026).

Results for Scenarios 1 and 2 indicate existing on-site conditions are conducive to extreme fire behavior during 97th percentile weather in fall months during a Santa Ana wind event. When flame lengths exceed 8 feet, high heat intensity and rate of spread make direct fire attack generally impossible. Long-distance spotting is anticipated for Scenarios 1 and 2. These conditions pose serious challenges to wildfire containment and control because direct attack is quickly ineffective, making it necessary to use heavy equipment, aerial tactics such as retardant drops, and indirect methods for wildfire containment and control.

Unlike Scenarios 1 and 2, Scenario 3 was modeled under average, onshore conditions. Such a fire would be expected to approach the project site from the southwest and would likely originate from the surrounding low-density residential area. The fuels in this area resemble those on-site, and thus the resulting fire behavior would be similar between the two areas. The nonnative grasslands and sage scrub vegetation would produce moderate flame lengths of 5.0 to 5.4 feet with high rates of spread between 0.3 and 0.5 mph (Dudek 2026). These conditions are conducive to direct attack wildfire management response using hand tools directly at the edge of the fire because heat intensity, rate of spread, and spotting distance are low to moderate for Scenario 3, average fire weather.

4.20.2 Regulatory Setting

4.20.2.1 Federal

NATIONAL FIRE PROTECTION ASSOCIATION CODES, STANDARDS, PRACTICES, AND GUIDES

The National Fire Protection Association (NFPA) develops codes, standards, recommended practices, and guides through a consensus standards development process approved by the American National Standards Institute (ANSI). The consensus standards development process brings together various professionals to achieve consensus on fire and other safety issues. NFPA standards are recommended guidelines and nationally accepted good practices in fire protection, but are not law or codes, unless adopted or referenced as such by the CFC or local fire agency. Typical standards would include Standard for Portable Fire Extinguishers (NFPA 10), Standard for the Installation of Sprinkler Systems (NFPA 13), National Electrical Code (NFPA 70), National Fire Alarm and Signaling Code (NFPA 72), Standard for Fire Doors and Other Opening Protectives (NFPA 80), and Life Safety Code (NFPA 101), as well as a number of other standards and codes specific to a building's use and/or occupancy.

4.20.2.2 State

CAL FIRE STRATEGIC FIRE PLAN 2024

The *CAL FIRE Strategic Fire Plan 2024* (2024 Fire Plan) is a collaborative effort between the California Board of Forestry and Fire Protection and CAL FIRE and is the current iteration of the Statewide fire plan that has been periodically adopted since the 1930s. The 2024 Fire Plan reflects CAL FIRE's focus on (1) fire prevention and suppression activities to protect lives, property, and ecosystem services; and (2) natural resource management to maintain the State's forests as a resilient carbon sink to meet California's climate change goals and to serve as important habitat for adaptation and mitigation. CAL FIRE provides annual updates to the California Board of Forestry and Fire Protection on the progress of achieving the goals and objectives in the 2024 Fire Plan through the implementation of Unit Fire Plans for its field units and contract counties.

CALIFORNIA GOVERNMENT CODE §§ 51175–51189

Government Code §§ 51175 through 51189 establish the statutory framework for identifying, designating, and regulating "very high fire hazard severity zones" in local responsibility areas (LRAs) and imposing related defensible space and building standard requirements on development within those zones. CAL FIRE is directed to map areas in the State as Moderate FHSZs, High FHSZs, and Very High FHSZs based on fuels, terrain, weather, and other relevant factors. The identified zones are transmitted to local agencies, who are then required to designate the zones in an LRA by ordinance within 120 days of receiving the information. LRAs are areas designated by local agencies upon the recommendation of CAL FIRE where a local agency is responsible for fire protection. Properties designated within a Very High FHSZ are required to maintain a defensible space of 100 feet from each side of a structure.

CALIFORNIA PUBLIC RESOURCES CODE

The project would be subject to the following applicable sections of the PRC:

- **PRC § 51182** outlines property maintenance standards in Very High FHSZs, including 100 feet of defensible space, vegetation management, and specific building material requirements, with some exemptions for nonflammable construction.
- **PRC § 4290** sets minimum fire safety standards for building construction in State Responsibility Areas (SRAs) and Very High FHSZs, covering areas such as road access, signage, fuel breaks, and water supply. These regulations aim to support defensible space and ignition-resistant development but do not override stricter local standards.
- **PRC § 4291** mandates at least 100 feet of vegetation management around buildings near flammable landscapes to reduce fire hazards, serving as a key fire prevention tool on private property within CAL FIRE's jurisdiction. It also requires clearing dead vegetation from roofs and trimming trees and shrubs within 10 feet of chimneys or stovepipes. Exemptions may apply to buildings made entirely of nonflammable materials.
- **PRC §§ 4292 through 4296** establish vegetation clearance requirements for electrical utilities, including guidelines for maintaining clearances around power lines and conductors.
- **PRC § 4741** authorizes CAL FIRE to support local governments with wildland fire prevention and vegetation management by providing its expertise.

CALIFORNIA CODE OF REGULATIONS

The project would be subject to the following applicable sections of the CCR, particularly in relation to fire safety, accessibility, water supply, and development in fire-prone areas:

- **14 CCR (Natural Resources)** regulates defensible space standards and provides alternatives when standard clearance distances cannot be met, such as using noncombustible materials, hardscape, or modifying structure design.
- **19 CCR (Public Safety)** includes public safety regulations from the State Fire Marshal, covering fire department access, alarms, emergency planning, and evacuation procedures. It also outlines the SEMS, which ensures coordinated emergency responses across agencies and government levels.
- **24 CCR (California Building Standards Code)** sets construction and fire safety standards for all building types, with relevant parts including the California Building Code (CBSC) (Part 2) and the CFC (Part 9) addressing materials, fire protection features, and emergency access requirements.
- **24 CCR Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)** specifically sets ignition-resistant construction requirements for new buildings in fire hazard areas, aiming to improve structural resistance to wildfires and reduce property loss.

CALIFORNIA BUILDING STANDARDS CODE

For projects within Santa Clarita, fire and life safety requirements are primarily governed by the California Building Standards Code (CBSC), as adopted and amended by the Santa Clarita Municipal Code (SCMC). The City also incorporates portions of Title 32 of the Los Angeles County Code. Together, these regulations establish requirements related to fire-resistive construction, fuel modification, emergency access, fire flow, fire suppression systems, and other measures intended to reduce fire risk and protect life and property.

The 2025 CBSC update includes the California Wildland-Urban Interface Code (CWUIC), which is codified as 24 CCR Part 7. The purpose of the CWUIC is to establish minimum requirements to reduce the likelihood of life and property loss due to wildfire through the use of performance and prescriptive requirements for construction and development in all FHSZs in SRAs and in LRAs designated as High FHSZ and Very High FHSZs.

The CRC governs the construction of single and multi-family homes and townhouses up to three stories, with adaptations for California's unique environmental conditions. It covers structural design, fire-resistant construction, energy efficiency, seismic safety, and emergency systems like smoke alarms and sprinklers. The CRC also includes specific requirements for wildfire risk, flood zones, and coastal areas, ensuring safe and resilient residential construction.

CALIFORNIA ENVIRONMENTAL QUALITY ACT, ATTORNEY GENERAL WILDFIRE ASSESSMENT GUIDANCE

In October 2022, the California Office of the Attorney General released *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act* (Attorney General's Best Practices for Wildfire Impacts), which provides guidance on best practices for assessing and mitigating wildfire impacts of development projects under CEQA (State of California Office of the Attorney General 2022). This guidance aims to assist local governments in evaluating and approving projects in fire-prone areas and encourage project designs that reduce wildfire risk while

ensuring emergency access and evacuation. Notably, the guidance does not create new legal obligations for local governments nor change existing laws or regulations.

The Attorney General's Best Practices for Wildfire Impacts include the following:

- **Baseline Conditions:** The guidance recommends that an FPP and EIR include information on fire-prone open spaces, fire history, fuels, and available firefighting water supplies within the project area.
- **Thresholds of Significance:** The guidance suggests that local governments establish thresholds to determine when wildfire risk increases pose a significant CEQA impact, considering factors like ignition risk, fire spread potential, and resident exposure.
- **Modeling:** The guidance encourages using fire behavior modeling to assess wildfire risks from new developments in fire-prone areas.
- **Qualitative Assessment:** The guidance recommends that an FPP and EIR qualitatively evaluate factors influencing wildfire risk, such as project density, location, water supply, and infrastructure.

The guidance states that mitigation measures should be customized to the project, its surrounding landscape, and nearby uses to effectively reduce wildfire risk. It emphasizes that CEQA requires lead agencies to consider and implement feasible mitigations to minimize wildfire impacts. When properly applied, these measures can reduce wildfire risk to a less-than-significant level.

4.20.2.3 Local

CITY OF SANTA CLARITA GENERAL PLAN

Applicable goals, objectives, and policies from the *City of Santa Clarita General Plan Land Use Element* (City of Santa Clarita 2011a), *City of Santa Clarita General Plan Safety Element* (City of Santa Clarita 2022), and *City of Santa Clarita General Plan Circulation Element* (City of Santa Clarita 2011b) are listed in Table 4.20-2.

Table 4.20-2. City of Santa Clarita General Plan Relevant Goals, Objectives, and Policies

Goal/Objective/ Policy	Description
Land Use Element	
Goal LU 3	Recognize that trails are an important recreational asset that, when integrated with transportation systems, contribute to mobility throughout the Santa Clarita Valley.
Objective LU 3.3	Ensure that the design of residential neighborhoods considers and includes measures to reduce impacts from natural or man-made hazards.
Policy LU 3.3.2	In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
Policy LU 3.3.5	Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.
Safety Element	
Goal S 3	Protection of public safety infrastructure and property from fires.
Objective S 3.2	Provide for the specialized needs of fire protection services in both urban and wildland interface areas.

Goal/Objective/ Policy	Description
Policy S 3.2.1	Identify areas of the Santa Clarita Valley that are prone to wildland fire hazards; adopt current CAL FIRE Fire Hazard Severity Zone maps and address these areas in fire safety plans.
Policy S 3.2.2	Enforce standards for maintaining defensible space around structures, roadside fuel reductions, and consider establishing community fire breaks through clearing of dry brush and vegetation.
Policy S 3.2.3	Establish landscape guidelines for fire-prone areas with recommended plant materials and provide this information to builders and members of the public.
Policy S 3.2.4	Require sprinkler systems, fire resistant roofs and building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.
Policy S 3.2.5	Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.
Policy S 3.2.6	Continue to provide information and training to the public on fire safety in wildland interface areas.
Policy S 3.2.7	Implement wildfire mitigation strategies as identified in the Local Hazard Mitigation Plan, including community education, evaluating access routes, and prescribed burning.
Objective S 3.3	Maintain acceptable emergency response times throughout the planning area.
Policy S 3.3.1	Plan for fire response times of no more than five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.
Policy S 3.3.2	Require the installation and maintenance of street name signs on all new development and the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets.
Policy S 3.3.3	Identify evacuation routes and their capacity, safety, and viability under a range of emergency scenarios, and plan for the evacuation needs of developments with only one point of access.
Objective S 3.4	Maintain development standards and land use regulations that prioritize fire safe development.
Policy S 3.4.1	Ensure that all new development and redevelopment in Fire Hazard Severity Zones comply with Board of Forestry requirements, Fire Safe Regulations, and current versions of the California Building Code (CBC), California Fire Code (CFC), and Title 14 of the California Code of Regulations (CCR).
Policy S 3.4.4	Require new development in Very High Fire Hazard Severity Zones to develop fire protection plans and enter into long term vegetation landscape maintenance agreements, and maintain access for emergency response vehicles, and require new residential development to maintain Fuel Modification Plans.
Circulation Element	
Goal C 2	A unified and well-maintained network of streets and highways which provides safe and efficient movement of people and goods between neighborhoods, districts, and regional centers, while maintaining community character.
Objective C 2.5	Consider the need for emergency access in transportation planning.
Policy C 2.5.1	Maintain a current evacuation plan as part of emergency response planning
Policy C 2.5.2	Ensure that new development is provided with adequate emergency and/or secondary access for purposes of evacuation and emergency response; require two points of ingress and egress for every subdivision or phase thereof, except as otherwise approved for small subdivisions where physical constraints preclude a second access point.
Policy C 2.5.3	Require provision of visible street name signs and addresses on all development to aid in emergency response.
Policy C 2.5.4	Provide directional signage to Interstate 5 and State Route 14 at key intersections in the Valley, to assist emergency evacuation operations.

SANTA CLARITA MUNICIPAL CODE

SCMC Chapter 22.01 adopts by reference the 2025 CFC and the CWUIC.

CITY OF SANTA CLARITA 2021 LOCAL HAZARD MITIGATION PLAN

The 2021 LHMP serves the purpose of documenting known hazards and identifying community actions that can be implemented over the short and long term to reduce future risk and loss in the City. The 2021 LHMP was prepared in response to the Disaster Mitigation Act of 2000 and is a Federally mandated update that ensures continuing eligibility for Hazard Mitigation Grant Program funding. The 2021 LHMP addresses several key topics, including the following:

- **Planning Process:** Provides a record of public process and involvement from committee members and stakeholders;
- **Community Profile:** Presents the history, geography, demographics, and socioeconomics of the City to provide historical context of hazards;
- **Hazard Identification and Risk Assessment:** Provides information on hazard identification, vulnerability, and risk associated with hazards in the City; and
- **Mitigation Strategy:** Describes existing mitigation and the mitigation process. In addition, the 2021 LHMP addresses the process of plan review, evaluation, implementation, and adoption and provides context and planning for hazard identification, risk, and mitigation strategies for wildfires, earthquakes, energy disruption, drought, severe weather events, pandemics, human-made hazards such as cyber-attacks and terrorism, the release of hazardous materials, landslides, and flooding.

4.20.3 Thresholds of Significance

The determinations of significance of project impacts are based on applicable policies, regulations, goals, and guidelines defined by CEQA and the City. The following thresholds of significance are based on the Environmental Checklist contained in Appendix G of the CEQA Guidelines. A project would result in significant adverse impacts related to wildfire if the project would:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

c) 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.

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.

Each of these thresholds is discussed under Section 4.20.5, *Project-Specific Impacts and Mitigation Measures*, below.

4.20.4 Impact Assessment Methodology

The thresholds of significance listed in Section 4.20.3, *Thresholds of Significance*, were used to develop analysis issues, methods, and significance determinations. The following impact assessment is based, in part, on the FPP (Dudek 2026), which includes an in-depth assessment of wildfire risks for the project site and surrounding area. The results of this study prompted the development of Project Design Features (PDFs) to reduce wildfire risk. A full list of PDFs is included in Chapter 2, *Project Description*, and the assessment of wildfire considers the application of these measures prior to determining significance. Fire

behavior model results should be used as a basis for planning only, as actual fire behavior for a given location will be affected by many factors, including unique weather patterns, small-scale topographic variations, or changing vegetation patterns. This analysis also considered the Attorney General's Best Practices for Wildfire Impacts guidance regarding assessment and mitigation of wildfire impacts (California Office of the Attorney General 2022).

4.20.4.1 Emergency Evacuation

Before describing the evacuation analysis that has been conducted for the project, it is important to note that most agencies do not have a designated quantitative threshold for evacuation, such as "evacuations should only take X minutes." Instead, an evacuation is considered safe if evacuees can evacuate before a wildfire threatens their structures and evacuation roadways. Simply, the amount of time required to evacuate the project site should be less than the time available to evacuate. The available time is increased by prompt evacuation notifications, providing alternate routes, protecting the roadways, and hardening the structures.

Potential project impacts to emergency response and evacuations were based, in large part, on the Evacuation Analysis included in Appendix C of the Transportation Assessment prepared for the project (Gibson 2026; see EIR Appendix I). The evacuation analysis study area is in the southeastern portion of the City and includes the neighborhoods along Sand Canyon Road between SR-14 and Placerita Canyon Road. In general, the evacuation study area is bound by SR-14 to the north, Placerita Canyon Road to the south, Rolling Hills Avenue to the west, and Live Oak Springs Canyon Road to the east. This study area was divided into TAZs. Travel Time and Total Evacuation Time were used to evaluate potential project effects to evacuation times. Travel Time models the time for a single vehicle to travel from each of a series of zones within the study area to a safe location during an organized, phased evacuation with traffic control in place and is considered "best-case scenario." Total Evacuation Time models the total amount of time it would take to evacuate the entire evacuation analysis area to a safe area, assuming an immediate, areawide evacuation order, and based on the rate at which vehicles can clear the area. Total Evacuation Time analysis does not include traffic controls and is considered "worst-case scenario."

The City's Demand Forecast Model was used to forecast traffic volume at key points along evacuation routes. As shown above in Figure 4.20-1, three evacuation routes were evaluated: the western route along Lost Canyon Road to SR-14 or Via Princessa; the northern evacuation route along Lost Canyon Road to Sand Canyon Road to SR-14, Soledad Canyon Road, or continuation on Sand Canyon Road; and the southern evacuation route using Oak Springs Canyon Road to Robinson Ranch Road, Sand Canyon Road, and Placerita Canyon Road. Seven intersections along the three evacuation routes were used to model Travel Time and Total Evacuation Time based on traffic volume for each zone. Five condition scenarios were used to analyze "worst-case scenario" evacuation of the entire project area. Travel time was measured in hours, minutes, and seconds for emergency evacuation.

Five condition scenarios were used to analyze "worst-case scenario" evacuation of the entire project area. These five conditions include use of the Sand Canyon and Lost Canyon Roads intersection, which is currently controlled by all-way stop signs, but would be improved to a single-lane roundabout as part of the proposed project. As such, this analysis is based on the "worst-case" evacuation scenarios that analyze the proposed single-lane roundabout which will be constructed during development of the project. Therefore, the following five conditions were modeled to forecast traffic volumes during a "worst-case scenario" full evacuation of the project area:

A. Existing Conditions (all-way stop at the Sand Canyon and Lost Canyon Roads intersection)
B. Future Conditions (2030) (roundabout at the Sand Canyon and Lost Canyon Roads intersection)
C. Future Conditions (2030) + project (roundabout at the Sand Canyon and Lost Canyon Roads intersection)

D. Future Conditions (2030) + project only evacuating to the north of Lost Canyon Road (roundabout at the Sand Canyon and Lost Canyon Roads intersection)

E. Future Conditions (2030) + project only evacuating to the south of Lost Canyon Road (roundabout at the Sand Canyon and Lost Canyon Roads intersection)

Evacuation model outcomes for current and future project conditions were used, in part, to evaluate impact significance. As outlined in Appendix G of the CEQA Guidelines, the City considers a project's impact on evacuation would be considered significant if the project would significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the project will expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

For more specific analysis methods, see the Evacuation Analysis included in Appendix C of the Transportation Assessment prepared for the project (Gibson 2026; see EIR Appendix I).

4.20.4.2 Fire Behavior Modeling

Fire behavior modeling was conducted to predict the type and intensity of a potential worst-case fire in the vicinity of the project site under existing conditions (discussed further in Section 4.20.1.8, *Wildfire Behavior*), as well as under operational conditions (Dudek 2026), discussed further below.

Fire behavior modeling under post-project conditions was based on reference to the 2022 Los Angeles County Fire Code (Los Angeles County Code Title 32 [Fire] § 4907 [Defensible Space]), which provides that fuel modification zones (FMZs) be provided around every building that is designed for human habitation or use within a Very High FHSZ. Fire behavior modeling incorporated three FMZs for the analysis: a 30-foot-wide Zone A FMZ and a 70-foot-wide Zone B FMZ, which would be irrigated, and a 100-foot thinning Zone C FMZ. The BehavePlus fire behavior modeling software package was used to assess fire behavior variables and to provide predictions of flame lengths, fire intensities, rates of spread, and spotting distance under two different fire weather and origin scenarios for the operational conditions:

- Scenario A is based on 97th percentile extreme weather conditions. This scenario assumes an offshore (wind from the east) fire involving a wildfire originating elsewhere and moving down the eastern mountainsides toward the project site during the fall. In this case, the fire would travel down moderately steep slopes, burning through areas of moderate-load grasses and dense, high-load shrubs as it approaches the project site. The diverse topography in this region may also create localized changes in wind speed, resulting in microvariations that could intensify fire behavior.
- Scenario B is based on 50th percentile average weather conditions. This scenario assumes an onshore (wind from the west) fire burning towards the project site from the southwest during the summer. The vegetation in this area consists of moderate-load grass-shrub vegetation moderately sloped downhill towards the project site. It is anticipated that the fire would likely originate from the low-density residential development in this area.

For a more detailed description of methods and data inputs used to model existing and future fire behavior for the project, see the FPP (Dudek 2026).

4.20.5 Project-Specific Impacts and Mitigation Measures

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The project includes the development of 341 age-restricted (55 years or older), detached single-family homes; an emergency staging area, and associated infrastructure improvements, including, without limitation, a railroad undercrossing, a bridge connecting the project to Lost Canyon Road, and J Street, which connects to Robinson Ranch Road. Emergency response and evacuation plans that have been adopted by the City include the County of Los Angeles Operational Area Emergency Operations Plan (OAEOP), which facilitates multiagency and multijurisdictional coordination during emergency operations, public information functions, resource management, and recovery efforts. Additionally, the *2025 County of Los Angeles All-Hazards Mitigation Plan* (2025 AHMP) (County of Los Angeles 2025) and 2021 LHMP (City of Santa Clarita 2021) are both intended to identify hazards and risks in Los Angeles County and the City, respectively, and guide appropriate response. The Land Use, Safety, and Circulation Elements of the *City of Santa Clarita General Plan* contain goals and objectives related to fire prevention, protection, and response in the City (City of Santa Clarita 2011a, 2011b, 2022). No plans currently exist that prescribe an evacuation timeline within the City.

The project also includes a proposed HeloPod® which would be constructed on the northern portion of the project site adjacent to the proposed trailhead and emergency staging area. This product is a prefabricated, high-capacity helicopter dip tank and water cistern connected to a municipal water supply or other reliable source, designed to provide a rapid-fill, hover-refill point for firefighting helicopters during wildfire events. The facility operates as a stationary water source, automatically refilling between uses, thereby improving aerial firefighting efficiency and reducing helicopter turnaround time while not being intended for domestic or industrial water demand.

CONSTRUCTION

During project construction, there would be a limited number of all-weather access roads available to allow fire and ambulance access to construction areas. Construction activities would be required to comply applicable construction requirements of the PRC to prevent ignition and spread of a wildfire during construction activities such as PRC § 4290, which regulates road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements during construction. The project would also be required to be consistent with the CFC (24 CCR Part 9), which regulates fire-resistance-rated construction, fire access roads, means of egress, and fire safety during construction and demolition.

Proposed construction activities may require traffic controls along nearby roadways and may slow traffic due to heavy vehicles and machinery traveling along nearby roadways. However, any traffic controls and vehicle and equipment movement would be temporary in nature and would not result in long-term impacts. The project would provide adequate emergency ingress and egress, emergency access, and accessibility to water for fire suppression, and would comply with all appropriate fire prevention methods.

The City's existing emergency response system would be sufficient to address emergency evacuation scenarios in the event of natural or human-caused incidents in the project area that result in a need to evacuate some or all existing residents of the adjacent communities and project construction employees. LACoFD provides fire, emergency, medical, and rescue services for the project area. The project area's circulation and access would conform with City requirements to ensure that adequate emergency access is provided throughout the project area.

Additionally, construction activities would require a peak of 92 construction workers on-site per day during the five-year construction period, resulting in only a minor increase of potential population requiring evacuation in the project area as compared to existing conditions. Construction of the project would not impede any emergency response or evacuation plans such as the General Plan Land Use, Safety, and Circulation Elements; 2021 LHMP; and 2025 AHMP. Therefore, impacts associated with emergency response plans or evacuation plans during construction would be *less than significant*, and mitigation is not necessary.

OPERATION

Upon buildout of the project, areas of the northern portion of the project site (north of the Metro-owned railroad) would be offered for dedication to the City upon implementation of the project. This area would include natural open space, FMZs, and flood control features. Additional features within the open space area would include an emergency staging area and HeloPod®. The emergency staging area is designed to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies. Additionally, the trailhead/emergency staging area would be available for use as an emergency equestrian area for the public. The project does not include development of property to the east of the project site, but would provide a 28-foot gated emergency vehicle access point, which would provide future emergency access from the extension of H Street to the east. All proposed access points, roads, and evacuation routes would be identified and constructed in accordance with State and County requirements to ensure safety along evacuation routes and compliance with all applicable emergency response and emergency evacuation plans. All fire apparatus access and vehicle roadways would comply with emergency response regulations, which require the roadways to be asphalt or concrete, designed to accommodate a minimum of a 75,000-pound fire apparatus load, and be surfaced to provide all-weather driving capabilities (CFC § 503.2.1, § 503.2.3, and Appendix D102.1; Los Angeles County Code Title 32; LACoFD Requirement 12).

Buildout of future residential land uses on the project site would increase the number of vehicles needing to access surrounding roadways in the event of an evacuation. Residents are expected to self-evacuate; however, evacuation assistance through the Homeowner's Association (HOA), City, and volunteer programs that serve residents with mobility concerns would be provided, as described further in PFD-WF-9 and PDF-WF-10. The project site is located adjacent to regional transportation networks with multiple points of access, such as SR-14, and within less than 3.5 miles of three existing fire stations (Fire Stations 132, 123, and 107). The *County of Los Angeles 2023-2024 Performance Measures* provides maximum emergency response times to varied land use classifications (County of Los Angeles 2024). The project site would be considered a Suburban land use, defined as "dense residential population, some wildland interface," which requires a maximum response time of eight minutes from the nearest fire station. An analysis was conducted of the travel-time response coverage from the closest existing station (Fire Station 132) (Dudek 2026). Total response time, including call and turnout time, from Station 132 is calculated at roughly seven minutes 19 seconds, as calculated with the Speed Limit Formula, and seven minutes 55 seconds, as calculated with the Verisk Formula, to the farthest lot within the proposed development. The Verisk response travel time formula discounts speed for intersections, vehicle deceleration, and vehicle acceleration, and does not include turnout time. The project conforms to the response time standard of eight minutes for suburban areas (LACoFD 2024).

Primary access to the project site will be via Lost Canyon Road connecting to the proposed A Street on-site, and secondary access would be via Robinson Ranch Road, connecting to the proposed J Street. These new surface streets would provide project residents with a second point of egress and an additional route to the Sand Canyon Road corridor, increasing flexibility during emergency situations. J Street would also benefit existing users of Oak Springs Canyon Road and Robinson Ranch Road by providing an alternative route for residents and visitors during both emergency and normal conditions. Additionally, the project

site is located less than 0.2 mile south of a SR-14, major highway/freeway corridor, which would facilitate emergency vehicle ingress and evacuee egress.

An evacuation analysis was performed to determine the project's impact on travel times during a complete evacuation of the project site and surrounding neighborhoods to a designated safe area (Gibson 2025); the analysis used the City's Travel Demand Forecast Model to model Travel Time and Total Evacuation Time.

Under the Total Evacuation Time analysis (worst-case scenario), assuming the Sand Canyon and Lost Canyon Roads intersection is improved to a roundabout, future conditions without the project would take approximately 2 hours 21 minutes to fully evacuate, whereas future conditions with the project would take approximately 2 hours 39 minutes, resulting in an increase of 18 minutes to the evacuation time. Increased evacuation time would not impact an adopted emergency evacuation plan because existing plans do not set a numerical evacuation time threshold. Though traffic volume and evacuation time length would increase, the project would not block or reroute existing roadways or evacuation routes or propose actions in conflict with emergency response and evacuation plan goals and objectives within the General Plan Land Use, Safety, and Circulation Elements (City of Santa Clarita 2011a, 2011b, 2022); 2021 LHMP (City of Santa Clarita 2021); and 2025 AHMP (County of Los Angeles 2025).

Additionally, the proposed buildings on the project site would be constructed with ignition-resistant materials. Therefore, in the event where physical evacuation is impractical, because of the ignition-resistant construction and FMZ setbacks, sheltering-in-place is considered to be a relatively safe option if a fastmoving wildfire precludes complete evacuation of the project site (Dudek 2026). The project would be consistent with the emergency response and evacuation plan goals and objectives within the General Plan Land Use, Safety, and Circulation Elements; 2021 LHMP; and 2025 AHMP. Therefore, impacts associated with emergency response plans or evacuation plans during operation would be *less than significant*, and mitigation is not necessary.

Impact WF-1
The project would not substantially impair an adopted emergency response plan or emergency evacuation plan during either construction or operation, block or reroute existing roadways or evacuation routes, or propose actions or approaches that are conflicting with local Emergency Operations or Response Plans.
Mitigation Measures
Mitigation is not necessary. Impact WF-1 would be less than significant.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

CONSTRUCTION

Expanded human activity, including vehicle and equipment operation and construction work, increases the potential for fire ignition. By implementing applicable code requirements and including site inspections in the construction and build process, probability of fire ignition and establishment during the construction phase of the project is reduced.

Buildout of the project would require temporary construction activities that may increase fire risk in the project area due to the use of combustible materials such as wood and diesel. The project would be consistent with preconstruction requirements of applicable law. An on-site inspection would also be conducted by the personnel of the LACoFD Forestry Division for final approval of the fuel modification plan prior to a certificate of occupancy being issued by the Building Official. Construction activities would comply with applicable law, which includes detailed ignition-resistant requirements for the following building components: roofing assemblies; vents and openings; exterior wall covering; open roof eaves; closed roof eaves and soffits; floor projections and underfloor protection; underfloor appendices; windows, skylights, and doors; exterior doors; decking; and accessory structures. The project would also be required to comply with the CFC, which requires a temporary or permanent water system for fire protection to be available prior to the arrival of combustible materials on-site. In addition, project construction would be required to comply with all applicable PRC requirements, such as PRC § 4290, which requires minimum fire safety standards related to defensible space that apply to residential, commercial, and industrial building construction in lands classified and designated as Very High FHSZs. These regulations include road standards for fire apparatus access, standards for signs identifying roads and buildings, fuel breaks and green belts, and minimum water supply requirements. Compliance with the aforementioned regulations would ensure that construction of the project does not exacerbate wildfire risks or expose project construction workers to pollutant concentrations.

The project also includes proposed PDFs for construction, which will be implemented if the project is approved by the City:

PDF-WF-1 A preconstruction meeting with the Los Angeles County Fire Prevention Unit would be held, before start of underground utility installation.

PDF-WF-2 A Construction Fire Protection Plan (CFPP) that would be prepared by the project applicant that addresses fire safety practices to reduce the possibility of fire during construction activities.

PDF-WF-3 Vegetation management requirements will be implemented at commencement of construction and throughout the construction phase in compliance with Chapter 33 of the CFC. Vegetation management for the project area will be performed in accordance with applicable law on all building locations before the start of work including importing combustible construction materials. Adequate fuel breaks will be created around all grading, site work, and other construction activities in areas where there is flammable vegetation to ensure that potential ignitions associated caused by construction activities do not transition offsite. Combustible materials will not be brought on-site without prior fire department approval regarding appropriate pre-construction fire safety features.

With compliance with the applicable code requirements, which are intended to avoid or minimize the potential to ignite a wildfire on-site, as well as implementation of these PDFs, the project would not exacerbate wildfire risks or expose project occupants (i.e., the construction workforce) to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire during project construction. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

Buildout of the project would result in 341 single-family homes and other site improvements, including an approximately 3.1-acre recreation center, public and private hiking trails, a trailhead/emergency staging area, and associated infrastructure improvements, including, without limitation, a railroad undercrossing, a bridge connecting the project to Lost Canyon Road, and J Street, which connects to Robinson Ranch Road.

The three major components of the fire environment are topography, vegetation (fuels), and climate (Dudek 2026). Based on existing conditions, the project site and surrounding areas have been designated as a Very High FHSZ, as identified on the Fire Zone Local Responsibility Area 2025 layer (City of Santa Clarita 2025). The Very High FHSZ designation does not indicate that an area is unsafe for development; however, it indicates that specific fire protection features that minimize structure vulnerability will be required, including compliance with provisions set forth in Chapter 7A of the CBC and provisions for maintaining FMZs. Accordingly, the FHSZ map does not demonstrate the probability that a wildfire would expose project occupants to pollutant concentrations associated with development of any specific project as it does not account for the use of project-specific design features or implementation of mitigation measures associated with development of a project.

FIRE BEHAVIOR MODELING

Fire behavior modeling results for the three scenarios described in Section 4.20.1.8, *Wildfire Behavior*, generally show that a potential fire moving toward the project area from the east poses the largest threat. However, as portions of the project site are transformed into urban landscapes, fire behavior on-site is expected to decrease. Following development, areas with hardscape features and irrigated landscaping are anticipated to experience much lower flame lengths and fire intensity compared to the community's edges and the WUI. The existing conditions fire behavior modeling results were used for the design of conservative operational FMZs.

When evaluating operational project conditions, it is important to recognize vegetation and topographic features outside of the project site would remain the same. The greatest fire threat would remain to the east of the project area, where it is exposed to a large expanse of undeveloped, naturally vegetated lands and extending to the San Gabriel Mountains. The portion of the project site that would change includes site hardening, landscaping, and FMZs that were modeled to reflect reduced fuel concentration and continuity around the planned community. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the WUI exposed structures within the project area (Dudek 2026). These principles were applied to project design and project operation fire behavior analysis.

As shown in Table 4.20-3, two wildfire scenarios were modeled for the post-project environment, where project construction is complete, the development is fully operational, and FMZs have been implemented. Although three wildfire scenarios were modeled for the existing conditions scenario, the post-project environment modeling only included two scenarios, which represent the most extreme condition (Scenario A) and an average condition (Scenario B).

Scenario A reflects "worst-case scenario" extreme fire weather with flame front approaching the project site from the east during a fall Santa Ana wind event. Scenario B models for 10% slopes during average summer weather with wildfire approaching from the sparsely developed residential area southwest of the project site. The BehavePlus software package was used to model post-project flame length, rate of spread, fireline intensity, and spotting distance.

A fire burning through the project area during an extreme weather event (Scenario A), would reduce in intensity as it progressed through the distinct zones. Within the farthest zone, Zone C, there would be moderate to very high flame lengths of 7.4 feet under sustained winds and 14.0 feet under 50-mph gusts and very high to extreme rates of spread from 0.7 mph under sustained winds and 3.0 mph during 50-mph gusts. Within Zone B, there would be moderate flame lengths up to 4.0 feet and a very high spread rate of 0.7 mph. By the time the fire reached Zone A, flame lengths would be low, ranging from 2.1 to 3.0 feet and with a moderate rate of spread from 0.1 to 0.2 mph. A fire burning within FMZs of the project under the extreme conditions of Scenario A could be compared to one burning under average, onshore weather

conditions as modeled in Scenario B. Upon reaching Zone C, the fire would exhibit low flame lengths of 3.6 feet and a moderate rate of spread of 0.2 mph. Within Zone C, flame lengths would drop to 2.1 feet while the rate of spread would be similar. If the fire were to reach Zone A, there would be only 1.1-foot flame lengths and a very low rate of spread of less than 0.1 mph under Scenario B. The reduced fire behavior within the up to 200-foot-wide FMZ, the inclusion of a 5-foot noncombustible Zone 0 around all structures, the ignition resistance provided by CBC Chapter 7A standards, and additional features outlined in the FPP would reduce the fire hazard associated with this community when compared to the existing conditions (Dudek 2026).

Table 4.20-3. Fire Behavior Modeling Results – FMZ Implementation

Fuel Model	Flame Length (feet)[1]	Spread Rate (mph)[1]	Fireline Intensity (Btu/ft/s)	Spot Fire (miles)[1]
Scenario A: 20% Slope, 97th Percentile Fall Offshore Extreme Weather, 19 mph Winds (50 mph Gusts) from the East				
Setback FMZ (Zone A)	2.1 (3.0)	0.1 (0.2)	1,286	0.2 (0.4)
Irrigated FMZ (Zone B)	4.0 (4.0)	0.7 (0.7)	602	0.2 (0.5)
Thinning FMZ (Zone C)	7.4 (14.0)	0.7 (3.0	1,919	0.4 (1.1)
Scenario B: 10% Slope, 50th Percentile Summer Onshore Average Weather, 11 mph Winds from the Southwest				
Setback FMZ (Zone A)	1.1	<0.1	973	0.1
Irrigated FMZ (Zone B)	2.1	0.2	426	0.1
Thinning FMZ (Zone C)	3.6	0.2	1,423	0.2

Source: Dudek (2026).

[1] Outputs in parenthesis represent peak 50 mile per hour wind gusts. Fireline intensity is driven by fuel characteristics and not influenced by wind speed.

As shown in Table 4.20-3, the proposed FMZs at the edges of the project perimeter adjacent to the open space areas would provide a buffer between fuels in the open space and structures within the project site. This project feature drives fire behavior transition from extreme in the existing condition described in Section 4.20.1.8, *Wildfire Behavior*, to low or moderate under post-project conditions, which accounts for the most extreme fire weather modeled. Lower predicted flame lengths, particularly in Zones A and B, contribute to lower fire intensity and rate of spread. These modeled wildfire conditions provide safer conditions for residents and emergency responders by lowering rapid exposure to extreme heat characteristic of fast-moving wildfires. Additionally, compared to existing conditions, development of the project would decrease the risk of wildfire hazards approaching from the east as the amount of vegetation (fuels) on-site would be reduced, resulting in increased protection to the surrounding areas.

The SCMC requires that FMZs be provided around every building that is designed for human habitation or use within a Very High FHSZ. Consequently, the project will consist of a 30-foot-wide Zone A FMZ and a 70-foot-wide Zone B FMZ (both Zones A and B will be irrigated), as well as a 100-foot thinning Zone C FMZ. These would provide defensible space and reduce fire intensity and flame lengths in the event of ignition. The FMZ would be approximately four times the modeled flame lengths based on the fuel type represented adjacent to the development footprint. Therefore, the FMZs around the project site are proposed to be a maximum of 200 feet (Figure 4.20-3). A five-foot-wide ember-resistant Zone 0 would also be included around all structures. Further, fuel modification will also be included within 10 feet of all fire apparatus access roads and a vertical clearance of at least 13 feet six inches would be maintained for these roadways to ensure fire apparatus can navigate access roads. Fire behavior modeling results support the effectiveness of project FMZs in modifying fire behavior during average and extreme wildfire events.

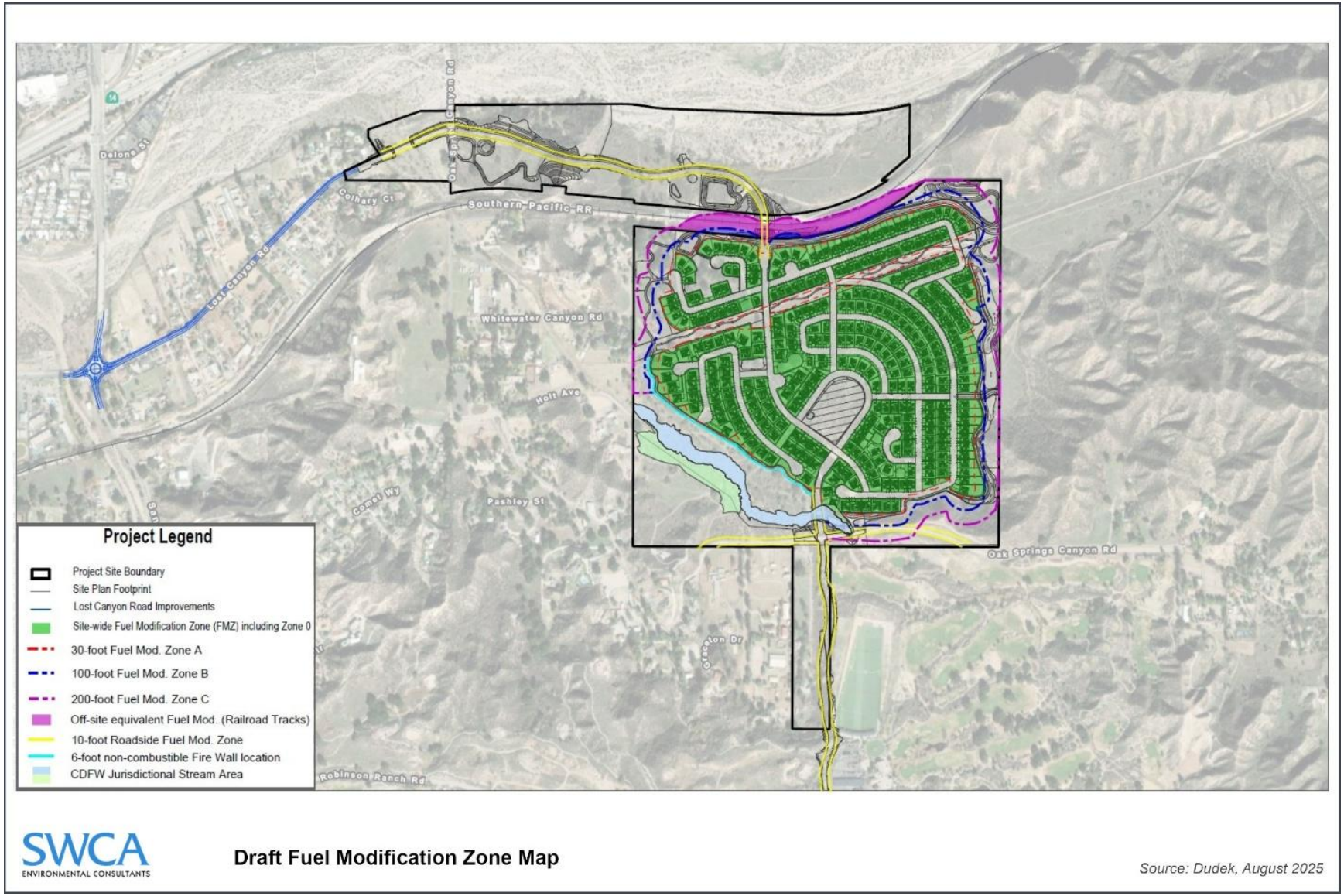


Figure 4.20-3. Fuel Modification Zone Map.

However, the southwest portion of the project site is adjacent to a California Department of Fish and Wildlife (CDFW) jurisdictional stream/channel, and, in order to reduce direct impacts to these areas, the project includes a reduced FMZ in the southwest area. The proposed FMZ in this area of the project site is consistent with the requirements of the LACoFD for a Zone A FMZ, as the FMZ would be a minimum of 30 feet and up to approximately 70 feet of fully irrigated on-site fuel modification that will be maintained to Zone A standards. The southwest portion of the project area would not provide the additional 100-foot-wide Zone C FMZ. Therefore, to provide additional deflection, code-exceeding PDF-WF-4 will provide a non-combustible, six-foot tall, heat-deflecting fire wall constructed outside the FMZ boundary.

INFRASTRUCTURE DESIGN AND WILDFIRE PREPAREDNESS

Increased human presence, vehicle and equipment use, and utility infrastructure operation and maintenance all increase fire ignition probability during project operation and the risk of wildfire exposure within and beyond the project area. The probability of fire ignition and establishment during the construction phase of the project would be reduced through project design and living with wildfire education and proactivity within the project community. This section describes how the project infrastructure is designed for the fire environment and measures the planned community would take to ensure wildfire ignition and threat awareness.

Due to the project site's location in a Very High FHSZ, future residential development would be required to comply with requirements identified in CBC Chapter 7A and CRC Chapter R337 for roofs and roof edges, exterior walls and siding, eaves and porch ceilings, vents, windows and exterior doors, exterior decking and stairs, underfloor areas and appendages, and residential sprinklers. Requirements of the CBC and CRC were created to minimize wildfire risk associated with development in Very High FHSZs; therefore, compliance with the CBC and CRC would reduce the potential for wildfire risk associated with proposed residential development.

All future development and site improvements would be required to comply with applicable law governing emergency vehicle access, address identification, water supply, defensible space, fire protection systems, and the use of fire-resistant building materials. The proposed gates would be required to install a KNOX Box in a location approved by LACoFD to allow for emergency fire access to the project site. All new homes must have clear address identification in a visible location. Landscaping in public areas of the project site must include fire-resistant plants that are strategically placed to resist the spread of fire to nearby homes and hardscaping should use limited combustible materials in or near structures. The project would be required to supply an adequate domestic and fire water storage and delivery system.

The following PDFs will be implemented if the project is approved by the City:

PDF-WF-4 The project will include the construction of a 6-foot non-combustible fire wall (lower 1 to 2 feet is a concrete masonry unit (CMU) block wall and upper 4 to 5 feet is a dual pane (including one tempered glazing pane) window) to provide additional heat deflection along the perimeter of the lots in the southwest portion of the project where there are reduced fuel modification zones which are adjacent to areas identified as California Department of Fish and Wildlife (CDFW) jurisdictional stream areas. The fire wall will be constructed to function as a heat-deflecting wall.

PDF-WF-5 Dual-pane, dual-tempered windows will be installed for structures facing the open space and naturally vegetated areas unable to achieve a minimum 100 feet of on-site FMZ (this area includes the lots in the southeast portion of the project site).

PDF-WF-6 The project HOA will maintain the access roads, including a minimum of 10 feet of clearance on each side of the road(s) within the development footprint adjacent to open space areas.

PDF-WF-7 To confirm that the project's FMZs and landscape areas are being maintained according to the FPP and the LACoFD's fuel modification guidelines. The project HOA will obtain a FMZ inspection and report from a qualified LACoFD-approved 3rd party inspector in May/June of each year certifying that vegetation management activities throughout the project site have been performed. If the FMZ areas are not compliant, the project HOA will have a specified period to correct any noted issues so that a re-inspection can occur and certification can be achieved. Annual inspection fees are subject to the current Fire Department Fee Schedule.

PDF-WF-8 The project HOA will maintain all common areas, including trees planted along roadways and in other areas throughout project site.

PDF-WF-9 A wildfire education program will be developed for the community—the Belcaro at Sand Canyon Wildfire Education Program. The education program will be implemented to maintain high wildfire awareness. The program will include the following:

- **Biannual Email and Mailers:** Residents and occupants will be provided with biannual emails and mailers in April and August that will include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, and how to prevent wildfires. Links to various resources on where to get trusted information such as LACoFD, 211 LA County, and Ready LA County will be provided.
- **Website:** There will be a dedicated community website with more detailed information and resources about wildfire awareness and prevention. The website will serve as a centralized resource for the fire education program and include information from the FPP. The website will also have fire watch and RFW alerts, as well as information on restrictions during fire weather conditions. Residents will also be able to use the website to sign up for an annual residential defensible space inspection from the HOA Fire Committee.
- **Community Workshops and Webinars:** Either in-person or virtual community workshops will be held two times a year. The goal of the workshops will be to cover various fire topics more in-depth. Examples include having an LACoFD representative come to meet the community, a workshop on how to make a go-bag, a workshop on how to make a residential evacuation plan, or how to maintain the home ignition zone.
- **New Resident Packet:** All residents and future new residents will be presented with a wildfire awareness and safety package upon purchase or rental of a home. Within the packet will be a memory stick with the evacuation plan, a list of fire protection features, information on the regional fire hazard, prohibited activities in fire risk areas, how to build a go-bag, and a list of agencies and resources for receiving trusted information.
- **Emergency Alert Campaign:** Residents and homeowners will be encouraged to sign up for Alert LA County, which is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, State, and federal agencies. The campaign will occur

annually and encourage residents to sign up for Alert LA County. Reminders will also be sent out in the biannual emails and mailers, on the community website, in the workshops, and in the new resident package.

- **Fire Watch Groups:** Within the community, there will also be volunteer fire watch groups, which will be comprised of residents and/or businesses who volunteer to participate in a fire watch group for the community. During RFW days, this group will be responsible for reminding residents of fire-safe practices and restrictions. During RFW days, the fire watch group will also maintain vigilance for potential fires and will be trained on procedures for alerting LACoFD in the event of a fire.
- **HOA Fire Safety Committee:** The fire safety committee will be responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee will be responsible for the coordination of the third-party FMZ inspections and the volunteer residential defensible space inspections. The committee will also be responsible for the creation and distribution of the educational program for the project. The committee will serve as a communication link between LACoFD and the community.

PDF-WF-10 A "Ready, Set, Go!" approach to evacuation will be formally adopted, practiced, and implemented by the project's HOA or other approved entity. The project's HOA will coordinate with the LACoFD to hold an annual fire safety and evacuation preparedness informational meeting. Representatives of LACoFD will be invited to attend, and important fire and evacuation information will be reviewed. One focus of these meetings and the project's annual message will be on the importance of each resident to prepare and be familiar with their own "Ready, Set, Go!" evacuation plan. Because the project incorporates ignition resistant construction, wide fuel modification zones, ember protection, and fire defensibility throughout, responding fire and law enforcement personnel will be able to direct persons to temporarily refuge within buildings on-site in the rare situation where shelter-in-place is determined to be safer than evacuating. The project's HOA or other approved entity will organize annual evacuation public outreach and engage directly with organizations such as the California Fire Safe Council.

Once developed, the project would not facilitate wildfire spread and would reduce projected fire behavior to levels that would be manageable by firefighting resources for protecting the project site's structures, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape (Dudek 2026). This is due to the conversion of landscapes to ignition-resistant maintained areas, more human monitoring areas resulting in early fire detection and discouragement of arson, and fast response from the fire suppression resources that are located within these developing areas (Dudek 2026). Based on required compliance with the CBC, CFC, PRC, and SCMC, the development of residential buildings would not exacerbate wildfire risk, because all buildings and improvements would be developed with fire-resistant building materials and allow for adequate emergency access and fire suppression requirements. Proactive fire prevention measures and emphasizing below-ground utility design would reduce ignition risk and wildfire establishment within the project area. With implementation of the PDFs and compliance with the applicable code requirements, the project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire during project operation. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact WF-2
The project would not exacerbate wildfire risks or expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire during project construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact WF-2 would be less than significant.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Buildout of the project would result in the development and installation of the following associated infrastructure improvements:

- A railroad undercrossing below the Metro-owned railroad;
- An extension of Lost Canyon Road with a bridge connecting the project site to provide access from the existing Lost Canyon Road;
- The development of the proposed J Street, which would connect to Robinson Ranch Road;
- Infrastructure improvements within the existing right-of-way (ROW) on Lost Canyon Road adjacent to the project site, including the expansion of local utilities infrastructure (water, sewer, and underground power lines) and roadway improvements; and
- The development of public trails along existing and expanded sections of Lost Canyon Road, as well as along the new J Street.

Southern California Gas Company has several easements on-site for pipelines and related infrastructure. Other on-site easements to remain include the County ingress/egress easement, the SCVWA utilities easement, and Southern California Edison easements for poles and lines.

All internal roads and driveways would be required to comply with CAL FIRE, LACoFD, and City roadway requirements to ensure proper installation to avoid the need for frequent maintenance or repairs and to allow for adequate emergency access throughout the project site. Proposed water, wastewater, gas, and electric lines to serve the project would be placed underground, which would reduce the risk of wildfire by avoiding the potential for sparks from power or other utility lines to ignite a fire within the project area. In addition, all public utility easements and utility infrastructure would be required to comply with the CBC and CFC for proper installation to avoid the need for frequent repair and maintenance trips that may exacerbate fire risk. If future construction activities are required for maintenance or repair of utility or other associated infrastructure, those projects would also be required to comply with the IFC and applicable PRC sections. With this compliance, the project would not exacerbate potential wildfire risk from the installation of associated infrastructure.

Potable water would be provided through the SCVWA by tying into an existing 16-inch water line at the southern tract boundary in Oak Spring Canyon Road. A secondary connection would be made in Lost Canyon Road to an existing eight-inch water line, approximately 670 feet west of the project area. Construction activities associated with the installation of the proposed utility and other associated

infrastructure would be required to comply with IFC § 3312 and PRC sections. The project would also include the construction of an additional water tank on an existing pad at the SCVWA Live Oak Reservoir site, increasing local water supply. With these requirements, the short-term construction of the project would not be expected ignite wildfire within the project area.

Fire hydrants must be established at intersections, along fire access roads, and adjacent to public streets as determined by current fire code requirements to meet operational needs. Fire hydrants would be consistent with applicable County Design Standards. All structures, of any occupancy type, would also be protected by an automatic interior fire sprinkler system. All automatic internal fire sprinklers would comply with LACoFD and the NFPA. As proposed, the fire hydrant system would comply with the CFC to allow for adequate water accessibility for fire protection services. Compliance with the CFC would ensure there is adequate available water for fire suppression throughout the life of the project to reduce risk associated with wildfire. Additionally, the applicant has proposed installation of a HeloPod® in the open space area north of the railroad tracks. This will provide a water source for firefighting helicopters in addition to hydrants providing water to ground apparatus.

Proposed installation of internal roads, public utility easements, and utility infrastructure throughout the project site would be required to comply with the SCMC, the CFC, the CBC, and applicable CAL FIRE requirements to ensure proper installation and expansion of associated infrastructure to avoid frequent maintenance or repair trips that may exacerbate fire risk and to avoid or minimize hazards associated with improper installation, including wildfire risk. In addition, proposed undergrounding of utility infrastructure would be conducive to the long-term avoidance or minimization of wildfire risk associated with utility infrastructure by avoiding the potential for wildfire ignition. Installation of associated infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact WF-3
The project would not exacerbate fire risk or result in temporary or ongoing impacts to the environment as a result of installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities).
Mitigation Measures
Mitigation is not necessary. Impact WF-3 would be less than significant.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

CONSTRUCTION

The project has the potential to expose people and structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes during grading, excavation, and other earth-moving activities associated with project construction. However, construction activities would be temporary in nature and the Stormwater Pollution Prevention Plan (SWPPP) required by the General Construction Permit would prevent construction site runoff from affecting off-site drainage patterns. As described in Section 4.10, *Hydrology and Water Quality,* and according to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)

No. 06037C0845G, dated June 2, 2021, a majority of the project site is located within FEMA Flood Zone X, which is defined as "areas determined to be outside the 0.2-percent-annual-chance floodplain" or not within a 100-year flood zone. However, several areas within the project site have been mapped as FEMA Flood Zone A and Zone AE, which are defined as "areas with a 1 percent annual chance of flooding" (FEMA 2021). Drainage patterns during construction would follow the proposed drainage plan. Compliance with the SWPPP, along with SCMC requirements, would avoid the potential for downslope or downstream flooding or landslides to expose people or structures to significant risks through the use of best management practices (BMPs) and erosion control measures that are required to be implemented during construction. Construction impacts would be *less than significant*, and mitigation is not necessary.

OPERATION

As described in Section 4.7, *Geology and Soils,* the slopes on the project site are considered stable, as the topography of the project site is gently sloping terrain toward the north and steeper hilly terrain exists mainly along the perimeters of the project site. As a result, the project site would not be located in an area at risk of landslides. As described above, a majority of the project site is located within FEMA Flood Zone X, which is defined as "areas determined to be outside the 0.2-percent-annual-chance floodplain" or not within a 100-year flood zone. However, several areas within the project site have been mapped as FEMA Flood Zone A and Zone AE, which are defined as "areas with a 1 percent annual chance of flooding" (FEMA 2021). The project site is bordered by the Santa Clara River to the north, which is also designated as a Special Flood Hazard Area (1%+ Annual Chance of Flood). Throughout the City, streams have been channelized into soft bottom channels with concrete sides to allow for development in the floodplain of the Santa Clara River. Because the channelization of stormwater can increase velocity and flows, much of the Santa Clara River has remained unchanneled and in a natural condition. According to the Safety Element, where flood control improvements have been required, the City has used buried bank stabilization as the preferred method of protecting adjacent development from flood hazards (City of Santa Clarita 2022).

The project includes four drainage management areas that correspond with the existing drainage outfalls. The existing storm drainage infrastructure serving the project site has been designed by the City to carry stormwater flows per the *Los Angeles County Department of Public Works Hydrology Manual* (County of Los Angeles 2006) and is designed to carry the 50-year storm event. No known storm drainage deficiencies exist in the vicinity of the project site. Furthermore, the project's drainage plan would reduce the peak discharge flow rates out of the project site because the plan is designed to use the existing topography of the project site and maintain historic drainage patterns to the maximum extent feasible, with integration of additional water quality and drainage facilities, thereby avoiding the potential for downslope or downstream flooding or landslides to expose people or structures to significant risks. Additionally, the project would include new flood control basins, which would be maintained by the project HOA, as well as the installation of two debris basins and a debris swale. These facilities are designed to capture sediment, gravel, boulders, and vegetative debris that are washed out of canyons during storms but allow water to flow into the downstream storm drain system, thereby reducing flood risk for communities downstream of the facility (County of Los Angeles 2024). Buildout of residential buildings and structures within the project site would also be required to comply with foundational and other building requirements identified in the CBC, which are designed to address post-fire structural stability.

Based on existing conditions at the project site, compliance with the CBC, and implementation and maintenance of SWPPPs and drainage plans that would be required for the project site, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff; post-fire slope instability; or drainage changes. Therefore, impacts would be *less than significant*, and mitigation is not necessary.

Impact WF-4
The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes during construction or operation.
Mitigation Measures
Mitigation is not necessary. Impact WF-4 would be less than significant.

4.20.6 Cumulative Impacts

EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN

Existing and foreseeable future development projects within the project region are identified in Chapter 3, *Environmental Setting*. Based on buildout of the project site, and the potential buildout of other reasonably foreseeable development projects in the project area, it is anticipated that there would be an increase in vehicles traveling on local roadways, which would potentially contribute to increased congestion and reduced rates of egress in the event of an evacuation. The evacuation analysis completed for the project includes a future conditions analysis for 2030, which reflects a conservative projected growth assumption that includes residential, commercial, and hotel uses.

Future conditions without the project would result in a "worst-case scenario" Total Evacuation Time of approximately two hours 39 minutes with the roundabout configuration, increasing the Total Evacuation Time by 18 minutes. This 18-minute cumulative increase would delay Total Evacuation Time but not alter evacuation routes, evacuation plans, or emergency response. As discussed above, an evacuation is considered safe if evacuees can evacuate before a wildfire threatens their structures and evacuation roadways. The available time is increased by prompt evacuation notifications, providing alternate routes, protecting the roadways, and hardening the structures. The Total Evacuation Time analysis provides a conservative estimate of the time required for all vehicles within the study area to clear the roadway network under a simultaneous evacuation scenario. The analysis does not attempt to estimate the time available before wildfire arrival, which varies depending on fire behavior, weather, and emergency management actions. Instead, the analysis evaluates whether the project would substantially worsen evacuation conditions. Because the project would result in only a modest increase in evacuation clearance time and would not change evacuation routes or emergency access, the project would not substantially impair evacuation or emergency response.

The project would provide public and emergency entry and exit points throughout the project site in accordance with City, PRC, and CAL FIRE requirements for adequate emergency access. Development plans are subject to review and approval by fire safety personnel to ensure that adequate emergency access and other safety features are included in the final project design. The project would provide adequate facilities for emergency ingress and egress, and, as discussed above, the project would be compliant with fire safety and building requirements to avoid or minimize wildfire risk. Reasonably foreseeable future projects would similarly be required to provide adequate emergency access for emergency and public ingress and egress and would be subject to environmental review to ensure consistency with applicable emergency response and evacuation plans. Additionally, installation of the proposed HeloPod® would improve aerial firefighting efficiency by allowing aircraft to refill without landing or traveling to distant waterbodies, which would serve as a cumulative benefit to the surrounding community and foreseeable future projects. Impacts related to emergency response plans and emergency evacuation plans would be less than cumulatively considerable.

POLLUTANT CONCENTRATIONS

Like the project, each related development would undergo individual review by the LACoFD and be required to meet all applicable fire safety standards. This includes ignition-resistant construction, fire protection systems, defensible space and vegetation management (such as FMZs), and, if needed, improvements to hydrant and vehicle access to effectively minimize wildfire risks. The development of the project site with mandated fire safety measures, ignition-resistant buildings, and a 100-foot-wide FMZ will decrease the likelihood of ignition on-site and wildfire spread compared to current conditions. Proposed future residential development east of the project site would likely reduce extreme fire behavior predicted for the existing and future project area condition. This would be achieved by manipulating the existing fuelbed, expanding defensible space principles included in State, County, and City standards. Therefore, the project's contribution to cumulative wildfire impacts is not considered significant. With full adherence to all applicable State and local regulations, along with the implementation of site-specific recommendations for related projects, cumulative wildfire impacts are expected to be less than cumulatively considerable.

INSTALLATION OR MAINTENANCE OF ASSOCIATED INFRASTRUCTURE

Future construction of the project and reasonably foreseeable projects located within a Very High FHSZ have the potential to increase risk of wildfire due to equipment and machinery use that could result in ignition. However, construction of the project and all reasonably foreseeable projects would be subject to the CFC and all applicable PRC sections to minimize the potential to ignite and/or exacerbate a wildfire. Therefore, based on required compliance with existing regulations, potential construction-related impacts of the project would not be cumulatively considerable.

The project and all other reasonably foreseeable future development projects in the area would be required to comply with applicable law to reduce potential risk associated with development in a High FHSZ. Proposed and foreseeable future development of roadways and other improvements would be required to comply with City and CAL FIRE requirements and with CFC and CBC sections for emergency vehicle access, addressing, water supply, defensible space, fire protection systems, and the use of fire-resistant building materials. In addition, if the project is approved by the City, PDFs will be implemented to avoid or minimize wildfire risk associated with vegetation management of proposed open space areas, evacuation, and wildfire education. Proposed infrastructure would not result in aboveground features that could physically impede established roadways or other facilities needed for emergency response or evacuation. New infrastructure and improvements would not result in population growth that could create additional vehicle trips along evacuation routes, as these infrastructure improvements are only designed to serve the project. Infrastructure improvements would be required to comply with all applicable CBC, CFC, PRC, and SCMC requirements to avoid or minimize wildfire risk associated with construction of utilities. Therefore, the project and other reasonably foreseeable projects would not result in cumulative impacts related to wildfire and associated hazards. Impacts related to installation or maintenance of associated infrastructure would be less than cumulatively considerable.

LANDSLIDES, SLOPE STABILITY, AND DRAINAGE

As previously discussed, some portions of the project site fall within FEMA Zone A and Zone AE floodplains, and related projects in the City and the wider Santa Clara River Watershed may also be located in FEMA-designated floodplains. However, both the project and related developments will be designed to mitigate floodplain hazards within their respective footprints. Like the project, related projects will implement procedural and structural BMPs during construction and operation. If related projects are in flood hazard zones, design features such as infiltration/detention basins and underground infiltration chambers—like those for the project—will be incorporated to ensure impacts to flood rates

and flows remain less than significant. Impacts related to landslides, slope stability, and drainage would be less than cumulatively considerable.

Impact WF-5 (Cumulative Impacts)
The project would not result in a cumulatively considerable impact related to wildfire.
Mitigation Measures
Mitigation is not necessary. Impact WF-5 would be less than significant.

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CHAPTER 5. ALTERNATIVES ANALYSIS

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) (CEQA Guidelines § 15126.6(a)) requires an Environmental Impact Report (EIR) to "describe a reasonable range of alternatives to a project, or to the location of a project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." This chapter discusses a range of alternatives to the proposed Belcaro at Sand Canyon Project (project), including a No Project Alternative, alternative locations, and alternative designs.

The CEQA Guidelines require the following:

- Description of ". . . a range of reasonable alternatives to the project, or to the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." (CEQA Guidelines § 15126.6(a)).
- A setting forth of alternatives that ". . . shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR needs to examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project." (CEQA Guidelines § 15126.6(f)).
- Discussion of the "No Project" alternative, and ". . . If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (CEQA Guidelines § 15126.6(e)(2)).
- Discussion and analysis of alternative locations ". . . that would avoid or substantially lessen any of the significant effects of the project;" only these need to be considered for inclusion in the EIR. (CEQA Guidelines § 15126.6(f)(2)(A)).
- "Prior to approval of the proposed subsequent project, the lead agency shall incorporate all feasible mitigation measures or feasible alternatives appropriate to the project as set forth in the Master EIR and provide notice in the manner required by § 15087." (CEQA Guidelines § 15177(d)).

This chapter: 1) describes the range of reasonable alternatives to the project; 2) examines and evaluates each environmental resource area analyzed within the EIR and compares the impacts of the alternatives to those of the project; and 3) identifies the Environmentally Superior Alternative.

5.2 ALTERNATIVES SELECTION

The City evaluated which alternatives should be considered in the EIR. This section reviews the objectives that were identified for the project and identifies the significant environmental impacts of the project.

5.2.1 Project Objectives

The applicant identifies these as the project objectives:

- Develop a planned, age-qualified (55+) residential community that aligns with the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.
- Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
- Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.
- Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.
- Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
- Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
- Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.

5.2.2 Significant Impacts Resulting from the Project

Alternatives are those that would avoid or substantially lessen one or more of the significant environmental effects identified during evaluation of a project. For the project, all of the environmental impacts described in Chapter 4, *Environmental Impacts Analysis*, are judged to be less than significant or less than significant with the incorporation of identified mitigation measures. As a result, no significant and unavoidable impacts were identified as part of the environmental evaluation for the project. A summary of impacts identified for the project by the environmental resource area is provided in Table 5-1.

Table 5-1. Summary of Impacts Resulting from the Project

Environmental Resource Area	Less than Significant Impact with Mitigation	Less than Significant Impact
Aesthetics		X
Agriculture and Forestry Resources		X
Air Quality	X	
Biological Resources	X	
Cultural Resources	X	
Energy		X
Geology and Soils	X	

Environmental Resource Area	Less than Significant Impact with Mitigation	Less than Significant Impact
Greenhouse Gas Emissions	X	
Hazards and Hazardous Materials	X	
Hydrology and Water Quality		X
Land Use and Planning		X
Mineral Resources		X
Noise	X	
Population and Housing		X
Public Services		X
Recreation		X
Transportation		X
Tribal Cultural Resources	X	
Utilities and Service Systems		X
Wildfire		X*

* The project includes Project Design Features, which would be implemented to reduce impacts to a less-than-significant level. The Project Design Features would be included in the Mitigation Monitoring and Reporting Program, should the project move forward to project approval.

5.2.3 Alternatives Development and Analysis Process

CEQA Guidelines § 15126.6(f)(1) states:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

If an alternative was found to be infeasible, then it was dropped from further consideration in this analysis.

In addition, CEQA Guidelines § 15126.6 states that alternatives should ". . . attain most of the basic objectives of the project..." California law provides that:

> "an EIR should not exclude an alternative from detailed consideration merely because it would impede to some degree the attainment of the project objectives." But an EIR need not study in detail an alternative that is infeasible or that the lead agency has reasonably determined cannot achieve the project's underlying fundamental purpose…. Although a lead agency may not give a project's purpose an artificially narrow definition, a lead agency may structure its EIR alternative analysis around a reasonable definition of underlying purpose and need not study alternatives that cannot achieve that basic goal."

The City's analysis began with screening and evaluating a list of preliminary alternatives based on sensitive environmental resources and public comments to determine which ones would be selected for further analysis in the EIR.

Each alternative was initially assessed as to whether it met the requirements of a viable alternative under CEQA by considering whether it 1) would be feasible, 2) would avoid or substantially lessen any of the significant effects of the project, and 3) could feasibly attain most of the basic objectives of the project. The alternatives that met these three requirements were carried forward for a more detailed review and are discussed in Section 5.4, *Alternatives Impacts Analysis*.

5.3 ALTERNATIVES CONSIDERED BUT REJECTED

CEQA Guidelines § 15126.6(c) requires that an EIR disclose potential alternatives that were considered and eliminated along with a brief explanation of the reason for elimination. Factors used to eliminate alternatives from detailed consideration include: 1) failure to meet most of the basic project objectives, 2) infeasibility, and/or 3) inability to avoid significant environmental impacts. The alternatives discussed in the following sections were considered but eliminated from further analysis.

5.3.1 Alternative Access – Oak Spring Canyon Road

The Alternative Access – Oak Spring Canyon Road Alternative would consider removing the Lost Canyon Road access and replacing the second access point to the project site with a route via Oak Spring Canyon Road and/or other existing roadways. This alternative would continue to allow for the full density of the proposed development; as such, the project-generating vehicle trips would remain constant, however, the project trips would be diverted to Oak Spring Canyon Road and/or J Street in lieu of Lost Canyon Road. Although this alternative would reduce the number of new vehicle trips on Lost Canyon Road by altering the existing proposed access, it would provide inadequate vehicle ingress and egress to and from the project site. This would result in reduced resident safety, ease of evacuation, and emergency access. In addition, the alignment is indirect and constrained, presenting challenges in achieving adequate roadway width and appropriate design standards. As a result, engineering sufficient roadway improvements to safely accommodate project traffic could be technically complex and potentially infeasible within the existing corridor. Consequently, this alternative would not meet the project objectives related to integrating a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies. Further, the project site and the surrounding area are mapped as a Very High Fire Hazard Severity Zone, the construction of a secondary access route would be required elsewhere on-site. Accordingly, the extension of an existing or construction of a new roadway would have similar potential to increase ground disturbance and adversely impact sensitive natural resources. This alternative would thus increase risks associated with emergency evacuation and public safety and would not meet the basic project objectives. Accordingly, this alternative was eliminated from further discussion in accordance with CEQA Guidelines § 15126.6(c).

5.3.2 Alternative Access – Bridge over Santa Clara River

The project includes an extension of Lost Canyon Road with a bridge over Oak Spring Canyon Creek connecting the project site to provide access from the existing Lost Canyon Road. The Alternative Access – Bridge over Santa Clara River Alternative would extend Oak Spring Canyon Road northward from Lost Canyon Road and would construct a bridge over the Santa Clara River, connecting the project site to Soledad Canyon Road with the intention of reducing traffic along Lost Canyon Road and providing an additional access across the river. This alternative would continue to allow for the full density of the proposed development, but would alter the existing proposed access. Although this alternative would reduce the number of new vehicles along Lost Canyon Road, it would increase impacts related to biological resources and potential jurisdictional wetlands and waters due to increased impacts to the Santa Clara River. The project site would extend into more sensitive portions of the Santa Clara River Significant Ecological Area (SEA).

5.3.2.1 Special-Status Species

Three special-status fish species (Santa Ana sucker, unarmored threespine stickleback, and arroyo chub) have moderate potential to occur in the Santa Clara River. Bridge construction could result in temporary direct impacts to these species and long-term indirect impacts to aquatic habitat through changes to river hydrology caused by bridge piers, including increased sedimentation, turbidity, and flow disruption, as well as risks associated with construction equipment, diversion structures, and pollutants. Because the project, as currently designed, would avoid direct impacts to these species, the bridge would introduce new impacts requiring additional mitigation measures. Construction noise, lighting, and ground disturbance could disrupt wildlife movement within the Santa Clara River corridor, which has been identified in the Santa Clarita Valley Area Plan as one of the most important wildlife movement zones in Los Angeles County and may require measures such as timing restrictions or noise controls. Pile driving, if required, could also disturb nearby nesting birds. In the long term, bridge-related traffic, noise, and lighting could reduce the effectiveness of this east–west wildlife corridor and discourage wildlife use and bird nesting within the river wash.

5.3.2.2 Riparian Habitat and Sensitive Vegetation

The Santa Clara River supports relatively intact alluvial sage scrub, riparian woodland, and southern riparian scrub communities. Construction of the bridge would disturb approximately two acres of riparian vegetation and sensitive scale broom scrub within the river channel, resulting in the loss of nesting and foraging habitat and potentially facilitating the spread of invasive plant species. These areas are ecologically important, including dry channel zones that contribute to the genetic isolation of the unarmored threespine stickleback population upstream.

5.3.2.3 Jurisdictional Waters

The Santa Clara River wash and its riparian habitat are regulated as waters of the state by the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW), while the floodplain falls under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Bridge construction would result in approximately 1.7 acres of permanent impacts to jurisdictional waters from bridge footings, access roads, and soil-cement bank protection along the embankments, as well as permanent shading of the riverbed from the bridge deck that could inhibit vegetation growth. Temporary construction activities, including equipment staging and access, would disturb an additional approximately 1.1 acres. These impacts would represent a substantial increase compared to the currently proposed project.

5.3.2.4 Significant Ecological Areas

The bridge site lies within the Santa Clara River SEA designated by the County of Los Angeles (County) and City of Santa Clarita (City) to protect sensitive habitats and species associated with the river. Construction and operation of the bridge would remove riparian habitat and could affect sensitive wildlife species, raising potential conflicts with SEA protection policies. The Santa Clara River and its tributaries support the only natural population of the federally endangered unarmored threespine stickleback; therefore, bridge construction could result in temporary direct impacts during construction and long-term indirect habitat impacts to this species.

In addition to the impacts related to biological resources and potential jurisdictional wetlands and waters discussed above, this alternative would also result in several off-site impacts associated with the proposed bridge improvements. The north bridge abutment would affect Assessor Parcel Number (APN) 2840-007-029, a parcel not under the applicant's control, due to grading and elevation differences between the

proposed bridge roadway surface and the existing facility driveways and building pads. These changes would result in impacts to existing structures, with the total disturbance on this property estimated at approximately 0.5 acre. The south bridge abutment would similarly affect APN 2840-007-030 as a result of required bank protection, an access road, and associated grading, resulting in approximately 0.4 acre of impact to that parcel. In addition, the bridge crossing would extend across property owned by the City (APNs 2840-007-902 and 2840-001-907), where bank protection improvements both upstream and downstream, along with access and grading activities, would occur. The bridge improvements could also create potential upstream effects by increasing water surface elevations and expanding the width of the floodplain, which may affect additional upstream properties.

Based on the above considerations, the Alternative Access – Bridge over Santa Clara River Alternative is infeasible and would not meet the basic project objectives. Therefore, this alternative was eliminated from further discussion in accordance with CEQA Guidelines § 15126.6(c).

5.3.3 Alternative Location

Under the Alternative Location Alternative, the project would not be developed on the proposed 193.8-acre project site and would instead be developed at another location within the City. An alternative location would need to be large enough to accommodate 341 age-restricted, detached single-family homes; a recreation center; public and private trails; and open space. There is potential that alternative locations would include similar physical and environmental constraints as the project site (e.g., presence of oak tree habitat, riparian habitat), as well as other constraints not presented on the project site. Unless an alternative location were to be identified within the City, the Alternative Location Alternative would not meet the basic project objectives, related to constructing development that aligns with the City's vision for balanced urban growth, housing diversity, sustainable land use, interconnecting trail networks, and protection of sensitive natural resources.

Based on the above considerations, the Alternative Location Alternative would not be feasible and would not meet the basic project objectives. Therefore, this alternative was eliminated from further discussion in accordance with CEQA Guidelines § 15126.6(c).

5.4 ALTERNATIVES IMPACTS ANALYSIS

Criteria used to develop preliminary project alternatives included: 1) whether the alternative would avoid or substantially lessen significant impacts to each environmental resource area analyzed within the EIR; 2) whether the alternative would generally meet the project objectives and underlying fundamental purpose; and 3) whether implementation of the alternative would be feasible. Specific preliminary project alternatives are described in further detail below.

5.4.1 No Project/No Build Alternative

CEQA Guidelines § 15126.6(e) requires analysis of the No Project/No Build Alternative. In accordance with the CEQA Guidelines, the No Project/No Build Alternative for a development project on an identifiable property consists of the circumstances under which the project does not proceed as provided by CEQA Guidelines § 15126.6(e)(3)(B). This states that "[i]n certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Additionally, "[t]he 'no project' analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

Under the No Project/No Build Alternative, the development of a gated senior community and associated improvements would not occur at the project site, and the existing physical conditions of the areas within the boundaries of the project would generally remain in their current state. As a result, the 193.8-acre project site would remain predominantly undeveloped, and the approximately 14-acre off-site improvement area would remain partially developed and disturbed as existing roadways and trails. This alternative assumes no development would occur on the project site to provide a clear comparison of the project to existing (undeveloped) baseline conditions.

5.4.1.1 Relationship to Project Objectives

The No Project/No Build Alternative would only partially meet two project objectives and would not achieve the remaining five objectives. Table 5-2 presents this alternative's ability to attain the project objectives outlined in Section 5.2.1, *Project Objectives*, and in Chapter 2, *Project Description*.

Table 5-2. Attainment of Objectives—No Project Alternative

Objective	Does the Alternative Attain the Objective?
Develop a planned, age-qualified (55+) residential community that aligns with the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.	**No.** This alternative would not develop a planned, age-qualified (55+) residential community that aligns with the City's vision.
Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.	**No.** This alternative would not integrate a new community into the City's existing and planned circulation network.
Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.	**No**. This alternative would not establish a comprehensive suite of recreational and wellness-oriented amenities.
Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.	**No.** This alternative would not create an interconnected trail network that connects with the City's regional trail system.
Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.	**No.** This alternative would not designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.	**Partially.** This alternative would minimize impacts to natural resources; however, it would not allow for any development on-site.
Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.	**Partially.** This alternative would minimize impacts to natural resources; however, it would not allow for the development of community spaces on-site.

5.4.1.2 Comparison of Significant Effects of Alternatives

The No Project/No Build Alternative would not implement the project. No project-related construction activities would occur, and there would be no changes to the existing land use types or operational characteristics of the project site.

The No Project/No Build Alternative would not contribute to cumulative impacts for the environmental issue areas examined in this EIR, as the project would not be implemented. Cumulative impacts are not discussed further for the No Project/No Build Alternative.

AESTHETICS

In the No Project/No Build Alternative, the project would not be implemented, and the existing project site would remain as is under current conditions. Consequently, views of, and from, the project site would remain unchanged. This alternative would not have a substantial effect on a scenic vista or damage scenic resources within a State Scenic Highway, as no such resources have been identified within the vicinity of the project site and no change to the existing visual character of the project site and surroundings would occur. This alternative would avoid the project's potential to result in changes to or the addition of new sources of light and glare on the project site.

Therefore, impacts of the No Project/No Build Alternative related to aesthetics would be *decreased* in comparison to the project.

AGRICULTURAL RESOURCES

In the No Project/No Build Alternative, the project would not be implemented. The project site does not contain any protected Farmland under Public Resources Code (PRC) § 21060.1. Accordingly, this alternative, like the project, would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses, as no development would occur. Additionally, the project site is not subject to an active Williamson Act contract. This alternative would not have a water demand as no development would occur.

Therefore, impacts of the No Project/No Build Alternative related to agricultural resources would be *similar* in comparison to the project.

AIR QUALITY

The No Project/No Build Alternative would not develop a gated senior community and associated off-site improvements within the project area, and no construction activities associated with these improvements would occur. This alternative would avoid the project's construction-related air pollutant emissions and would not require the project's mitigation measure related to construction period diesel particulate matter (PM) concentrations. In addition, there would be no changes to the operational characteristics of the project site in this alternative, thereby avoiding the project's operation-related air pollutant emissions. Given this, the No Project/No Build Alternative would not conflict with an applicable air quality plan, generate short- or long-term criteria pollutant emissions in exceedance of the South Coast Air Quality Management District (SCAQMD) significance thresholds, expose sensitive receptors to substantial concentrations of pollutant emissions, or result in adverse odors or other emissions.

Therefore, impacts of the No Project/No Build Alternative related to air quality would be *decreased* in comparison to the project.

BIOLOGICAL RESOURCES

Under the No Project/No Build Alternative, the project area would remain unchanged, and all biological resources present on-site would remain as is under current conditions. This alternative would avoid the project's potential adverse effects to the Crotch's bumble bee, California legless lizard, southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard, slender mariposa lily, and Peirson's morning glory, such that this alternative would not have a substantial effect

on any species identified as a candidate, sensitive, or special-status species. This alternative would also avoid the project's impacts on riparian habitat, sensitive natural communities, nesting birds, nesting bird habitats, and federally protected wetlands. Since no construction activities would occur under this alternative, this alternative would also avoid the project's impacts on resident or migratory wildlife corridors and Santa Clara River SEA resources. In addition, this alternative would not require removing or relocating the existing oak trees on-site and would not conflict with the City of Santa Clarita Oak Tree Preservation Ordinance. Lastly, this alternative would not conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP. This alternative would not require the project's mitigation measures related to biological resources. However, the No Project/No Build Alternative would not preclude future development on the site. Such future proposals may not include a permanent Conservation Area to preserve a portion of the site, as proposed under the current project.

Therefore, the impacts of the No Project/No Build Alternative related to biological resources would be *decreased* in comparison to the project.

CULTURAL RESOURCES

Under the No Project/No Build Alternative, the project site would remain unchanged, and no modifications would be made to historical resources. The No Project/No Build Alternative would not include any ground-disturbing activities, and the project site would remain unchanged. There would be no potential to disturb known or unknown archaeological resources, including human remains. This alternative would not require the project's mitigation measure related to archaeological resources.

Therefore, the impacts of the No Project/No Build Alternative related to cultural resources would be *decreased* in comparison to the project.

ENERGY

The No Project/No Build Alternative would not result in development within the project site, and no construction activities, including grading or other earthwork activities, associated with these improvements would occur. No electricity or fuel usage would occur at the project site. Therefore, this alternative, like the project, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Therefore, impacts of the No Project/No Build Alternative related to energy would be *decreased* in comparison to the project.

GEOLOGY AND SOILS

The No Project/No Build Alternative would not result in development within the project site and no construction activities, including grading or other earthwork activities, associated with these improvements would occur. Therefore, this alternative would not cause or accelerate seismic and geologic hazards, including surface fault rupture, strong seismic ground motion, seismically induced settlement due to liquefaction or landslides, soil erosion, lateral spreading, subsidence, and expansive soils. This alternative would not require the project's mitigation measure related to liquefaction. Additionally, since grading and earthwork activities would not occur under this alternative, the potential to uncover subsurface paleontological resources would not occur, and this alternative would not require the project's mitigation measures related to paleontological resources.

Therefore, impacts of the No Project/No Build Alternative related to geology and soils would be *decreased* in comparison to the project.

GREENHOUSE GAS EMISSIONS

Under the No Project/No Build Alternative, no construction-related emissions or changes to the operational characteristics of the project site would occur. Therefore, this alternative would not generate new GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Given that the 193.8-acre project site would remain predominantly undeveloped, and the approximately 14-acre off-site improvement area would remain partially developed and disturbed as existing roadways and trails, this alternative would not conflict with an applicable plan, policy, or regulation adopted to reduce GHG emissions.

Therefore, impacts of the No Project/No Build Alternative related to GHG emissions would be *decreased* in comparison to the project.

HAZARDS AND HAZARDOUS MATERIALS

Under the No Project/No Build Alternative, no new demolition or construction activities would occur, and the project would not be implemented. This alternative would not result in construction-related activities that would uncover subsurface hazards (i.e., arsenic-impacted soils) or create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Therefore, this alternative would not require the project's mitigation measures to address impacts associated with hazardous materials during construction. Without implementation of the project's mitigation measures, arsenic-impacted soils at concentrations above residential screening levels would remain on-site. This alternative would not result in hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school, nor would it create a significant hazard to the public or the environment as the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Further, and consistent with the project, this alternative would not be developed within two miles of a public airport or public-use airport and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Therefore, impacts of the No Project/No Build Alternative related to hazards and hazardous materials would be *decreased* in comparison to the project.

HYDROLOGY AND WATER QUALITY

The No Project/No Build Alternative would not redevelop the project site and no construction activities, including grading or other earthwork activities, associated with these improvements would occur. Therefore, no construction-related impacts would occur related to violating water quality standards and waste discharge requirements; decreasing groundwater supplies or interfering with groundwater recharge; altering drainage patterns, resulting in substantial erosion or siltation, flooding, and/or the creation of runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or impede or redirect flood flows; risk releasing pollutants due to project inundation; and conflicting with or obstructing the implementation of a water quality control plan.

Under the No Project/No Build Alternative, there would be no changes to the amount of impervious or pervious surfaces on the project site, and no modifications to the existing drainage patterns would be made. This alternative would not implement the project's proposed low impact development (LID) best management practices (BMPs): remove obstructions, debris, and trash from the bioretention area and dispose of properly; inspect bioretention area to ensure that it drains between storms and within five days after rainfall; inspect inlets for channels, soil exposure, or other evidence of erosion; remove and replace all dead and diseased vegetation; maintain vegetation and the irrigation system; check that mulch is at the appropriate depth (three inches per soil specifications) and replenish as necessary before the wet season

begins; and inspect bioretention area using the inspection checklist. However, even without the benefit of the project's LID BMPs, impacts from this alternative would be decreased when compared to those of the project.

Therefore, impacts of the No Project/No Build Alternative related to hydrology and water quality would be *decreased* in comparison to the project.

LAND USE AND PLANNING

Under the No Project/No Build Alternative, the project site would remain in its current condition, and no modifications to the project site would occur. Like the project, this alternative would not physically divide an established community. Since this alternative would not result in physical changes to the existing project site or its operational characteristics, it would not result in impacts related to the division of an established community. However, the City's Housing Element identifies sites within the City, including this site, to help meet regional housing needs. As such, while the No Project/No Build Alternative would avoid physical changes to the site, it would not implement the Housing Element's objective of facilitating residential development on identified housing opportunity sites.

Therefore, the impacts of the No Project/No Build Alternative related to land use and planning would be *similar* in comparison to the project.

MINERAL RESOURCES

Under the No Project/No Build Alternative, the project site would remain in its current condition and no modifications to the project site would occur. The project site is classified as Mineral Resource Zone (MRZ)-2 and MRZ-3; however, this alternative, like the project, would not interfere with any existing or future mineral aggregate resource or oil production. Further, the project site is not located in a Mineral/Oil Conservation Area (MOCA) Overlay Zone; therefore, implementation of this alternative, like the project, would not interfere with any existing or future mineral aggregate or oil production, nor conflict with any local general plan, specific plan, or other land use plan.

Therefore, the impacts of the No Project/No Build Alternative related to mineral resources would be *similar* in comparison to the project.

NOISE AND VIBRATION

Under the No Project/No Build Alternative, there would be no construction-related noise or changes to the operational characteristics of the project site. Thus, this alternative would not require the project's mitigation measure to reduce construction-related noise as it would not generate a substantial temporary or permanent increase in noise levels near the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. In addition, the No Project/No Build Alternative would not result in the generation of excessive ground-borne vibration or ground-borne noise levels. Similar to the project, this alternative would not be near a private airstrip or within the boundaries of an airport land use plan.

Therefore, the impacts of the No Project/No Build Alternative related to noise and vibration would be *decreased* in comparison to the project.

POPULATION AND HOUSING

Under the No Project/No Build Alternative, the project site would remain in its current condition, and no modifications to the project site would occur. This alternative would not induce substantial or unplanned

population growth and would not conflict with SCAG population and housing projections. This alternative, like the project, would not displace existing people or housing. As described above, this alternative would not further the City's General Plan vision or Housing Element goals.

Therefore, the impacts of the No Project/No Build Alternative related to population and housing would be *decreased* in comparison to the project.

PUBLIC SERVICES

Under the No Project/No Build Alternative, the project site would remain in its current condition and no modifications to the project site would occur. This alternative would not induce substantial or unplanned population growth in a manner that could substantially increase demand on the Los Angeles County Fire Department (LACoFD), Los Angeles County Sheriff's Department (LASD), recreational facilities, or on other governmental facilities.

Therefore, the impacts of the No Project/No Build Alternative related to public services would be *decreased* in comparison to the project.

RECREATION

The No Project/No Build Alternative would not result in a new or permanent population at the project site; therefore, it would not result in an associated increase in the use of nearby existing parks and recreational facilities such that substantial physical deterioration of any one facility would occur or be accelerated. Since the project site would remain under current conditions, this alternative would not result in any additional adverse physical effects on the environment. As with the project, this alternative would continue to provide publicly accessible trails within the approximately 14-acre off-site improvement area; however, it would not develop a recreation center, private trails, preserved open space dedicated to the City, or public trails and a public trailhead that would connect to the City's existing trail network.

Therefore, the impacts of the No Project/No Build Alternative related to recreation would be *similar* in comparison to the project.

TRANSPORTATION

Under the No Project/No Build Alternative, there would be no construction-related trips or changes to the operational characteristics of the project site. This alternative would not result in any new conflict with a project plan, ordinance, or policy addressing the circulations system or an applicable congestion management program. This alternative would also avoid the project's estimated net increase in vehicle miles traveled (VMT), as no changes to current conditions would occur. This alternative would not substantially increase hazards due to a design feature and would not result in inadequate emergency access, as existing conditions would remain.

Therefore, the impacts of the No Project/No Build Alternative related to transportation would be *decreased* in comparison to the project.

TRIBAL CULTURAL RESOURCES

The No Project/No Build Alternative would not include any ground-disturbing activities and the project site would remain unchanged. There would be no potential to disturb known or unknown tribal cultural resources, including human remains.

Therefore, the impacts of the No Project/No Build Alternative related to tribal cultural resources would be *decreased* in comparison to the project.

UTILITIES AND SERVICE SYSTEMS

In the No Project/No Build Alternative, the project would not be implemented, and the project site would remain as is under current conditions. Therefore, this alternative would not require or result in relocating or constructing new or expanded water or wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities; affect the water supplies available to the project site; result in a determination by the wastewater treatment provider that it has inadequate capacity to serve the project; generate solid waste in excess of state or local standards; and oppose federal, state, or local management and solid waste reduction statutes and regulations.

Therefore, the impacts of the No Project/No Build Alternative related to utilities and service systems would be *decreased* in comparison to the project.

WILDFIRE

In the No Project/No Build Alternative, the project would not be implemented, and the project site would remain as is under current conditions. This alternative would result in a higher concentration of vegetation (fuels) compared to the project, increasing the risk of wildfire hazards.

Therefore, the impacts of the No Project/No Build Alternative related to wildfire would be *increased* in comparison to the project.

5.4.2 Alternative 2: Reduced Development Alternative, Avoidance of Sensitive Habitats

The project includes the development of a gated senior residential community on a 193.8-acre site. Project components would include 341 age-restricted, detached single-family residences; a centrally located recreation center; and an integrated network of public and private trails; approximately 87.2 acres of the project site would be developed to accommodate these uses. The remaining 106.6 acres would be permanently preserved and managed as open space, with the primary objective of protecting sensitive on-site biological resources and maintaining existing natural landscape features. While this alternative would reduce the potential development footprint, it would include the same number of units as the project.

Alternative 2, Reduced Development Alternative, Avoidance of Sensitive Habitats, would minimize impacts to biological resources by consolidating the same overall residential density into a smaller development footprint and modifying the project site layout. Because this alternative would result in a smaller development footprint, the extent of disturbance to sensitive vegetation communities would decrease. By consolidating development and avoiding sensitive habitat areas where feasible, Alternative 2 would increase the amount of land retained as open space and enhance opportunities for long-term preservation and management of natural resources, including oak woodlands, riparian areas, and other sensitive habitats present on-site.

Biological resources mapping indicates that the project area contains nine distinct sensitive vegetation communities (Dudek 2026). These communities represent regionally important habitats and contribute to local biodiversity. The sensitive vegetation communities identified within the project boundaries include:

- *Encelia californica* Association
- *Populus fremontii – Salix laevigata* Association
- *Populus fremontii* Association
- *Rhus aromatica* Association

- *Artemisia tridentata ssp. parishii* Association
- *Eriogonum fasciculatum – Artemisia tridentata* Association
- *Lepidospartum squamatum – Eriogonum fasciculatum* Association
- *Lepidospartum squamatum – Atriplex canescens* Association
- *Prunus ilicifolia ssp. ilicifolia* Association

Under the current project design, development areas intersect with portions of all nine sensitive vegetation communities. Specifically, 175 residential lots, in addition to the proposed recreation center lot, overlap with these sensitive habitats. Direct impacts would include vegetation removal, grading, and long-term land use conversion within affected areas.

Reducing the project's development footprint to avoid sensitive habitat would require several design changes. Lost Canyon Road would still be extended, resulting in some sensitive habitat impacts, and the proposed water line would continue to extend south through the Sand Canyon Golf Course along the J Street alignment, also affecting sensitive habitat. Overall, efforts to avoid and minimize sensitive habitat would reduce the developable footprint by approximately 52% and decrease sensitive habitat impacts by about 31 acres. To maintain the proposed unit count while accommodating other site constraints such as drainage, fuel modification zones, and Robinson Ranch Road access, residential density would need to increase from approximately 3.7 dwelling units per acre to about 8.5 to nine dwelling units per acre. This shift would likely require a change in housing product type to smaller lots with small-lot single-family homes on lot sizes of approximately 3,000 to 4,000 square feet. The project includes one-story homes with a second-story option; this alternative would likely require additional height and floors for homes. Concentrating development within the remaining buildable area would also result in increased oak tree impacts, with an estimated additional 15 trees affected, six of which are heritage oaks.

5.4.2.1 Relationship to Project Objectives

Table 5-3 presents this alternative's ability to attain the project objectives outlined in Section 5.2.1, *Project Objectives*, and in Chapter 2, *Project Description*.

Table 5-3. Attainment of Objectives— Reduced Development Alternative, Avoidance of Most Sensitive Habitats

Objective	Does the Alternative Attain the Objective?
Develop a planned, age-qualified (55+) residential community that aligns with the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.	**Yes.** Alternative 2 would continue to develop an age-qualified (55+) residential community that meets the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.
Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.	**Yes.** Alternative 2 would integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.	**Yes.** Alternative 2 would establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.

Objective	Does the Alternative Attain the Objective?
Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.	**Partially.** Alternative 2 would create an interconnected trail network that connects with the City's regional trail system; however, the trail network would be potentially reduced due to the requirement to avoid sensitive vegetation communities.
Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.	**Yes.** Alternative 2 would identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.	**Yes.** Alternative 2 would minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.	**Partial.** Alternative 2 would preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, however, concentrating development within the remaining buildable area would result in increased oak tree impacts compared to the project, with an estimated additional 15 trees affected, six of which are heritage oaks.

5.4.2.2 Comparison of Significant Effects of Alternatives

Alternative 2 would result in similar types of construction activities, duration, and equipment as the project. Upon project completion, this alternative would result in similar land uses and operational activities as proposed by the project.

AESTHETICS

Alternative 2 would result in the development of a gated senior residential community on a 193.8-acre site; however, only approximately 41.9 acres of the project site would be developed to accommodate these uses, compared to the approximately 87.2 acres of the project site that would be developed under the project. Like the project, this alternative's changes in the project site would be visible directly from adjacent off-site locations, including residential buildings. Like the project, this alternative would not have a substantial effect on a scenic vista or damage scenic resources within a State Scenic Highway, as no such resources have been identified near the project site. While this alternative would result in a reduced development footprint, in order to achieve the existing unit count and maintain other perimeter constraints, the density increase could result in a clustered development pattern, such as small-lot subdivision. Like the project, implementation of this alternative would change the overall project site and result in modifications to the visual characteristics of the project site, but not in such a way that would adversely alter or degrade the existing visual character or scenic quality of the project site, and would be consistent with the applicable policies governing scenic quality in City plans. This alternative would create new sources of light and glare, similar to the project; however, the light and glare would be condensed into a smaller footprint. In addition, this alternative would not contribute to cumulative impacts related to aesthetics. However, shifting to smaller lots or a more clustered development pattern, could result in taller structures compared to the project. Increased building height associated with these housing types could result in greater visual impacts than those anticipated under the project.

Therefore, the impacts of Alternative 2 related to aesthetics would be *similar* in comparison to the project.

AGRICULTURAL RESOURCES

Alternative 2 would result in a reduced development footprint compared to the project. The project site does not contain any protected Farmland under PRC § 21060.1, and this alternative, like the project, would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. Further, the project site is not subject to an active Williamson Act contract. This alternative's water demand would be similar to that of the project, as the unit count would remain the same. In addition, this alternative would not contribute to cumulative impacts related to agricultural resources.

Therefore, the impacts of Alternative 2 related to agricultural resources would be *similar* in comparison to the project.

AIR QUALITY

Alternative 2 would result in similar types of construction activities, duration, and equipment as the project, as the unit count for this alternative would remain as 341 units, like the project. Upon project operation, this alternative would result in similar land uses as proposed by the project, except for the smaller footprint. Like the project, this alternative would be subject to consistency with the air quality standards and the land use assumptions identified in the SCAQMD's Air Quality Management Plan (AQMP) and SCAG's regional plans and policies. As identified for the project, this alternative would also implement a mitigation measure to reduce construction-related air pollutant emissions. Operational emissions would be similar when compared to the project given the unit count would be the same. Similar to the project, this alternative would not conflict with an applicable air quality plan, generate short- or long-term criteria pollutant emissions in exceedance of the SCAQMD significance thresholds, expose sensitive receptors to substantial concentrations of pollutant emissions, or result in adverse odors or other emissions. In addition, this alternative would not contribute to cumulative impacts related to air quality.

Therefore, the impacts of Alternative 2 related to air quality would be *similar* in comparison to the project.

BIOLOGICAL RESOURCES

Alternative 2 would result in similar types of construction activities, duration, and equipment as the project; however, the overall area of ground disturbance during the construction of this alternative would be reduced compared to that of the project. Future operational conditions under this alternative would result in similar land uses as proposed by the project.

Thus, this alternative, like the project, could result in adverse effects during the construction process on special-status species, riparian habitat and sensitive vegetation communities, jurisdictional waters, and SEAs, either directly or through habitat modifications, as described further below. In addition, concentrating development within the remaining buildable area would also result in increased oak tree impacts, with an estimated additional 15 trees affected, six of which are heritage oaks. Like the project, this alternative would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. In addition, this alternative would not contribute to cumulative impacts related to biological resources.

Special-Status Species

Crotch's bumble bee is a generalist forager and could occur anywhere on the project site where floral resources are available. Because Alternative 2 would preserve more sensitive vegetation communities than the project, direct impacts to this species would likely be reduced. However, mitigation measures would still likely be required to reduce impacts to less than significant.

Under both the project and Alternative 2, five reptile species (California legless lizard, southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard) and one mammal (San Diego black-tailed jackrabbit) could be directly affected. Habitat loss alone does not constitute a substantial adverse effect; however, these species may be susceptible to injury or mortality during vegetation clearing and ground-disturbing construction activities. Because Alternative 2 would reduce the overall development footprint, impacts to these species would also be reduced.

Similarly, the reduced development footprint under Alternative 2 would lessen direct impacts to special-status birds, including Cooper's hawk, southern California rufous-crowned sparrow, and Bell's sage sparrow, though mitigation measures would still be required to reduce impacts to less than significant.

Riparian Habitat and Sensitive Vegetation Communities

The footprint of Alternative 2 would impact approximately nine acres (a reduction of approximately 31 acres) of the following sensitive vegetation communities:

- *Artemisia tridentata* ssp. *parishii* Association
- *Encelia californica* Association
- *Eriogonum fasciculatum* - *Artemisia tridentata* Association
- *Lepidospartum squamatum* - *Eriogonum fasciculatum* Association
- *Populus fremontii* Association
- *Prunus ilicifolia ssp. ilicifolia* Association

All direct impacts to the following sensitive vegetation communities would be avoided under Alternative 2:

- *Lepidospartum squamatum* - *Atriplex canescens* Association
- *Populus fremontii* - *Salix laevigata* Association
- *Rhus aromatica* Association
- *Typha* (*angustifolia*, *domingensis*, *latifolia*) Alliance

Jurisdictional Waters

Alternative 2 would avoid most jurisdictional waters. The reduced development footprint would avoid the majority of non-wetland waters regulated by CDFW and RWQCB in the southern portion of the project site and would continue to avoid non-wetland waters regulated by CDFW, RWQCB, and USACE in the northeastern portion of the project site, consistent with the project. In addition, Alternative 2 would avoid most riparian habitat regulated by CDFW in the southwestern portion of the project site.

Significant Ecological Areas

Implementation of Alternative 2 would reduce development within the Santa Clara River SEA. Because most of the project site lies within this SEA, impacts to the SEA would be reduced compared to the project. However, mitigation measures would still be required to reduce impacts to less than significant due to the remaining development proposed under Alternative 2.

Therefore, the impacts of Alternative 2 related to biological resources would be *decreased* in comparison to the project.

CULTURAL RESOURCES

Alternative 2 would alter the existing physical conditions of the areas within the boundaries of the project site; however, similar to the project, Alternative 2 would not cause a substantial adverse change in the significance of a historical resource. No historic resources eligible for listing on the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or City's List of Historic Resources, either individually or as a contributing element to an existing historic district or a potential linear historic district are located within a 1-mile radius of the project site.

Alternative 2 would include grading, excavation, and other earthwork activities throughout a reduced footprint as compared to the project. However, there would be similar potential to disturb known or unknown archaeological resources, including human remains, within the project site. This alternative would implement the same project mitigation measure to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to cultural resources.

Therefore, the impacts of Alternative 2 related to cultural resources would be *decreased* in comparison to the project.

ENERGY

Alternative 2 would result in similar types of construction activities, duration, and equipment as the project, as the unit count for this alternative would remain as 341 units, like the project. Upon project operation, this alternative would result in similar land uses as proposed by the project, except for the smaller footprint, which would result in similar electricity and fuel usage as the project. Like the project, this alternative would be subject to the California Building Energy Efficiency Standards (24 California Code of Regulations [CCR] Part 6), California Green Building Standards Code (CALGreen) (24 CCR Part 11), and California Air Resources Board's (CARB) *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan). Therefore, this alternative, like the project, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. In addition, this alternative would not contribute to cumulative impacts related to energy.

Therefore, the impacts of Alternative 2 related to energy would be *similar* in comparison to the project.

GEOLOGY AND SOILS

Alternative 2 would include grading, excavation, and other earthwork activities at a reduced extent to that proposed by the project. Like the project, this alternative would be subject to all applicable regulations, including the applicable provisions in the Alquist-Priolo Earthquake Fault Zoning Act, Seismic Safety Act, Seismic Hazards Mapping Act, and California Building Code (CBC). As with the project, this alternative would not cause or accelerate seismic and geologic hazards, including surface fault rupture, strong seismic ground motion, seismically induced settlement due to liquefaction or landslides, soil

erosion, lateral spreading, subsidence, and expansive soils. This alternative would implement the same project mitigation measure to reduce potential impacts related to liquefaction to less-than-significant levels.

Similar to the project, all ground-disturbing activities associated with the construction of this alternative have the potential to impact subsurface paleontological resources within the project site. Paleontological resources may be impacted by the construction or implementation of this alternative regardless of the footprint of grading and/or excavation activities. Any fossils encountered during ground-disturbing activities could be at risk for damage or destruction from such activities depending on the nature of the fossil encountered. This alternative would require the implementation of the same project mitigation measure to reduce potential impacts on paleontological resources to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to geology and soils.

Therefore, the impacts of Alternative 2 related to geology and soils would be *decreased* in comparison to the project.

GREENHOUSE GAS EMISSIONS

Alternative 2 would result in similar types of construction activities, duration, and equipment as the project, as the unit count for the project would remain as 341 units, like the project. Upon project operation, this alternative would result in similar land uses as proposed by the project. Given that this alternative would result in similar construction and operational conditions as the project, this alternative would likely generate similar GHG emissions.

Given that the operation of the facilities at the project site under this alternative would be similar to the project, it would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions. This alternative would include the project's mitigation measures that would further the GHG reduction targets set forth in CARB's 2022 Scoping Plan related to building decarbonization. In addition, this alternative would not contribute to cumulative impacts related to GHG emissions.

Overall, the impacts of Alternative 2 related to GHG emissions would be *similar* in comparison to the project.

HAZARDS AND HAZARDOUS MATERIALS

Alternative 2 would include grading, excavation, and other earthwork activities at a reduced extent to that proposed by the project. However, when compared to the project, this alternative has similar potential for construction-related activities to uncover subsurface hazards (i.e., arsenic-impacted soils) and create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Therefore, this alternative would include the project's mitigation measures to address impacts associated with hazardous materials during construction.

Like the project, this alternative could result in hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. This alternative would also include the project's mitigation measures to address construction and operational impacts associated with this issue. This alternative would not create a significant hazard to the public or the environment on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Further, and consistent with the project, this alternative would not be developed within two miles of a public airport or public-use airport and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, with the implementation of the project's mitigation measures, this alternative would not contribute to cumulative impacts related to hazards and hazardous materials.

Therefore, the impacts of Alternative 2 related to hazards and hazardous materials would be *similar* in comparison to the project.

HYDROLOGY AND WATER QUALITY

Alternative 2 would include grading, excavation, and other earthwork activities at a reduced extent to that proposed by the project. While this alternative would result in the unit count for the project remaining at 341 units, the building footprint would be reduced, resulting in a decrease of impervious surfaces when compared to the project.

Like the project, this alternative would result in earthwork activities that would require soil to be excavated and transported off-site and similar dewatering practices as the project would occur under this alternative. Like the project, compliance with the requirements of the Los Angeles Regional Water Quality Control Board (LARWQCB) National Pollutant Discharge Elimination System (NPDES) Program and Porter-Cologne Water Quality Control Act (Porter-Cologne Act) waste discharge requirements, Construction General Permit, and City stormwater regulations would be sufficient to address the potential for the buildout of the project to violate water quality standards or waste discharge requirements during construction activities. This alternative would implement the seven LID BMPs in accordance with the Los Angeles County LID Standards Manual.

Similar to the project buildout, this alternative would not adversely affect local groundwater levels or deplete groundwater supplies. The project site is not in a flood hazard or tsunami zone and the risk of a seiche is low. Therefore, there would be no risk of releasing pollutants due to project inundation by these hazards, similar to the project. Lastly, given that this alternative would be subject to compliance with existing applicable regulatory requirements and would implement the project's LID BMPs, this alternative would not conflict with or obstruct implementing a water quality control plan or sustainable groundwater management plan. In addition, this alternative would not contribute to cumulative impacts related to hydrology and water quality.

Therefore, the impacts of Alternative 2 related to hydrology and water quality would be *similar* in comparison to the project.

LAND USE AND PLANNING

Alternative 2 would reduce the developable footprint by approximately 52%; residential density would need to increase from approximately 3.7 dwelling units per acre to about 8.5 to nine dwelling units per acre. This shift would likely require a change in housing product type to smaller lots or a clustered development pattern, such as single-family homes with lot sizes of approximately 3,000 to 4,000 square feet. This alternative may not be consistent with the applicable goals, objectives, and policies identified in the General Plan elements, as well as with the SCMC and SCAG 2020-2045 RTP/SCS. Multifamily residential uses, such as townhomes or detached condominiums, are not permitted in the Non-Urban 5 (NU5) and Urban Residential 1 (UR1) zones by the SCMC.

Like the project, this alternative would not physically divide an established community as all project activities would occur within the existing boundary of the project site and would not introduce features that would implement barriers or divide the established uses within the project area and the surrounding neighborhood. In addition, this alternative would not contribute to cumulative impacts related to land use and planning.

Therefore, the impacts of Alternative 2 related to land use and planning would be *increased* in comparison to the project.

MINERAL RESOURCES

Alternative 2 would result in a reduced development footprint compared to the project. The project site is classified as MRZ-2 and MRZ-3; however, this alternative, like the project, would not interfere with any existing or future mineral aggregate resource or oil production. Further, the project site is not located in an MOCA Overlay Zone; therefore, implementation of this alternative, like the project, would not interfere with any existing or future mineral aggregate or oil production, nor conflict with any local general plan, specific plan, or other land use plan. In addition, this alternative would not contribute to cumulative impacts related to mineral resources.

Therefore, the impacts of Alternative 2 related to mineral resources would be *similar* in comparison to the project.

NOISE AND VIBRATION

Alternative 2 would include similar types of construction activities and equipment as the project, as the unit count for this alternative would remain at 341 units. As such, construction of this alternative would generate similar noise levels as the project, which could affect noise-sensitive land uses. The project's mitigation measures would be included to reduce construction-related noise for the duration of the construction phase of this alternative, like the project. Once operational, this alternative, like the project, would establish stationary on-site noise sources at the project site as well as contribute to off-site roadway traffic noise. This alternative would include new stationary noise sources similar to the project, including roadway traffic noise sources, parking noise, and mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] equipment). Additionally, several outdoor amenities and sports courts are proposed in addition to the recreation center and single-family homes. A pickleball court, horseshoe pit, and dog park are proposed on the western portion of the project site adjacent to nearby noise-sensitive residential land uses. A pool and bocce ball courts would also be adjacent to the recreation center. Given that the project would result in similar operational residential-related uses, operational noise from this alternative would be similar to that of the project.

Like the project, this alternative would not result in the generation of excessive ground-borne vibration or ground-borne noise levels. Given that the project site is not near a private airstrip or within the boundaries of an airport land use plan, this alternative would have similar impacts related to airport noise as the project. In addition, this alternative would not contribute to cumulative impacts related to noise and vibration.

Therefore, the impacts of Alternative 2 related to noise would be *similar* in comparison to the project.

POPULATION AND HOUSING

Alternative 2 would include similar types of construction activities and equipment as the project, as the unit count for this alternative would remain at 341 units. Like the project, these proposed construction activities would not induce substantial or unplanned population growth. Like the project, this alternative would result in 341 new age-restricted units. Accordingly, the population and housing growth associated with this alternative would be similar to that of the project. This population and housing growth would be negligible and would not exceed the projected growth scenarios identified using SCAG population and housing projections. Like the project, this alternative is a residential development; therefore, this alternative would result in a negligible increase in employees, such as on-site security or recreation center management staff, and any population growth associated with new permanent employment opportunities would be negligible and would fall below SCAG growth projections. This alternative, like the project, would not displace existing people or housing. In addition, this alternative would not contribute to cumulative impacts related to population and housing.

Therefore, the impacts of Alternative 2 related to population and housing would be *similar* in comparison to the project.

PUBLIC SERVICES

Alternative 2 would result in similar population growth as the project, as the unit count would remain the same. Growth associated with this alternative, similar to the project, would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on the LACoFD or LASD. This alternative, like the project, would be subject to the payment of development impact fees to address the incremental increase in demand on fire and police department services. In addition, this alternative, like the project, would ultimately increase long-term safety at the project site because the new development would be built to current building and fire codes and the new land uses would include new security measures that would reduce the potential for long-term calls for police protection. This alternative, like the project, would develop age-restricted residential units and would not result in additional students that could affect school facilities. Given the nature of the proposed age-restricted housing, the on-site recreational opportunities are expected to reduce the demand for other nearby parks and trails within the City as new residents are not expected to regularly use off-site recreational facilities. As the proposed unit count would be the same as the project, this alternative would not result in growth in a manner that could substantially increase demand on other governmental facilities. In addition, this alternative would not contribute to cumulative impacts related to public services.

Therefore, the impacts of Alternative 2 related to public services would be *similar* in comparison to the project.

RECREATION

Alternative 2, similar to the project, would result in a new or permanent population that would use the project site for recreation and increase the use of nearby parks or recreational facilities. However, similar to the project, this alternative would provide a 3.1-acre recreation center and 3.7 miles of private trails that would provide ample recreational opportunities to new residents on-site. This alternative would reduce the project's development footprint to avoid sensitive habitat, resulting in an increase in undeveloped land within the project site. Therefore, it would not result in an associated increase in the use of nearby existing parks and recreational facilities such that substantial physical deterioration of any one facility would occur or be accelerated. Further, this alternative, similar to the project, would be subject to the payment of Quimby Fees, which require new residential developments to offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities in the City to serve residents. Since this alternative would result in the same open space improvements and enhancements as the project, this alternative would result in similar physical effects on the environment during construction. As with the project, this alternative would continue to provide publicly accessible open space areas within the project area. In addition, this alternative would not contribute to cumulative impacts related to recreation.

Therefore, the impacts of Alternative 2 related to recreation would be *similar* in comparison to the project.

TRANSPORTATION

Alternative 2 would include similar types of construction activities and equipment as the project, as the unit count for this alternative would remain at 341 units. Construction-related trips would be similar, therefore, when compared to the project. After developing this alternative, no changes to the operational characteristics of the project site would occur that would substantially increase the VMT to and from the project site. Thus, this alternative would have a similar estimated net increase in VMT as the project. To

minimize impacts associated with the J Street extension, the project's secondary access would instead be provided via Oak Spring Canyon Road. Similar to the project, this alternative would not result in a significant impact related to ensuring consistency with transportation plans, programs, ordinances, or policies. In addition, and similar to the project, this alternative would not include components that would substantially increase hazards due to a design feature. In addition, this alternative would not contribute to cumulative impacts related to transportation.

Therefore, the impacts of Alternative 2 related to transportation would be *similar* in comparison to the project.

TRIBAL CULTURAL RESOURCES

Alternative 2 would include grading, excavation, and other earthwork activities throughout a reduced footprint as compared to the project. However, there would be similar potential to disturb known or unknown tribal cultural resources, including human remains, within the project site. This alternative would implement the same project mitigation measures to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to tribal cultural resources.

Therefore, the impacts of Alternative 2 related to tribal cultural resources would be *decreased* in comparison to the project.

UTILITIES AND SERVICE SYSTEMS

Alternative 2 would result in a reduced development footprint; however, the proposed unit count and floor area ratio (FAR) would remain the same. Consequently, this alternative would result in similar demand for utilities and service systems as the project. Like the project, this alternative would connect to and use existing utilities and service systems surrounding the project site and nearby development. Like the project, water supply for the project would be provided by tying into a Zone 1976 16-inch water line at the southern tract boundary in Oak Spring Canyon Road, and a secondary connection would be made in Lost Canyon Road to a Zone 1797 8-inch water line, approximately 670 feet west of the project site. In addition, storage for Zone 1976 would need to be upgraded by adding a new 1-million-gallon tank at the existing off-site Live Oak Reservoir. This alternative would increase water demand and associated water use, which would be supplied by the Santa Clarita Valley Water Agency (SCVWA), in a similar capacity as the project. Thus, the impacts of this alternative related to the water supply would be similar to the project. This alternative would result in a similar wastewater generation as the project, which would represent a minimal increase in wastewater sent for treatment at the Santa Clarita Valley Joint Sewerage System (SCVJSS); therefore, the Los Angeles County Sanitation Districts (LACSD) would have adequate capacity to serve this alternative's projected demand. This alternative would also result in similar generation of solid waste due to the similar building square footage and unit count associated with this alternative and, like the project, would be consistent with the applicable regulations associated with solid waste and would promote compliance with the provisions of CALGreen and SCMC Chapter 15.44 (Integrated Waste Management). In addition, this alternative would not contribute to cumulative impacts related to utilities and service systems.

Therefore, the impacts of Alternative 2 related to utilities and service systems would be *similar* in comparison to the project.

WILDFIRE

Alternative 2 would result in the development of a gated senior residential community on a 193.8-acre site; however, only approximately 41.9 acres of the project site would be developed to accommodate these uses, compared to the approximately 87.2 acres of the project site that would be developed under the project. Alternative 2 would include similar types of construction activities and equipment as the project, as the unit count for this alternative would remain at 341 units. Like the project, any traffic controls and vehicle and equipment movement associated with construction of this alternative would be temporary in nature and would not result in long-term impacts. Similar to the project, this alternative would also include ignition-resistant construction and fuel modification zone (FMZ) setbacks and would implement the same Project Design Features. Like the project, proposed installation of internal roads, public utility easements, and utility infrastructure throughout the project site would be required to comply with the CFC, CBC, and applicable California Department of Forestry and Fire Protection (CAL FIRE) and requirements to ensure proper installation and expansion of associated infrastructure to avoid frequent maintenance or repair trips that may exacerbate fire risk and to avoid or minimize hazards associated with improper installation, including wildfire risk.

In terms of operation, the unit count would be similar to that of the project; however, the development footprint would be reduced, therefore resulting in a higher concentration of vegetation (fuels) compared to the project. Although the open space at the project site under this alternative would increase compared to the project, the proposed FMZs at the edges of the project perimeter adjacent to the open space areas would provide a buffer between fuels in the open space and structures within the project site in the same manner as the project. As discussed above, the unit count for this alternative would remain at 341 units; therefore, the evacuation conditions would be similar to that of the project and this alternative would have similar impacts associated with emergency response plans and evacuation plans during operation as the project. In addition, this alternative would not contribute to cumulative impacts related to wildfire.

Therefore, the impacts of Alternative 2 related to wildfire would be *similar* in comparison to the project.

5.4.3 Alternative 3: Existing Zoning Project

The project includes the development of a gated senior residential community on a 193.8-acre site. Project components would include 341 age-restricted, detached single-family residences; a centrally located recreation center; and an integrated network of public and private trails. Within the project site, 106.4 acres have a General Plan land use and zoning designation of UR1, and the remaining 87.4 acres are designated as NU5. The proposed infrastructure improvements associated with the project would be located within an area zoned as NU5 to the west of the project site, an area zoned as Open Space (OS) to the south of the project site, and within public rights-of-way throughout the project area, which have no zoning designations. The project would require Density Bonus waivers to develop the proposed dwelling units under the existing land use and zoning designations; however, no General Plan Amendment or zone change is required.

If the project were designed strictly in accordance with the physical zoning constraints of NU5 (minimum lot size of 43,560 square feet and minimum lot width of 100 feet) and UR1 (minimum lot size of 20,000 square feet and minimum lot width of 75 feet), the resulting development pattern would be substantially different from what maximum allowable density on-site would allow. Although hillside cross-slope density calculations indicate a potential yield of approximately 283 units, applying these zoning standards would reduce the feasible project to roughly 109 units. In order to meet minimum lot size requirements, the subdivision pattern would extend into areas that currently function as open space, including Oak Spring Canyon Creek and the oak grove along the northwestern project boundary. This configuration would decrease preserved open space to approximately 68.5 acres, compared to 106 acres under the project layout. The layout would also place three residential units north of the railroad tracks, resulting in

the loss of the designated emergency staging area, and would eliminate the planned trailhead. Additionally, off-site impacts to the property to the east would occur due to grading and fuel modification zone requirements, as well as development encroaching upon a significant ridgeline in the southeastern portion of the project site.

5.4.3.1 Relationship to Project Objectives

Table 5-4 presents this alternative's ability to attain the project objectives outlined in Section 5.2.1, *Project Objectives*, and in Chapter 2, *Project Description*.

Table 5-4. Attainment of Objectives— Existing Zoning Project

Objective	Does the Alternative Attain the Objective?
Develop a planned, age-qualified (55+) residential community that aligns with the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.	**Partially.** Alternative 3 would continue to develop an age-qualified (55+) residential community; however, the reduced density would not meet the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.
Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.	**Partially.** Alternative 3 would integrate a new community into the City's existing and planned circulation network. However, this alternative would result in the loss of the designated emergency staging area and would therefore not prioritize enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.	**Yes.** Alternative 3 would establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.
Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.	**No.** Alternative 3 would eliminate the planned trailhead, which was intended to provide trail connectivity to the proposed Lost Canyon Road trail and perimeter trail. Therefore, this alternative would not create an interconnected trail network that connects with the City's regional trail system.
Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.	**No.** Alternative 3 would result in the loss of the designated emergency staging area; therefore, it would not identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.	**No.** Alternative 3 would extend into areas that currently function as open space, including Oak Spring Canyon Creek and the oak grove along the northwestern project boundary. This alternative would also encroach upon a significant ridgeline in the southeastern portion of the project site. As such, this alternative would not minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.	**No.** Alternative 3 would extend into areas that currently function as open space, including Oak Spring Canyon Creek and the oak grove along the northwestern project boundary. Therefore, this alternative would not preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.

5.4.3.2 Comparison of Significant Effects of Alternatives

Alternative 3 would result in decreased types of construction activities, duration, and equipment as the project. Upon project completion, this alternative would result in similar land uses and operational activities as proposed by the project.

AESTHETICS

Alternative 3 would result in the development of a gated senior residential community on a 193.8-acre site. Like the project, this alternative's changes in the project site would be visible directly from adjacent off-site locations, including residential buildings. Like the project, this alternative would not have a substantial effect on a scenic vista or damage scenic resources within a State Scenic Highway, as no such resources have been identified near the project site. While this alternative would result in a reduced unit count, in order to achieve consistency with the existing zoning requirements of the NU5 and UR1 zones, the lot size increase would result in a greater development footprint compared to the project. This configuration would also decrease preserved open space to approximately 68.5 acres, compared to 106 acres under the project layout, and would require development to encroach upon a significant ridgeline in the southeastern portion of the project site. Implementation of this alternative would change the overall project site and result in modifications to the visual characteristics of the project site and could adversely alter or degrade the existing visual character or scenic quality of the project site. Additionally, grading would likely impact the significant ridgeline on site to accommodate increased lot sizes. This alternative may not be consistent with the applicable policies that govern scenic quality in City plans. This alternative would create new sources of light and glare, similar to the project; however, the light and glare would be reduced compared to the project. In addition, this alternative would not contribute to cumulative impacts related to aesthetics.

Therefore, the impacts of Alternative 3 related to aesthetics would be *increased* in comparison to the project.

AGRICULTURAL RESOURCES

Alternative 3 would result in an increased development footprint compared to the project but would remain within the boundaries of the project site. The project site does not contain any protected Farmland under PRC § 21060.1, and this alternative, like the project, would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. Further, the project site is not subject to an active Williamson Act contract. This alternative's water demand would be reduced compared to that of the project, as the unit count would be decreased by approximately 232 units. In addition, this alternative would not contribute to cumulative impacts related to agricultural resources.

Therefore, the impacts of Alternative 3 related to agricultural resources would be *decreased* in comparison to the project.

AIR QUALITY

Alternative 3 would result in reduced types of construction activities, duration, and equipment compared with the project, as the unit count for this alternative would be 109 units compared to the project's 341 units, resulting in a decrease of 232 units. Upon project operation, this alternative would result in similar land uses as proposed by the project, except for a larger development footprint throughout the boundaries of the project site. Like the project, this alternative would be subject to consistency with the air quality standards and the land use assumptions identified in the SCAQMD's AQMP and SCAG's regional plans and policies. This alternative would also implement a mitigation measure to reduce construction-related air pollutant emissions. Operational emissions would be decreased when compared to the project given

the unit count would be reduced by 232 units. This alternative would not conflict with an applicable air quality plan, generate short- or long-term criteria pollutant emissions in exceedance of the SCAQMD significance thresholds, expose sensitive receptors to substantial concentrations of pollutant emissions, or result in adverse odors or other emissions as the unit count proposed under this alternative would be lower than that of the project. In addition, this alternative would not contribute to cumulative impacts related to air quality.

Therefore, the impacts of Alternative 3 related to air quality would be *decreased* in comparison to the project.

BIOLOGICAL RESOURCES

Alternative 3 would result in reduced construction activities, duration, and equipment as the project. The overall area of ground disturbance during the construction of this alternative, however, would be greater compared to that of the project. In order to meet minimum lot size requirements, the subdivision pattern would extend into areas that currently are proposed as open space, including Oak Spring Canyon Creek and the oak grove along the northwestern project boundary. The configuration of this alternative would decrease preserved open space (both HOA-owned and dedicated to the City) to approximately 68.5 acres, compared to 106 acres under the project layout. Future operational conditions under this alternative would result in similar land uses as proposed by the project.

Thus, this alternative, like the project, could result in adverse effects during the construction process and during project operation on special-status species, riparian habitat and sensitive vegetation communities, jurisdictional waters, and SEAs, either directly or through habitat modifications, as described further below. Like the project, this alternative would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. In addition, this alternative would not contribute to cumulative impacts related to biological resources.

Special-Status Species

Crotch's bumble bee is a generalist forager and could occur anywhere on the project site where floral resources are available. Because Alternative 3 would result in a reduction of preserved open space containing sensitive vegetation communities compared to the project, direct impacts to this species would likely be increased. Like the project, mitigation would be required to reduce impacts to less than significant.

Under both the project and Alternative 3, five reptile species (California legless lizard, southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard) and one mammal (San Diego black-tailed jackrabbit) could be directly affected. Habitat loss alone does not constitute a substantial adverse effect. These species, however, may be susceptible to injury or mortality during vegetation clearing and ground-disturbing construction activities. Because Alternative 3 would increase the overall development footprint and decrease preserved open space, impacts to these species would be increased.

Similarly, the increased development footprint under Alternative 3 would increase direct impacts to special-status birds, including Cooper's hawk, southern California rufous-crowned sparrow, and Bell's sage sparrow. Like the project, mitigation would be required to reduce impacts to less than significant.

Riparian Habitat and Sensitive Vegetation Communities

The footprint of Alternative 3 would decrease preserved open space to approximately 68.5 acres, compared to 106 acres under the project layout, thereby impacting additional sensitive vegetation communities compared to the project.

Jurisdictional Waters

Alternative 3 would result in an increased development footprint, which could impact non-wetland waters regulated by CDFW and RWQCB in the southern portion of the project site and non-wetland waters regulated by CDFW, RWQCB, and USACE in the northeastern portion of the project site. In addition, Alternative 3 could impact riparian habitat regulated by CDFW in the southwestern portion of the project site.

Significant Ecological Areas

Implementation of Alternative 3 would result in an increased development footprint, which could impact development within the Santa Clara River SEA. Like the project, mitigation measures would be required to reduce impacts to less than significant.

Therefore, the impacts of Alternative 3 related to biological resources would be *increased* in comparison to the project.

CULTURAL RESOURCES

Alternative 3 would alter the existing physical conditions of the areas within the boundaries of the project site; however, similar to the project, Alternative 3 would not cause a substantial adverse change in the significance of a historical resource. No historic resources eligible for listing on the NRHP, CRHR, or City's List of Historic Resources either individually or as a contributing element to an existing historic district or a potential linear historic district are located within a 1-mile radius of the project site.

Alternative 3 would also include grading, excavation, and other earthwork activities throughout an increased development footprint as compared to the project. Accordingly, there would be increased potential to disturb known or unknown archaeological resources, including human remains, within the project site. This alternative would implement the same project mitigation measure to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to cultural resources.

Therefore, the impacts of Alternative 3 related to cultural resources would be *increased* in comparison to the project.

ENERGY

Alternative 3 would result in decreased types of construction activities, duration, and equipment as compared to the project, as the unit count for this alternative would decrease by 232 units. Upon project operation, this alternative would result in similar land uses as proposed by the project, but would result in decreased electricity and fuel usage as compared to the project. Like the project, this alternative would be subject to the California Building Energy Efficiency Standards (24 CCR Part 6), CALGreen (24 CCR Part 11), and CARB's 2022 Scoping Plan. Therefore, this alternative, like the project, would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency as the population generation would be reduced as compared to the project. In addition, this alternative would not contribute to cumulative impacts related to energy.

Therefore, the impacts of Alternative 3 related to energy would be *decreased* in comparison to the project.

GEOLOGY AND SOILS

Alternative 3 would include grading, excavation, and other earthwork activities at an increased extent compared to the project. Like the project, this alternative would be subject to all applicable regulations, including the applicable provisions in the Alquist-Priolo Earthquake Fault Zoning Act, Seismic Safety Act, Seismic Hazards Mapping Act, and CBC. As with the project, this alternative would not cause or accelerate seismic and geologic hazards, including surface fault rupture, strong seismic ground motion, seismically induced settlement due to liquefaction or landslides, soil erosion, lateral spreading, subsidence, and expansive soils. This alternative would implement the same project mitigation measure to reduce potential impacts related to liquefaction to less-than-significant levels.

Similar to the project, all ground-disturbing activities associated with the construction of this alternative have the potential to impact subsurface paleontological resources within the project site. Paleontological resources may be impacted by the construction or implementation of this alternative regardless of the footprint of grading and/or excavation activities. Any fossils encountered during ground-disturbing activities could be at risk for damage or destruction from such activities depending on the nature of the fossil encountered. This alternative would require the implementation of the same project mitigation measure to reduce potential impacts on paleontological resources to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to geology and soils.

Therefore, the impacts of Alternative 3 related to geology and soils would be *similar* in comparison to the project.

GREENHOUSE GAS EMISSIONS

Alternative 3 would result in decreased types of construction activities, duration, and equipment as compared to the project, as the unit count for this alternative would decrease by 232 units compared to the project. Upon project operation, this alternative would result in similar land uses as proposed by the project. Given that this alternative would result in decreased construction and operational conditions as compared to the project, this alternative would likely generate less GHG emissions.

Given that the operation of the facilities at the project site under this alternative would be reduced, it would not conflict with any applicable plan, policy, or regulation adopted to reduce GHG emissions. This alternative would include the project's mitigation measures that would further the GHG reduction targets set forth in CARB's 2022 Scoping Plan related to building decarbonization. In addition, this alternative would not contribute to cumulative impacts related to GHG emissions.

Therefore, the impacts of Alternative 3 related to GHG emissions would be *decreased* in comparison to the project.

HAZARDS AND HAZARDOUS MATERIALS

Alternative 3 would include grading, excavation, and other earthwork activities at an increased extent to that proposed by the project. When compared to the project, this alternative has greater potential for construction-related activities to uncover subsurface hazards (i.e., arsenic-impacted soils) and create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials as the building footprint would be expanded and preserved open space would be decreased to approximately 68.5 acres, compared to 106 acres under the project layout. This alternative would include the project's mitigation measures to address impacts associated with hazardous materials during construction.

Like the project, this alternative could result in hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school and would include the project's mitigation measures to address construction and operational impacts associated with this issue. This alternative would not create a significant hazard to the public or the environment on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Further, and consistent with the project, this alternative would not be developed within two miles of a public airport or public-use airport and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. In addition, this alternative would not contribute to cumulative impacts related to hazards and hazardous materials.

Therefore, the impacts of Alternative 3 related to hazards and hazardous materials would be *increased* in comparison to the project.

HYDROLOGY AND WATER QUALITY

Alternative 3 would include grading, excavation, and other earthwork activities at an increased extent to that proposed by the project. While this alternative would result in the unit count for the project decreasing to 109 units, overall building footprints would likely be increased, resulting in an increase of impervious surfaces when compared to the project.

This alternative would result in greater earthwork activities that would require soil to be excavated and transported off-site and increased dewatering practices as the building footprint would increase compared to the project. Like the project, compliance with the requirements of the LARWQCB NPDES Program and Porter-Cologne Act waste discharge requirements, Construction General Permit, and City stormwater regulations would be sufficient to address the potential for the buildout of the project to violate water quality standards or waste discharge requirements during construction activities. This alternative would implement the seven LID BMPs in accordance with the Los Angeles County LID Standards Manual.

This alternative could adversely affect local groundwater levels or deplete groundwater supplies as the building footprint would be increased compared to the project. However, given that this alternative would be subject to compliance with existing applicable regulatory requirements and would implement the project's LID BMPs, this alternative would not conflict with or obstruct implementing a water quality control plan or sustainable groundwater management plan. The project site is not in a flood hazard or tsunami zone and the risk of a seiche is low. Therefore, there would be no risk of releasing pollutants due to project inundation by these hazards, similar to the project. In addition, this alternative would not contribute to cumulative impacts related to hydrology and water quality.

Therefore, the impacts of Alternative 3 related to hydrology and water quality would be *increased* in comparison to the project.

LAND USE AND PLANNING

Alternative 3 would increase the developable footprint by increasing the lot size and minimum lot width to comply with the physical zoning constraints of the NU5 and UR1 zones. This configuration would decrease preserved open space to approximately 68.5 acres, compared to 106 acres under the project layout. The layout would also place three residential units north of the railroad tracks, resulting in the loss of the designated emergency staging area, and would eliminate the planned trailhead. Additionally, off-site impacts to the property to the east would occur due to grading and fuel modification zone requirements, as well as development encroaching upon a significant ridgeline in the southeastern portion of the project site. Therefore, this alternative may not be consistent with the applicable goals, objectives, and policies identified in the General Plan elements, as well as with the SCMC, and SCAG 2020-2045 RTP/SCS.

Like the project, this alternative would not physically divide an established community as all project activities would occur within the existing boundary of the project site and would not introduce features that would implement barriers or divide the established uses within the project area and the surrounding neighborhood. In addition, this alternative would not contribute to cumulative impacts related to land use and planning.

Therefore, the impacts of Alternative 3 related to land use and planning would be *increased* in comparison to the project.

MINERAL RESOURCES

Alternative 3 would result in an increased development footprint compared to the project; however, all development would remain within the project site boundary. The project site is classified as MRZ-2 and MRZ-3; however, this alternative, like the project, would not interfere with any existing or future mineral aggregate resource or oil production. Further, the project site is not located in an MOCA Overlay Zone; therefore, implementation of this alternative, like the project, would not interfere with any existing or future mineral aggregate or oil production, nor conflict with any local general plan, specific plan, or other land use plan. In addition, this alternative would not contribute to cumulative impacts related to mineral resources.

Therefore, the impacts of Alternative 3 related to mineral resources would be *similar* in comparison to the project.

NOISE AND VIBRATION

Alternative 3 would include reduced types of construction activities and equipment as compared to the project, as the unit count for this alternative would decrease by 232 units compared to the project. Construction of this alternative could generate an increase in ambient noise levels in the vicinity of the project site, which could affect noise-sensitive land uses. The project's mitigation measures would be included to reduce construction-related noise for the duration of the construction phase of this alternative, like the project. Once operational, this alternative, like the project, would establish stationary on-site noise sources at the project site as well as contribute to off-site roadway traffic noise. This alternative would include reduced stationary noise sources compared to the project, including roadway traffic noise sources, parking noise, and mechanical equipment (e.g., HVAC equipment) as the unit count would decrease. Similar to the project, several outdoor amenities and sports courts are proposed in addition to the recreation center and single-family homes. A pickleball court, horseshoe pit, and dog park are proposed on the western portion of the project site adjacent to nearby noise-sensitive residential land uses. A pool and bocce ball courts would also be adjacent to the recreation center. Given that the project would result in reduced operational residential-related uses, operational noise from this alternative would be reduced compared to the project.

Like the project, this alternative would not result in the generation of excessive ground-borne vibration or ground-borne noise levels. Given that the project site is not near a private airstrip or within the boundaries of an airport land use plan, this alternative would have similar impacts related to airport noise as the project. In addition, this alternative would not contribute to cumulative impacts related to noise and vibration.

Therefore, the impacts of Alternative 3 related to noise would be *decreased* in comparison to the project.

POPULATION AND HOUSING

Alternative 3 would include decreased types of construction activities and equipment compared to the project, as the unit count for this alternative would decrease by 232 units. The proposed construction and operational activities would not induce substantial or unplanned population growth as the population and housing growth associated with this alternative would be less than that of the project. The population and housing growth associated with this alternative would be negligible and would not exceed the projected growth scenarios identified using SCAG population and housing projections. Like the project, this alternative is a residential development; therefore, this alternative would result in a negligible increase in employees, such as on-site security or recreation center management staff, and any population growth associated with new permanent employment opportunities would be negligible and would fall below SCAG growth projections. This alternative, like the project, would not displace existing people or housing. In addition, this alternative would not contribute to cumulative impacts related to population and housing.

Therefore, the impacts of Alternative 3 related to population and housing would be *decreased* in comparison to the project.

PUBLIC SERVICES

Alternative 3 would result in reduced population growth compared to the project, as the unit count would decrease. Growth associated with this alternative, similar to the project, would be consistent with SCAG projections and would not represent substantial or unplanned growth in a manner that could substantially increase demand on the LACoFD or LASD. This alternative, like the project, would be subject to the payment of development impact fees to address the incremental increase in demand on fire and police department services. In addition, this alternative, like the project, would ultimately increase long-term safety at the project site because the new development would be built to current building and fire codes, including, but not limited to, the CFC, CBC, and CRC, and the new land uses would include new security measures that would reduce the potential for long-term calls for police protection. This alternative, like the project, would develop age-restricted residential units and would not result in additional students that could affect school facilities. Given the nature of the proposed age-restricted housing, the on-site recreational opportunities are expected to reduce the demand for other nearby parks and trails within the City as new residents are not expected to regularly use off-site recreational facilities. As the proposed unit count would decrease compared to the project, this alternative would not result in growth in a manner that could substantially increase demand on other governmental facilities. In addition, this alternative would not contribute to cumulative impacts related to public services.

Therefore, the impacts of Alternative 3 related to public services would be *decreased* in comparison to the project.

RECREATION

Alternative 3, similar to the project, would result in a new or permanent population that would use the project site for recreation and increase the use of nearby parks or recreational facilities. However, this alternative would result in a decrease of 232 units; therefore, the population growth would be smaller compared to the project. Similar to the project, this alternative would provide a 3.1-acre recreation center that would provide ample recreational opportunities to new residents on-site. Therefore, it would not result in an associated increase in the use of nearby existing parks and recreational facilities such that substantial physical deterioration of any one facility would occur or be accelerated. Further, this alternative, similar to the project, would be subject to the payment of Quimby Fees, which require new residential developments to offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities in the City to serve residents. As with

the project, this alternative would continue to provide publicly accessible open space areas within the project area. In addition, this alternative would not contribute to cumulative impacts related to recreation.

Therefore, the impacts of Alternative 3 related to recreation would be *decreased* in comparison to the project.

TRANSPORTATION

Alternative 3 would result in a reduced unit count on the project site by 232 units. Construction-related trips would be reduced when compared to the project. After developing this alternative, the operational characteristics of the project site would result in a decreased VMT to and from the project site as compared to the project. However, this alternative would result in the loss of the designated emergency staging area; therefore, this alternative could result in a significant impact related to ensuring consistency with transportation plans, programs, ordinances, or policies and substantially increase hazards due to a design feature. Although this alternative would result in the loss of the emergency staging area, the total VMT associated with this alternative would decrease as compared to the project, thereby resulting in decreased traffic impacts. In addition, this alternative would not contribute to cumulative impacts related to transportation.

Therefore, the impacts of Alternative 3 related to transportation would be *decreased* in comparison to the project.

TRIBAL CULTURAL RESOURCES

Alternative 3 would include grading, excavation, and other earthwork activities throughout an increased footprint as compared to the project. Accordingly, there would be increased potential to disturb known or unknown tribal cultural resources, including human remains, within the project site. This alternative would implement the same project mitigation measures to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to tribal cultural resources.

Therefore, the impacts of Alternative 3 related to tribal cultural resources would be *increased* in comparison to the project.

UTILITIES AND SERVICE SYSTEMS

Alternative 3 would result in a reduced unit count on the project site. This alternative would result in a decreased demand for utilities and service systems as compared to the project. Like the project, this alternative would connect to and use existing utilities and service systems surrounding the project site and nearby development. Like the project, water supply for the project would be provided by tying into a Zone 1976 16-inch water line at the southern tract boundary in Oak Spring Canyon Road, and a secondary connection would be made in Lost Canyon Road to a Zone 1797 8-inch water line, approximately 670 feet west of the project site. In addition, storage for Zone 1976 would need to be upgraded by adding a new 1-million-gallon tank at the existing off-site Live Oak Reservoir. This alternative would decrease water demand and associated water use, which would be supplied by SCVWA, compared to the project. Thus, the impacts of this alternative related to the water supply would be decreased compared to the project. This alternative would also result in a decreased wastewater generation as compared to the project; therefore, the LACSD would have adequate capacity to serve this alternative's projected demand. This alternative would also result in a decreased generation of solid waste due to the decreased unit count associated with this alternative and, like the project, would be consistent with the applicable regulations associated with solid waste and would promote compliance with the provisions of CALGreen and SCMC

Chapter 15.44 (Integrated Waste Management). In addition, this alternative would not contribute to cumulative impacts related to utilities and service systems.

Overall, the impacts of Alternative 3 related to utilities and service systems would be *decreased* in comparison to the project.

WILDFIRE

Alternative 3 would include decreased types of construction activities and equipment as compared to the project, as the unit count for this alternative would decrease by 232 units. Like the project, any traffic controls and vehicle and equipment movement associated with construction of this alternative would be temporary in nature and would not result in long-term impacts. Similar to the project, this alternative would also include ignition-resistant construction and FMZ setbacks, and would implement the same code-exceeding Project Design Features. Like the project, proposed installation of internal roads, public utility easements, and utility infrastructure throughout the project site would be required to comply with the CFC, the CBC, and applicable CAL FIRE and County Public Works requirements to ensure proper installation and expansion of associated infrastructure to avoid frequent maintenance or repair trips that may exacerbate fire risk and to avoid or minimize hazards associated with improper installation, including wildfire risk. In terms of operation, the unit count would be reduced compared to that of the project; however, the development footprint would be increased. As discussed above, the unit count for this alternative would decrease by 232 units; therefore, the time required for a complete evacuation of the project site would be reduced compared to the project. However, the layout of this alternative would place three residential units north of the railroad tracks, resulting in the loss of the designated emergency staging area. In addition, this alternative would not contribute to cumulative impacts related to wildfire.

Therefore, the impacts of Alternative 3 related to wildfire would be *similar* in comparison to the project.

5.4.4 Alternative 4: Full State Density Bonus Project

The project includes the development of a gated senior residential community on a 193.8-acre site. Project components would include 341 age-restricted, detached single-family residences; a centrally located recreation center; and an integrated network of public and private trails. In accordance with Government Code § 65915, the applicant has requested a 20% density bonus. Because the project includes an age-restricted (senior citizen) housing development, the applicant is eligible for a density bonus of 20% of the number of senior units; no income or affordability restrictions are associated with this density bonus.

Alternative 4 would apply density bonus laws by incorporating affordable housing into the design. Consequently, the allowable development capacity would increase substantially. Under the project site's slope density, the base yield is 284 units. This alternative would qualify for a 100% density bonus by providing affordable housing, achieved through two 50% bonuses—one for setting aside 15% of the units as very-low-income units and another for providing 15% as moderate-income units. Applying the full bonus would result in a total of 568 units on the project site, consisting of 482 market-rate units and 86 affordable units. Assuming the same overall residential footprint and street layout, the housing product mix would include approximately 86 affordable units on 3,000-square-foot lots and 482 market-rate units on lots ranging from approximately 4,200 to 5,800 square feet. Under this alternative, a recreation center would not be included in the project amenities.

5.4.4.1 Relationship to Project Objectives

Table 5-5 presents this alternative's ability to attain the project objectives outlined in Section 5.2.1, *Project Objectives*, and in Chapter 2, *Project Description*.

Table 5-5. Attainment of Objectives— Full State Density Bonus Project

Objective	Does the Alternative Attain the Objective?
Develop a planned, age-qualified (55+) residential community that aligns with the City's vision for balanced urban growth, housing diversity, and sustainable land use, consistent with the City's General Plan and regional sustainability goals.	**Partially.** Alternative 4 would continue to develop an age-qualified (55+) residential community, which would meet the City's vision for housing diversity. However, the increased density could result in an increase in population growth, which may not meet the City's or SCAG's vision for balanced urban growth and sustainable land use.
Integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.	**Yes.** Alternative 4 would integrate a new community into the City's existing and planned circulation network, prioritizing enhancements to emergency access and public safety consistent with City infrastructure plans and policies.
Establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design.	**Partially.** Alternative 4 would provide open space and trails but would not establish a comprehensive suite of recreational and wellness-oriented amenities tailored to the needs of an age-qualified (55+) population, fostering active, healthy lifestyles in accordance with best practices in community design. This alternative would not include the 3.1-acre recreation center. As such, the following amenities would not be included in this alternative compared to the project: club room, kitchen, lobby, flex space, fitness center, yoga room, and restrooms, courtyard, an event lawn, a fitness lawn, a swimming pool with spas, restrooms, bocce ball courts, a golf-cart parking lot, an entry garden, patios, pickleball courts, horseshoe pits, a tree grove with games, a lounge, picnic areas, and a 0.25-mile fitness loop.
Create an interconnected trail network that connects with the City's regional trail system, providing accessible outdoor recreation opportunities for both residents and the broader public, and supporting the City's commitment to active transportation and open space connectivity.	**Partially.** Alternative 4 would create an interconnected trail network that connects with the City's regional trail system; however, the trail network would be potentially reduced due to the increased density at the project site.
Identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.	**Yes.** Alternative 4 would identify and designate a strategically located staging area to support emergency response capabilities, facilitate efficient evacuation procedures, and support fire suppression operations in coordination with local public safety agencies.
Minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.	**Yes.** Alternative 4 would minimize impacts to the City's natural resources by concentrating development in areas that align with regional conservation objectives.
Preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.	**Yes.** Alternative 4 would preserve and incorporate existing oak tree resources within community spaces to the greatest extent feasible, supporting the City's urban forestry goals and promoting ecological sustainability through sensitive site planning and landscape integration.

5.4.4.2 Comparison of Significant Effects of Alternatives

Alternative 4 would result in an increase of construction activities, duration, and equipment as compared to the project. Upon project completion, this alternative would result in similar land uses and operational activities as proposed by the project; however, the density of these land uses would increase.

AESTHETICS

Alternative 4 would result in the development of a gated senior residential community on a 193.8-acre site; however, compared to the project's proposed 341 dwelling units, this alternative would develop 568 dwelling units, resulting in an increase of 227 dwelling units. Like the project, this alternative's changes in the project site would be visible directly from adjacent off-site locations, including residential buildings. However, like the project, this alternative would not have a substantial effect on a scenic vista or damage scenic resources within a State Scenic Highway, as no such resources have been identified near the project site. While this alternative would result in the same development footprint as the project, in order to achieve the unit increase, the proposed development would be increasingly dense. Like the project, implementation of this alternative would change the overall project site and result in modifications to the visual characteristics of the project site, likely including increased building heights, but not in such a way that it would adversely alter or degrade the existing visual character or scenic quality of the project site, and would be consistent with the applicable policies that govern scenic quality in City plans. This alternative would create additional new sources of light and glare, compared to the project. In addition, this alternative would not contribute to cumulative impacts related to aesthetics.

Therefore, the impacts of Alternative 4 related to aesthetics would be *increased* in comparison to the project.

AGRICULTURAL RESOURCES

Alternative 4 would result in a similar development footprint compared to the project. The project site does not contain any protected Farmland under PRC § 21060.1, and this alternative, like the project, would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. Further, the project site is not subject to an active Williamson Act contract. However, this alternative's water demand would be greater than that of the project, as the unit count would increase by 227 dwelling units. In addition, this alternative would not contribute to cumulative impacts related to agricultural resources.

Therefore, the impacts of Alternative 4 related to agricultural resources would be *increased* in comparison to the project.

AIR QUALITY

Alternative 4 would result in increased types of construction activities, duration, and equipment as the project, as the unit count for this alternative would increase by 227 units. Upon project operation, this alternative would result in similar land uses as proposed by the project; however, the density would be greater. Accordingly, this alternative may not be consistent with the air quality standards and the land use assumptions identified in the SCAQMD's AQMP and SCAG's regional plans and policies. As identified for the project, this alternative would also implement a mitigation measure to reduce construction-related air pollutant emissions. Operational emissions would be greater than those of the project given the unit count would increase by 227 units, resulting in increased emissions, and potentially requiring additional mitigation measures. This alternative could conflict with an applicable air quality plan, generate short- or long-term criteria pollutant emissions in exceedance of the SCAQMD significance thresholds, expose sensitive receptors to substantial concentrations of pollutant emissions, and result in adverse odors or other emissions. In addition, this alternative would not contribute to cumulative impacts related to air quality.

Therefore, the impacts of Alternative 4 related to air quality would be *increased* in comparison to the project.

BIOLOGICAL RESOURCES

Alternative 4 would result in increased types of construction activities, duration, and equipment as the project; however, the overall area of ground disturbance during the construction of this alternative would be similar compared to that of the project. Future operational conditions under this alternative would result in similar land uses as proposed by the project.

Thus, this alternative, like the project, could result in adverse effects during the construction process on special-status species, riparian habitat and sensitive vegetation communities, jurisdictional waters, and SEAs, either directly or through habitat modifications, as described further below. Like the project, this alternative would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP. In addition, this alternative would not contribute to cumulative impacts related to biological resources.

Special-Status Species

Crotch's bumble bee is a generalist forager and could occur anywhere on the project site where floral resources are available. Because Alternative 4 would be developed in a similar footprint to the project, direct impacts to this species would likely be similar and mitigation would still be required to reduce impacts to less than significant.

Under both the project and Alternative 4, five reptile species (California legless lizard, southern California legless lizard, California glossy snake, coastal whiptail, and Blainville's horned lizard) and one mammal (San Diego black-tailed jackrabbit) could be directly affected. Habitat loss alone does not constitute a substantial adverse effect; however, these species may be susceptible to injury or mortality during vegetation clearing and ground-disturbing construction activities. Because Alternative 4 would be developed in a similar footprint to the project, impacts to these species would be similar.

Alternative 4 would have similar impacts to special-status birds, including Cooper's hawk, southern California rufous-crowned sparrow, and Bell's sage sparrow, as the project and mitigation measures would still be required to reduce impacts to less than significant.

Riparian Habitat and Sensitive Vegetation Communities

Similar to the project, the footprint of Alternative 4 would impact the following sensitive vegetation communities:

- *Artemisia tridentata* ssp. *parishii* Association
- *Encelia californica* Association
- *Eriogonum fasciculatum - Artemisia tridentata* Association
- *Lepidospartum squamatum - Eriogonum fasciculatum* Association
- *Populus fremontii* Association
- *Prunus ilicifolia* ssp. *ilicifolia* Association

Jurisdictional Waters

Alternative 4 would continue to avoid non-wetland waters regulated by CDFW, RWQCB, and USACE in the northeastern portion of the project site, consistent with the project. However, like the project, Alternative 4 would not avoid the majority of non-wetland waters regulated by CDFW and RWQCB in the southern portion of the project site or riparian habitat regulated by CDFW in the southwestern portion of the project site.

Significant Ecological Areas

Because most of the project site lies within the Santa Clara River SEA, impacts to the SEA would be similar compared to the project and mitigation measures would be required to reduce impacts to less than significant.

Therefore, the impacts of Alternative 4 related to biological resources would be *similar* in comparison to the project.

CULTURAL RESOURCES

Alternative 4 would alter the existing physical conditions of the areas within the boundaries of the project site; however, similar to the project, Alternative 4 would not cause a substantial adverse change in the significance of a historical resource. No historic resources eligible for listing on the NRHP, CRHR, or City's List of Historic Resources either individually or as a contributing element to an existing historic district or a potential linear historic district are located within a 1-mile radius of the project site.

Alternative 4 would include grading, excavation, and other earthwork activities in a similar capacity compared to the project and there would be similar potential to disturb known or unknown archaeological resources, including human remains, within the project site. This alternative would implement the same project mitigation measure to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to cultural resources.

Therefore, the impacts of Alternative 4 related to cultural resources would be *similar* in comparison to the project.

ENERGY

Alternative 4 would result in an increase of construction activities, duration, and equipment as the project, as the unit count for this alternative would increase by 227 units. Upon project operation, this alternative would result in similar land uses as proposed by the project, except at a greater density, which would result in an increase of electricity and fuel usage compared to the project. Like the project, this alternative would be subject to the California Building Energy Efficiency Standards (24 CCR Part 6), CALGreen (24 CCR Part 11), and CARB's 2022 Scoping Plan. However, this alternative could conflict with or obstruct a state or local plan for renewable energy or energy efficiency. In addition, this alternative would not contribute to cumulative impacts related to energy.

Therefore, the impacts of Alternative 4 related to energy would be *increased* in comparison to the project.

GEOLOGY AND SOILS

Alternative 4 would include grading, excavation, and other earthwork activities at a similar extent to that proposed by the project. Like the project, this alternative would be subject to all applicable regulations, including the applicable provisions in the Alquist-Priolo Earthquake Fault Zoning Act, Seismic Safety Act, Seismic Hazards Mapping Act, and CBC. As with the project, this alternative would not cause or accelerate seismic and geologic hazards, including surface fault rupture, strong seismic ground motion, seismically induced settlement due to liquefaction or landslides, soil erosion, lateral spreading, subsidence, and expansive soils. This alternative would implement the same project mitigation measure to reduce potential impacts related to liquefaction to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to geology and soils.

Similar to the project, all ground-disturbing activities associated with the construction of this alternative have the potential to impact subsurface paleontological resources within the project site. Paleontological resources may be impacted by the construction or implementation of this alternative regardless of the footprint of grading and/or excavation activities. Any fossils encountered during ground-disturbing activities could be at risk for damage or destruction from such activities depending on the nature of the fossil encountered. This alternative would require the implementation of the same project mitigation measure to reduce potential impacts on paleontological resources to less-than-significant levels.

Therefore, the impacts of Alternative 4 related to geology and soils would be *similar* in comparison to the project.

GREENHOUSE GAS EMISSIONS

Alternative 4 would result in increased types of construction activities, duration, and equipment as the project, as the unit count for the project would increase by 227 units. Upon project operation, this alternative would result in similar land uses as proposed by the project, however the density would be greater. Given that this alternative would result in a similar greater construction and operational condition as compared to the project, this alternative would generate greater GHG emissions.

Given that the operational density at the project site would be greater than the project, this alternative could conflict with an applicable plan, policy, or regulation adopted to reduce GHG emissions. This alternative would include the project's mitigation measures that would further the GHG reduction targets set forth in CARB's 2022 Scoping Plan related to building decarbonization. In addition, this alternative would not contribute to cumulative impacts related to GHG emissions.

Overall, the impacts of Alternative 4 related to GHG emissions would be *increased* in comparison to the project.

HAZARDS AND HAZARDOUS MATERIALS

Alternative 4 would include grading, excavation, and other earthwork activities at a similar extent to that proposed by the project. When compared to the project, this alternative has similar potential for construction-related activities to uncover subsurface hazards (i.e., arsenic-impacted soils) and create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Therefore, this alternative would include the project's mitigation measures to address impacts associated with hazardous materials during construction.

Like the project, this alternative could result in hazardous emissions or involve the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school and would include the project's mitigation measures to address construction and operational impacts associated with hazards and hazardous materials. This alternative would not create a significant hazard to the public or the environment on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5. Further, and consistent with the project, this alternative would not be developed within two miles of a public airport or public-use airport and would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. In addition, this alternative would not contribute to cumulative impacts related to hazards and hazardous materials.

Therefore, the impacts of Alternative 4 related to hazards and hazardous materials would be *similar* in comparison to the project.

HYDROLOGY AND WATER QUALITY

Alternative 4 would include grading, excavation, and other earthwork activities at a similar extent to that proposed by the project. While this alternative would result in an increase of 227 units, the building footprint would be similar, resulting in a decrease of impervious surfaces when compared to the project.

Like the project, this alternative would result in earthwork activities that would require soil to be excavated and transported off-site and similar dewatering practices as the project would occur under this alternative. Like the project, compliance with the requirements of the LARWQCB NPDES Program and Porter-Cologne Act waste discharge requirements, Construction General Permit, and City stormwater regulations would be sufficient to address the potential for the buildout of the project to violate water quality standards or waste discharge requirements during construction activities. This alternative would implement the seven LID BMPs in accordance with the Los Angeles County LID Standards Manual.

Compared to the project buildout, this alternative could adversely affect local groundwater levels or deplete groundwater supplies as this alternative would result in an increase of 227 units and could conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. However, the project site is not in a flood hazard or tsunami zone and the risk of a seiche is low. Therefore, there would be no risk of releasing pollutants due to project inundation by these hazards, similar to the project. In addition, this alternative would not contribute to cumulative impacts related to hydrology and water quality.

Therefore, the impacts of Alternative 4 related to hydrology and water quality would be *increased* in comparison to the project.

LAND USE AND PLANNING

Alternative 4 would incorporate affordable housing into the design of the project and would increase the density by 227 units. Assuming the same overall residential footprint and street layout, the housing product mix would include approximately 86 affordable units on 3,000-square-foot lots and 482 market-rate units on lots ranging from approximately 4,200 to 5,800 square feet. Under this alternative, a recreation center would not be included in the project amenities. This alternative may not be consistent with the applicable goals, objectives, and policies identified in the General Plan elements, as well as with the SCMC and SCAG 2020-2045 RTP/SCS. While the proposed density would be permitted under State Density Bonus Law, it would increase the conflict between project density and allowable density in the NU5 and UR1 zones.

However, like the project, this alternative would not physically divide an established community as all project activities would occur within the existing boundary of the project site and would not introduce features that would implement barriers or divide the established uses within the project area and the surrounding neighborhood. In addition, this alternative would not contribute to cumulative impacts related to land use and planning.

Therefore, the impacts of Alternative 4 related to land use and planning would be *increased* in comparison to the project.

MINERAL RESOURCES

Alternative 4 would result in a similar development footprint compared to the project. The project site is classified as MRZ-2 and MRZ-3; however, this alternative, like the project, would not interfere with any existing or future mineral aggregate resource or oil production. Further, the project site is not located in an MOCA Overlay Zone; therefore, implementation of this alternative, like the project, would not

interfere with any existing or future mineral aggregate or oil production, nor conflict with any local general plan, specific plan, or other land use plan. In addition, this alternative would not contribute to cumulative impacts related to mineral resources.

Therefore, the impacts of Alternative 4 related to mineral resources would be *similar* in comparison to the project.

NOISE AND VIBRATION

Alternative 4 would include increased types of construction activities and equipment as the project, as the unit count for the project would increase by 227 units. Construction of this alternative could generate an increase in ambient noise levels in the vicinity of the project site, which could affect noise-sensitive land uses. The project's mitigation measures would be included to reduce construction-related noise for the duration of the construction phase of this alternative, like the project. Once operational, this alternative would establish increased stationary on-site noise sources, such as parking noise and mechanical equipment noise (e.g., HVAC equipment) at the project site as well as contribute to increased off-site roadway traffic noise compared to the project. However, this alternative would not include the development of a recreation center. Operational noise associated with the recreation center amenities, therefore, would be decreased compared to the project. Given that the project would result in greater operational residential-related uses, operational noise from this alternative would be greater than the project.

Like the project, this alternative would not result in the generation of excessive ground-borne vibration or ground-borne noise levels. Given that the project site is not near a private airstrip or within the boundaries of an airport land use plan, this alternative would have similar impacts related to airport noise as the project. In addition, this alternative would not contribute to cumulative impacts related to noise and vibration.

Therefore, the impacts of Alternative 4 related to noise would be *increased* in comparison to the project.

POPULATION AND HOUSING

Alternative 4 would include increased types of construction activities and equipment as the project, as the unit count for this alternative would increase by 227 units. The proposed construction activities could induce substantial or unplanned population growth. This alternative would result in 568 units. The population and housing growth associated with this alternative would be greater than that of the project. This population and housing growth could exceed the projected growth scenarios identified using SCAG population and housing projections. Like the project, this alternative is a residential development; therefore, this alternative would result in a negligible increase in employees, such as on-site security or recreation center management staff, and any population growth associated with new permanent employment opportunities would be negligible and would fall below SCAG growth projections. This alternative, like the project, would not displace existing people or housing. In addition, this alternative would not contribute to cumulative impacts related to population and housing.

Therefore, the impacts of Alternative 4 related to population and housing would be *increased* in comparison to the project.

PUBLIC SERVICES

Alternative 4 would result in greater population growth compared to the project, as the unit count would increase by 227 units. Growth associated with this alternative could be inconsistent with SCAG projections and could represent substantial or unplanned growth in a manner that could substantially

increase demand on the LACoFD and LASD. This alternative, like the project, would be subject to the payment of development impact fees to address the incremental increase in demand on fire and police department services. In addition, this alternative, like the project, would ultimately increase long-term safety at the project site because the new development would be built to current building and fire codes, including, but not limited to, CFC, CBC, and CRC, and the new land uses would include new security measures that would reduce the potential for long-term calls for police protection. This alternative, like the project, would develop age-restricted residential units and would not result in additional students that could affect school facilities. Given the nature of the proposed age-restricted housing, the on-site recreational opportunities are expected to reduce the demand for other nearby parks and trails within the City as new residents are not expected to regularly use off-site recreational facilities. As the proposed unit count would increase as compared to the project, this alternative could result in growth in a manner that could substantially increase demand on other governmental facilities. In addition, this alternative would not contribute to cumulative impacts related to public services.

Therefore, the impacts of Alternative 4 related to public services would be *increased* in comparison to the project.

RECREATION

Alternative 4, similar to the project, would result in a new or permanent population that would use the project site for recreation and increase the use of nearby parks or recreational facilities. However, unlike the project, this alternative would not provide the 3.1-acre recreation center, which is designed to provide ample recreational opportunities to new residents on-site. Therefore, this alternative could result in an associated increase in the use of nearby existing parks and recreational facilities such that substantial physical deterioration of any one facility would occur or be accelerated. This alternative, similar to the project, would be subject to the payment of Quimby Fees, which require new residential developments to offset the incremental increase in the use of existing park facilities through the payment of fees for development of new recreational facilities in the City to serve residents. Since this alternative would result in an increase in residential units and a decrease in open space improvements and enhancements as the project, this alternative would result in increased physical effects. In addition, this alternative would not contribute to cumulative impacts related to recreation.

Therefore, the impacts of Alternative 4 related to recreation would be *increased* in comparison to the project.

TRANSPORTATION

Alternative 4 would include greater types of construction activities and equipment as the project, as the unit count for this alternative would increase by 227 units. Accordingly, construction-related trips would be increased when compared to the project. After developing this alternative, the operational characteristics of the project site would substantially increase the VMT to and from the project site. Thus, this alternative would have an estimated net increase in VMT as compared to the project. This alternative could result in a significant impact related to ensuring consistency with transportation plans, programs, ordinances, or policies. In addition, this alternative could include components that would substantially increase hazards due to a design feature. This alternative could contribute to cumulative impacts related to transportation.

Therefore, the impacts of Alternative 4 related to transportation would be *increased* in comparison to the project.

TRIBAL CULTURAL RESOURCES

Alternative 4 would include grading, excavation, and other earthwork activities, throughout a similar footprint as compared to the project. There would be similar potential to disturb known or unknown tribal cultural resources, including human remains, within the project site. This alternative would implement the same project mitigation measures to reduce this alternative's potential impacts to less-than-significant levels. In addition, this alternative would not contribute to cumulative impacts related to tribal cultural resources.

Therefore, the impacts of Alternative 4 related to tribal cultural resources would be *similar* in comparison to the project.

UTILITIES AND SERVICE SYSTEMS

Alternative 4 would result in a similar development footprint; however, the proposed unit count and FAR would increase. This alternative would result in an increase in demand for utilities and service systems compared to the project. Like the project, this alternative would connect to and utilize existing utilities and service systems surrounding the project site and nearby development; however, this alternative would increase water demand and associated water use, which would be supplied by SCVWA, in a greater capacity than the project. Thus, the impacts of this alternative related to the water supply would be increased in comparison to the project. This alternative would also result in increased wastewater generation compared to the project, which would represent an increase in wastewater sent for treatment at the SCVJSS; therefore, the LACSD may not have adequate capacity to serve this alternative's projected demand. This alternative would also result in an increased generation of solid waste due to the increased building square footage and unit count associated with this alternative and may not be consistent with the applicable regulations associated with solid waste and would promote compliance with the provisions of CALGreen and SCMC Chapter 15.44 (Integrated Waste Management). In addition, this alternative would not contribute to cumulative impacts related to utilities and service systems.

Overall, the impacts of Alternative 4 related to utilities and service systems would be *increased* in comparison to the project.

WILDFIRE

Alternative 4 would include increased types of construction activities and equipment as the project, as the unit count for this alternative would increase by 227 units. Like the project, any traffic controls and vehicle and equipment movement associated with construction of this alternative would be temporary in nature and would not result in long-term impacts. Similar to the project, this alternative would also include ignition-resistant construction, FMZ setbacks, and would implement the same code-exceeding Project Design Features. Like the project, proposed installation of internal roads, public utility easements, and utility infrastructure throughout the project site would be required to comply with the CFC, the CBC, and applicable CAL FIRE and County Public Works requirements to ensure proper installation and expansion of associated infrastructure to avoid frequent maintenance or repair trips that may exacerbate fire risk and to avoid or minimize hazards associated with improper installation, including wildfire risk. In terms of operation, the unit count for this alternative would increase by 227 units; therefore, the evacuation conditions, such as evacuation timing, would be greater than that of the project. Therefore, this alternative could impact associated emergency response plans and evacuation plans during operation. In addition, this alternative would not contribute to cumulative impacts related to wildfire.

Overall, the impacts of Alternative 4 related to wildfire would be *increased* in comparison to the project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines require an analysis of alternatives to identify an Environmentally Superior Alternative among the alternatives evaluated in the EIR. The Environmentally Superior Alternative is the alternative that would minimize adverse impacts on the environment. Based on the evaluation of the alternatives in this chapter and the comparison of impacts, as summarized in Table 5-6, both the No Project/No Build Alternative and Alternative 2 would minimize the project's adverse impacts on the environment in the same manner. As directed by CEQA Guidelines § 15126.6(e)(2):

> If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

In determining the environmentally superior alternative, the analysis considers the relative severity and significance of environmental effects associated with each alternative rather than solely the number of resource areas in which impacts may be reduced.

As shown in Table 5-6, Alternative 3 would reduce impacts in a greater number of resource categories compared to Alternative 2. However, the comparison presented in Table 5-6 reflects the number of resource areas with reduced impacts and does not fully capture the relative importance or significance of those impact reductions.

Alternative 2 would be considered the Environmentally Superior Alternative among the built alternatives because it would reduce or avoid impacts in resource areas where the project would result in potentially significant impacts requiring mitigation. In particular, Alternative 2 would reduce impacts to resource areas that include mitigation measures and where the project's impacts could otherwise be potentially significant.

Because Alternative 2 would minimize adverse effects in the environmental issue areas with the greatest potential for significant impacts, it would result in an overall reduction in the severity of environmental impacts relative to the other built alternatives.

Therefore, Alternative 2 would be the Environmentally Superior Alternative because it would be the built alternative that minimizes the project's adverse impacts on the environment. In addition, Alternative 2 would meet six of the project objectives and partially achieve one of the project objectives.

Table 5-6. Comparison of Impacts Among Alternatives

Environmental Resource Area	Alternative 1: No Project/ No Build Alternative	Alternative 2: Reduced Development Alternative, Avoidance of Sensitive Habitats	Alternative 3: Existing Zoning Project	Alternative 4: Full State Density Bonus Project
Meets Project Objectives?	**No**	**Partially**	**No**	**Partially**
Aesthetics	Decreased	Similar	Increased	Increased
Agricultural Resources	Decreased	Similar	Decreased	Increased
Air Quality	Decreased	Similar	Decreased	Increased
Biological Resources	Decreased	Decreased	Increased	Similar
Cultural Resources	Decreased	Decreased	Increased	Similar
Energy	Decreased	Similar	Decreased	Increased
Geology and Soils	Decreased	Decreased	Similar	Similar

Environmental Resource Area	Alternative 1: No Project/ No Build Alternative	Alternative 2: Reduced Development Alternative, Avoidance of Sensitive Habitats	Alternative 3: Existing Zoning Project	Alternative 4: Full State Density Bonus Project
Greenhouse Gas Emissions	Decreased	Similar	Decreased	Increased
Hazards and Hazardous Materials	Decreased	Similar	Increased	Similar
Hydrology and Water Quality	Decreased	Similar	Increased	Increased
Land Use and Planning	Similar	Increased	Increased	Increased
Mineral Resources	Similar	Similar	Similar	Similar
Noise and Vibration	Decreased	Similar	Decreased	Increased
Population and Housing	Decreased	Similar	Decreased	Increased
Public Services	Decreased	Similar	Decreased	Increased
Recreation	Similar	Similar	Decreased	Increased
Transportation	Decreased	Similar	Decreased	Increased
Tribal Cultural Resources	Decreased	Decreased	Increased	Similar
Utilities and Service Systems	Decreased	Similar	Decreased	Increased
Wildfire	Increased	Similar	Similar	Increased

Alternative 2 would avoid the project's impact to biological resources as it would reduce the development footprint by approximately 52% and decrease sensitive habitat impacts by about 31 acres while maintaining the proposed unit count. Alternative 2 would also result in decreased impacts to other environmental resource areas listed in Table 5-6. Alternative 2 would meet five project objectives and partially meet two project objectives related to creating an interconnected trail network and preserving oak trees. Alternative 2 is the alternative scenario that reduces the most environmental impacts when compared to the project.

For comparison, Alternative 3 would reduce the feasible project to roughly 109 units and would decrease preserved open space to approximately 68.5 acres, compared to 106 acres under the project layout. The layout would also place three residential units north of the railroad tracks, resulting in the loss of the designated emergency staging area, and would eliminate the planned trailhead. Additionally, off-site impacts to the property to the east would occur due to grading and fuel modification zone requirements, as well as development encroaching upon a significant ridgeline in the southeastern portion of the project site. Designing the project strictly in accordance with the physical zoning constraints does not outweigh the additional impacts to the project site. Alternative 3 would also result in increased impacts as compared to the project to the other environmental issues areas listed in Table 5-6. As described in Table 5-4, Alternative 3 would only meet one project objective and partially meet two objectives; however, this alternative would not meet the other four project objectives.

Alternative 4 would result in increased environmental impacts as compared to the project for most issue area analyzed in this EIR, as shown in Table 5-6, as this alternative would develop a total of 568 units on the project site compared to the 341 proposed under the project. Additionally, under this alternative, a recreation center would not be included in the project amenities. Alternative 4 meets four project objectives and partially meets the other three project objectives.

Based strictly on an analysis of the relative environmental impacts, Alternative 2 is considered the Environmentally Superior Alternative. However, it is important to note that all the identified impacts of the project could be reduced to less-than-significant levels through the implementation of the mitigation

measures identified in this EIR. In addition, Alternative 2 would not meet the project objectives as fully as the project.

The City will determine whether to approve the project as proposed or consider a variation of the project based in whole or in part on the analysis contained within this EIR. The City will need to determine to what degree the project meets the City's and the State of California's housing development goals, including whether the project appropriately applies California's density bonus laws as a driver of housing production and affordability. Both of these considerations are outside the scope of CEQA, although the EIR can be used to weigh the environmental consequences of the various development options.

The City, as the lead agency for the project, will consider the whole of the record when considering the project. The City may select the project as proposed, an alternative, or a specified combination of particular elements identified in the alternatives, as the approved project. In all scenarios, the Mitigation Monitoring and Reporting Program (MMRP) would be applied to the approved project.

CHAPTER 6. OTHER CEQA CONSIDERATIONS

This chapter of the Environmental Impact Report (EIR) discusses other potential environmental effects for which the California Environmental Quality Act (CEQA) requires analysis, in addition to the specific issue areas evaluated in Chapter 4, *Environmental Impacts Analysis*. These additional effects include the potential for the proposed Belcaro at Sand Canyon Project (project) to result in growth-inducing impacts, significant irreversible environmental changes, and unavoidable significant environmental impacts.

6.1 GROWTH-INDUCING IMPACTS

CEQA Guidelines § 15126.2(e) requires that an EIR discuss the ways in which a project could facilitate growth-induced impacts in the surrounding environment, including facilitation of economic or population growth or the development of additional housing, either directly or indirectly. Growth-inducing impacts may also be caused by removing obstacles to population growth (such as expansion of a wastewater treatment plant, which allows for increased construction in a service area) or by increases in the population that require construction of new community service facilities and could cause significant environmental effects. The discussion also considers project characteristics that may encourage and facilitate other activities that could affect the environment significantly, either on an individual or cumulative basis. Growth-inducing impacts are evaluated to determine whether the project would remove an existing physical or regulatory constraint to growth beyond that already anticipated in adopted plans or regional forecasts.

6.1.1 Direct Growth

Direct population growth associated with the project is discussed in detail in Section 4.14, *Population and Housing*. The project would result in 341 new age-restricted, detached single-family homes that would introduce a new and permanent population. According to the *Transportation Assessment for Belcaro at Sand Canyon*, the average size of a household for senior detached housing is 1.8 persons (Gibson 2026; EIR Appendix I). Using the average estimate of 1.8 persons per household, the project would generate approximately 614 residents. According to California Department of Finance (DOF) population estimates, as of January 1, 2025, the population of Santa Clarita is approximately 232,377 (DOF 2025). The addition of 614 new residents would result in an approximate total of 232,991 residents in the City following full buildout in 2032. Population growth associated with the project would represent an approximately 0.26% increase over the five-year construction buildout period. This incremental population increase would occur within the development capacity evaluated in the *City of Santa Clarita General Plan* and associated General Plan EIR and would not exceed the housing growth assumptions incorporated into Southern California Association of Governments (SCAG) regional forecasts.

The number of established households is projected to increase to 90,300 by 2035 and to 92,500 by 2050 (SCAG 2024). As of January 1, 2025, Santa Clarita has approximately 82,437 established households, a 0.6% increase from January 1, 2024 (DOF 2025). The project would result in 341 new age-restricted residences within the City, which would result in an approximate total of 82,778 households following buildout of the project site. The construction of new households within the City would represent an approximately 0.41% increase over the 5-year construction period. The project does not require a General Plan Amendment and does not increase the City's overall residential capacity beyond what was previously planned and analyzed. Accordingly, the project would accommodate forecasted growth rather than induce growth beyond adopted planning assumptions.

The project site, consisting of the residential development area, public and private trails, and recreation area, would be located on 193.8 acres of vacant, undeveloped land. The project area consists of approximately 208 acres, which includes the project site and the proposed off-site improvements and extension of Lost Canyon Road, as well as the development of the proposed J Street. Within the project site, 106.4 acres have a General Plan land use designation and zoning designation of Urban Residential (UR1), and the remaining 87.4 acres are designated as Non-Urban 5 (NU5). The associated infrastructure improvements would be located within an area zoned as Open Space (OS) to the south of the project site, an area zoned as NU5 to the west of the project site, and within public rights-of-way throughout the project area, which have no zoning designations.

The UR1 land use designation provides for residential neighborhoods at densities that require urban services. Many of these neighborhoods provide a transition between higher-density, urban development and rural communities throughout the planning area, and this designation is appropriate in such urban/rural interface areas.

The NU5 land use designation provides for the maintenance and expansion of rural communities in the planning areas that are distinguished by large lot sizes (generally 1 acre or greater), agricultural and equestrian uses, and the absence of urban services. Uses in the NU5 designation could include single-family homes at a maximum density of one dwelling unit per one acre, agriculture, equestrian uses, private recreation, and public and institutional facilities serving the local area. Specific allowable uses and development standards are determined by the underlying zoning designation.

The project would invoke the State's Density Bonus law, including application of waivers, to develop the proposed dwelling units under the existing land use and zoning designations. However, no General Plan Amendment or zone change is required. In accordance with the Density Bonus Law (California Government Code § 65915), New Urban West, Incorporated (the project applicant) has proposed a 20% density bonus. Because the project includes an age-restricted (senior citizen) housing development, the project applicant is eligible for a density bonus of 20% of the number of senior units. No income or affordability restrictions are associated with this density bonus. The Density Bonus Law also allows the project applicant to request waivers from development standards. Accordingly, the project applicant is requesting the following waivers:

1. **Minimum Lot Size and Lot Width per Santa Clarita Municipal Code (SCMC) Chapter 17.57**. The SCMC requires a minimum lot area of 20,000 square feet for UR1 and 43,560 square feet for NU5. The project applicant is requesting a minimum net lot area of 5,000 square feet with a minimum lot width of 50 feet.
2. **Minimum Setback per SCMC Chapter 17.57.** Most of the 341 single-family lots would meet the SCMC's development standards. The project applicant, however, is requesting reductions in front yard setbacks, rear yard setbacks, reverse corner lot side yard setbacks, and/or cul-de-sac lot widths for 40 lots.
3. **Maximum Retaining Wall Height per SCMC § 17.57.020**. The SCMC requires that retaining walls not exceed six feet in height. The project applicant requests an increase in height limits of certain retaining walls to 8.5 feet.
4. **Maximum Length of Continuous Retaining Wall per SCMC § 17.57.020.** The SCMC requires that the maximum length of any continuous retaining wall not be more than 100 linear feet. The project applicant is requesting a waiver to increase the continuous length of certain retaining walls in excess of the 100 linear feet. The longest continuous wall would be approximately 450 linear feet in length.
5. **Ridgeline Preservation per SCMC § 17.38.070.** The SCMC requires a 100-foot vertical and a 100-foot horizontal distance from an identified significant ridgeline. The project applicant is requesting a waiver for a reduction in the vertical setback.

Implementation of the project would provide new opportunities for housing development. The most recent Regional Housing Needs Allocation (RHNA) allocation, known as the *SCAG 6th Cycle RHNA Allocation Plan*, was adopted by SCAG and approved by the California Department of Housing and Community Development (HCD) in March 2021, and covers the period from October 2021 to October 2029. For this cycle, SCAG was assigned a total need of 1,341,827 housing units, which were allocated among all 197 SCAG jurisdictions (SCAG 2025). Additionally, Objective H1-1 of the *City of Santa Clarita General Plan Housing Element* states "Maintain adequate site capacity to accommodate Santa Clarita's regional housing need throughout the planning period, including 5,131 lower-income units, 1,672 moderate-income units, and 3,228 market-rate units" (City of Santa Clarita 2023). Therefore, the development of 341 housing units would meet the City of Santa Clarita's (City's) planning goals to provide additional housing and would be consistent with the housing estimates of the 6th Cycle RHNA.

Thus, the addition of 614 new residents generated by the project would not be expected to exceed the City's projected population estimates and would be generally consistent with the population projection for the City. As such, probable growth within the project site has been accounted for in the City's General Plan Land Use Element.

6.1.2 Removal of an Impediment to Growth

Indirect population growth may occur by removing a barrier to growth, such as creating new access to undeveloped areas or increasing the capacity of existing infrastructure. The project would be limited to development on the existing project parcels within City limits and would not result in new construction in a manner that could foster new growth in a previously undeveloped area beyond the project site itself. The project would include roadway improvements and new access roads; however, these roadway extensions are proposed solely to provide access to the project site from Lost Canyon Road and Robinson Ranch Road, and are proposed to be private and gated roads. Vacant, undeveloped land is currently located east of the project site; however, the proposed new access roads implemented as part of the project would not provide access to this undeveloped area to the east, as the new roads would not extend into neighboring undeveloped areas. Therefore, the project would not result in the construction of new roadways, bridges, or other features that would make previously undeveloped areas accessible to new development.

Further, the project would be limited to the construction of infrastructure to serve the project and does not include major expansion of existing public or utility services or facilities in a manner that would allow for substantial growth in other areas not currently served, or currently underserved, by utility services or facilities. Proposed infrastructure developments associated with the project, including the expansion of local utilities (water and sewer lines), are not anticipated to be extended into previously undeveloped areas that would be available for future development. These infrastructure improvements are intended to meet the service needs of the project and are consistent with City infrastructure plans and policies. These project-specific improvements would facilitate the buildout of the project and account for planned related projects located within a relevant geographical area in proximity to the project site using similar infrastructure; however, they do not account for use by unplanned and undeveloped areas.

6.1.3 Economic Expansion or Growth

Employment in Santa Clarita is projected to increase to 99,500 workers by 2035 and to 100,800 workers by 2050 (SCAG 2024). According to the California Employment Development Department (EDD), as of August 2025, there are approximately 118,900 workers in the City's labor force, which exceeds the SCAG projections (EDD 2025). The project is a residential development; therefore, the project would result in a negligible increase in employees, such as on-site security or recreation center management staff. Based on August 2025 unemployment estimates by the EDD, Santa Clarita has an unemployment rate of 6% with approximately 7,100 unemployed members of the workforce in the City. Based on the

existing unemployment rate, the project is expected to use workers from the local employment force and would not require a substantial number of workers to relocate to the project area. Therefore, any population growth associated with new permanent employment opportunities would be negligible and would fall below SCAG growth projections.

6.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines § 15126.2(d) identifies significant irreversible environmental changes as the use of nonrenewable resources during the initial and continued phases of a project may be irreversible, since a large commitment of these resources makes removal or nonuse thereafter unlikely. Irreversible environmental changes may also result from environmental accidents associated with the project. In accordance with CEQA Guidelines § 15126.2(d), this section of the EIR evaluates whether the project would result in the irretrievable commitment of resources or would cause irreversible changes in the environment.

6.2.1 Commitment of Resources

The project would result in the development of residential and recreational uses within the currently undeveloped project site and would commit approximately 58.7 acres of land for residential uses, 3.1 acres for recreational uses, and 25.4 acres for private streets and emergency use. Approximately 106.6 acres of open space would be maintained within the project area. Once developed, it is highly unlikely that the project site would be reverted to a less urban land use. In addition, construction of the project would irreversibly consume construction materials and nonrenewable energy resources (e.g., fossil fuels, wood, etc.). Nonrenewable resources used during the construction and development within the project site would no longer be used for other purposes. Consumption of building materials and energy is associated with all development projects in the region, and these commitments of resources are not unique or unusual to the project. Construction of residential and commercial structures would be subject to the California Building Code (CBC), which regulates the method of use, properties, performance, and types of building materials used in construction. Construction equipment would be subject to California and local fuel efficiency standards and idling restrictions.

Operation of the project would also result in an incremental contribution to the long-term consumption of energy resources associated with the establishment of residential uses within the project site. Electricity would be provided by the Southern California Edison (SCE), which supplies 33% of its energy mix from renewable resources, 3% from large hydroelectric sources, 24% from natural gas, and 8% from nuclear. Solar accounts for 17% of SCE's power mix and is currently the largest renewable energy resource (SCE 2022). The project would be required to meet or exceed the requirements of the CBC and California Title 24 for Building Energy Efficiency Standards in effect at the time of construction. Compliance with these standards would include implementation of water conservation measures, energy- and water-efficient appliances, and energy-efficient heating and cooling systems. These sustainable building features would reduce new energy demand and the consumption of water and nonrenewable fossil fuels to a level consistent with or better than other development within the project vicinity. Additionally, as required by Title 24 § 150.1(c)14 (Photovoltaic Requirements), rooftop solar would be included on each new residential unit, which would supply approximately 1,206,186 kilowatt hours (kWh) of energy per year.

Future development of the project would also increase the demand for public services, public facilities, and utility services, which represents a permanent commitment of these resources. As evaluated in Section 4.15, *Public Services*, the project would be subject to the payment of fees to offset the incremental demand on public facilities and services and allow for continued use of these services and

facilities by the existing and future populations. As evaluated in Section 4.19, *Utilities and Service Systems*, there would be adequate water supply and wastewater treatment capacity to serve the project's demand. Therefore, the commitment of these resources for project development has been accounted for and would not result in a substantial adverse environmental impact.

6.2.2 Environmental Accidents

Construction of the project would also result in the short-term use of construction-related hazardous substances (e.g., gasoline, fuels, solvents, paints, oils, etc.) during the estimated 36-month construction phase of the project. The use of these substances could lead to upset conditions as a result of accidental spill or release. Any hazardous substances used during project construction would be required to be used, transported, and disposed of in accordance with the Occupational Safety and Health Administration (OSHA) Process Safety Management Standard (29 Code of Federal Regulations [CFR] 1910.119) and the California Code of Regulations (CCR) Title 22, Division 4.5 (Environmental Health Standards for the Management of Hazardous Waste). Adherence to existing California requirements would minimize the potential for the project to result in upset or accident conditions related to construction-related hazardous substance use.

6.3 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL IMPACTS

CEQA Guidelines § 15126.2(c) requires an EIR to describe any significant impact, including those which can be mitigated but not reduced to a less-than-significant level, and where there are impacts that cannot be alleviated without imposing an alternative design, their implications, and the reason why the project is being proposed, notwithstanding their effect. This project does not result in any significant and unavoidable impacts; all significant impacts that could result from project implementation can be mitigated to levels below significance thresholds and criteria with the implementation of the mitigation measures identified in this EIR.

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CHAPTER 7. REFERENCES AND REPORT PREPARATION

7.1 PROJECT DESCRIPTION

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7.6 REPORT PREPARATION

This EIR has been prepared by SWCA Environmental Consultants, in association with the City of Santa Clarita (CEQA Lead Agency), Ambient Air Quality & Noise Consulting, Geosyntec Consultants, Inc., and Kittleson & Associates, Inc.

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