GSCHWEND RESIDENCE PROJECT

DRAFT INITIAL STUDY
File No. CP17-010/ER20-205

Prepared by:
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June 2021

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June 2021

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LIST OF ABBREVIATIONS AND ACRONYMS

°C	Celsius
°F	Fahrenheit
µg/m3	micrograms per cubic meter
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AF	acre-feet
BAAQMD	Bay Area Air Quality Management District
Basin	San Francisco Bay Area Air Basin
BMP	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalARP	California Accidental Release Prevention
CalEMA	California Emergency Management Agency
CalEPA	California Environmental Protection Agency
CAL-OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation's (
CAP	Clean Air Plan
CARB	California Air Resources Board
CBC	California Building Code
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act

CCR	California Code of Regulations
CD	Community Design
CDFW	California Department of Fish and Wildlife
CDMG	California Department of Mines and Geology
CE	Categorical Exemption
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFC	California Fire Code
CGS	California Geological Survey
CH_4	landfill methane
CH_4	methane
City	City of San José
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Exposure Level
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibel(s)
DNL	day-night average level

DOC	Department of Conservation
DTSC	Department of Toxic Substances and Control
EC	Environmental Considerations/Hazards
EO	Executive Order
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ER	Environmental Resources
ES	Education and Services
FAA	Federal Aviation Administration
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Maps
FIS	Flood Insurance Studies
GHG	greenhouse gas
GIS	geographic information system
GSA	groundwater sustainability agencies
GWh	gigawatt-hours
GWP	Global Warming Potential
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HMCD	Hazardous Materials Compliance Division
HMP	Hydromodification Management Plan

HMSO	Hazardous Materials Storage Ordinance
HRA	health risk assessment
HS-sr	Hillside-Scenic Road Combining District
IN	Infrastructure
L_{dn}	day-night average level
L_{eq}	sound level
L_{max}	maximum noise level
LTA	Local Transportation Analysis
LU	Land Use
MBTA	Migratory Bird Treaty Act
mg/m3	milligrams per cubic meter
MHUSD	Morgan Hill Unified School District
MLD	Most Likely Descendant
MMT	million metric tons
MND	Mitigated Negative Declaration
MO	Model Ordinance
MRP	Municipal Regional Permit
MRZ	Mineral Resource Zones
MS	Measurable Environmental Sustainability
MS4	municipal separate storm sewer systems
msl	mean sea level
MT	metric tons
MTC	Metropolitan Transportation Commission
N_2O	nitrous oxide

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NO_2	Nitrogen Dioxide
NOD	Notice of Determination
NOI	Notice of Intent
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	Ozone
OES	Office of Emergency Services
OPR	Office of Planning and Research
Pb	Lead
PBCE	Planning, Building and Code Enforcement
PDO	Parkland Dedication Ordinance
PFCs	perfluorocarbons
PG&E	Pacific Gas & Electric
PIO	Park Impact Ordinance
PM	particulate matter
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
ppm	parts per million
PPV	peak particle velocity
PR	Parks, Open Space, and Recreation

PRC	Public Resources Code
PRD	Permit Registration Document
project	Gschwend Residence Project
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
RMS	root-mean-square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SCCDEH	Santa Clara Department of Environmental Health
SCP	Stormwater Control Plan
SCS	Sustainable Communities Strategy
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SCVWD	Santa Clara Valley Water District
SF_6	sulfur hexafluoride
SFHA	Special Flood Hazard Areas
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act
SIP	State Implementation Plan
SJC	San José International Airport
SJFD	San José Fire Department
SJMC	San José Municipal Code
SJPD	San José Police Department
SJPL	San José Public Library

SJWC	San José Water Company
SMARA	Surface Mining and Reclamation Act
SMARTS	Stormwater Multiple Application and Report Tracking System
SO_2	Sulfur Dioxide
SR 85	State Route
SRA State	Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCM	treatment control measures
TMDL	Total Maximum Daily Load
TR	Land Use/Transportation
UCMP	University of California Museum of Paleontology
UGB	Urban Growth Boundary
US 101	US Highway 101
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
VdB	vibration velocity in decibels
VHFHSZ	very high fire hazard severity zones
VMT	vehicle miles traveled
VTA	Valley Transportation Authority
WDR	Waste Discharge Requirements

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1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of San José (City) as the Lead Agency, has prepared this Initial Study for the proposed Gschwend Residence Project (project) in compliance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of San José, California. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed Project.

1.2 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

The City of San José will use the Initial Study to support the use of a Mitigated Negative Declaration (MND) for the proposed Project. The City shall consider the Initial Study/MND together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with Project approval actions.

1.3 NOTICE OF DETERMINATION

If the Project is approved, the City of San José will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (*State CEQA Guidelines* Section 15075(g)).

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2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Gschwend Residence Project

2.2 LEAD AGENCY CONTACT

City of San José
Department of Planning, Building, and Code Enforcement
Thai-Chau Le, Supervising Planner
Thai-Chau.Le@sanjoseca.gov
408.535.5658

2.3 PROJECT APPLICANT

Marcus and Chelsea Gschwend
1570 Oakland Road
San José, CA 95131
408.487.2200

2.4 PROJECT LOCATION

Approximately 0.25 miles southwest of the intersection of Santa Teresa Boulevard and Bayliss Drive

2.5 ASSESSOR'S PARCEL NUMBERS

708-21-004; 708-21-005

2.6 GENERAL PLAN AND ZONING DISTIRCT

City Parcel General Plan Designation: *Open Hillside*
City Parcel Zoning: *Agricultural (A)*

County Parcel General Plan Designation: *Hillsides*
County Parcel Zoning: *Hillside-Scenic Road Combining District (HS-sr)*

2.7 HABITAT PLAN DESIGNATION

Land Cover Designation: California Annual Grassland; Valley Oak Woodland
Development Zone: Private Development Covered
Fee Zone: A: Ranchlands and Natural Lands

2.8 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- City of San José, demolition, grading, and building permit approval
- County of Santa Clara, well permit approval
- County of Santa Clara, septic system

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3.0 PROJECT DESCRIPTION

3.1 PROJECT SITE AND SITE DESCRIPTION

3.1.1 Regional Setting

The Project site consists of two contiguous parcels located southwest of Santa Teresa Boulevard: the northern parcel (Assessor's Parcel Number [APN] 708-21-004) totals 11.69 acres and is within the jurisdiction of the City, and the southern parcel (APN 708-21-005) totals 5.18 acres and is unincorporated land within the jurisdiction of Santa Clara County. The City encompasses approximately 180 square miles of land within the County, and is bounded by the cities of Sunnyvale, Mountain View, Santa Clara, Fremont, and Milpitas to the north; unincorporated Santa Clara County to the east and south; and the cities of Campbell, Cupertino, Los Gatos, and Saratoga to the west.

As shown in Figure 3-1, Project Location and Regional Vicinity Map, regional access to the Project site is provided by US Highway 101 (US 101) to the east and State Route (SR) 85 to the north. The Bailey Avenue on- and off-ramp provides access to US 101, which generally runs north-south, and is located approximately 2.6 miles southeast of the Project site. Direct access to SR 85, which generally runs east-west through the City, is provided by on- and off-ramps along Cottle Road, located approximately 3.3 miles northwest of the Project site.

3.1.2 Project Vicinity and Surrounding Land Uses

As noted above, the approximately 16.86-acre Project site consists of two parcels located west of Santa Teresa Boulevard, south of the Bayliss Drive intersection. The Project site is partially bound by the Santa Clara Valley Water District's (SCVWD) Alamitos Canal (Coyote-Alamitos Canal), as it traverses the northern edge of the Project site within a 60-foot easement. Open space and residential uses are located to the north, Santa Teresa Boulevard is located to the east, and open space, including the Santa Teresa County Park, is to the west of the Project site. The Project site is primarily surrounded by residential and open space uses, with some recreational uses present to the northwest.

3.1.3 History of the Existing Project Site and Site Conditions

In its existing setting, the undeveloped Project site is irregular in shape and is located in a hillside area primarily comprised of non-native grasslands and scattered valley oak and California buckeye trees. The Project site ranges in elevation from approximately 260 feet to 380 feet above mean sea level (msl). Figure 3-2, Aerial Photograph of the Project Site and Surrounding Land Uses, depicts an aerial photograph of the Project site. Development in the vicinity of the Project site was limited to unpaved roads, agricultural uses, electrical transmission lines, and sparse development until approximately 1980, by which time the surrounding residential subdivisions and Santa Teresa Boulevard had both been constructed.

While the Project site does not contain any buildings, high voltage PG&E electrical transmission towers and overhead power lines cross the north side of the Project site within an easement and additional transmission lines also border the Project site to the south. As noted above, the 60-foot

easement for the Coyote-Alamitos Canal includes a dirt access road adjacent to the concrete-lined canal.

3.2 PROPOSED PROJECT

The following includes a description of the proposed Project, which would result in the construction of a two-story single-family home and associated improvements on the Project site.

3.2.1 Development Proposal

As shown on Figure 3-3, Conceptual Site Plan, the proposed Project consists of the construction of an approximately 4,464-square-foot single-family home that would be two stories and approximately 31 feet, 6 inches in height and include an approximately 1,441-square-foot attached garage, as well as related improvements including installation of a water well and tanks, a septic system, and a leach field. Conceptual floor plans for the first and second floors are shown in Figure 3-4, Conceptual First and Second Floor Plan. The proposed residence would be located on a relatively flat section of the hillside in the middle of the northern parcel (referred to as the residence site), as shown in Figure 3-3. The residence site is located within the City's jurisdiction.

The proposed Project would also include grading and construction of a new approximately 1,400-foot-long driveway from Santa Teresa Boulevard to the home site. The majority of the proposed driveway would generally utilize the alignment of the existing dirt maintenance road but would deviate from the existing road alignment for the driveway along Santa Teresa Boulevard and an approximately 400-foot section east of the proposed residence. The driveway would be improved with gravel and asphalt section, drainage gutters, low retaining walls where needed, and pull-outs for passing vehicles. The majority of the proposed driveway would be located within the County's jurisdiction. Pursuant to the County's fire code, the Project applicant would be required to clear and maintain vegetation within 30 to 50 feet of the driveway. In addition, the current design incorporates a 35-foot buffer, as shown in Figure 3-3.

The residence site would be graded to create a flat pad at an elevation of approximately 330 feet. Grading for the proposed Project, including all utilities, would result in approximately 2,574 cubic yards of cut and 2,569 cubic yards of fill, requiring an import of approximately 5 cubic yards. The proposed Project would be constructed in one phase lasting approximately three months, with construction anticipated to begin in fall 2021.

3.2.2 Building Design

As illustrated in Figures 3-5, Conceptual Elevations – Front and Right Side, and 3-6, Conceptual Elevations – Rear and Left Side, the proposed two-story house would have a wraparound deck around the upper floor with a pitched gable roof. The lower level, which would include the garage, would be set into the hillside to minimize the apparent height and visibility of the structure; the two-story façade would be exposed to views from the north and east, but would appear as a one-story residence from the south and west, as shown in Figure 3-7, Conceptual Elevations – Extended. Vertical and horizontal lines and color and material changes would serve to visually break up the façade as well. The materials proposed for the residence would include fiber cement horizontal wall

siding, earth tone window trim, and earth tone roof shingles. As noted above, the proposed residence would be a maximum of 31 feet, 6 inches above the finished grade to the top of the roof.

3.2.3 Utilities and Infrastructure

As noted above, the proposed Project would include the installation of the following utilities: a new water well located approximately 60 feet east of the proposed residence, a two approximately 5,000-gallon water storage tanks located approximately 50 feet south of the proposed residence, and a septic system with a leach field that would be installed on the northern side of the hillside, approximately 300 feet north of the proposed residence, to dispose of wastewater. The project would utilize solar panels for electricity and would rely on propane gas for heating.

3.3 APPROVALS/PERMITS

While the City is the CEQA Lead Agency for the Project, other agencies also have discretionary authority related to the Project and approvals or serve as a responsible and/or trustee agency in connection to the proposed Project. A list of these agencies and potential permits and approvals that may be required is provided below.

- City of San José, demolition, grading, and building permit approval
- County of Santa Clara, well permit approval
- County of Santa Clara, septic system

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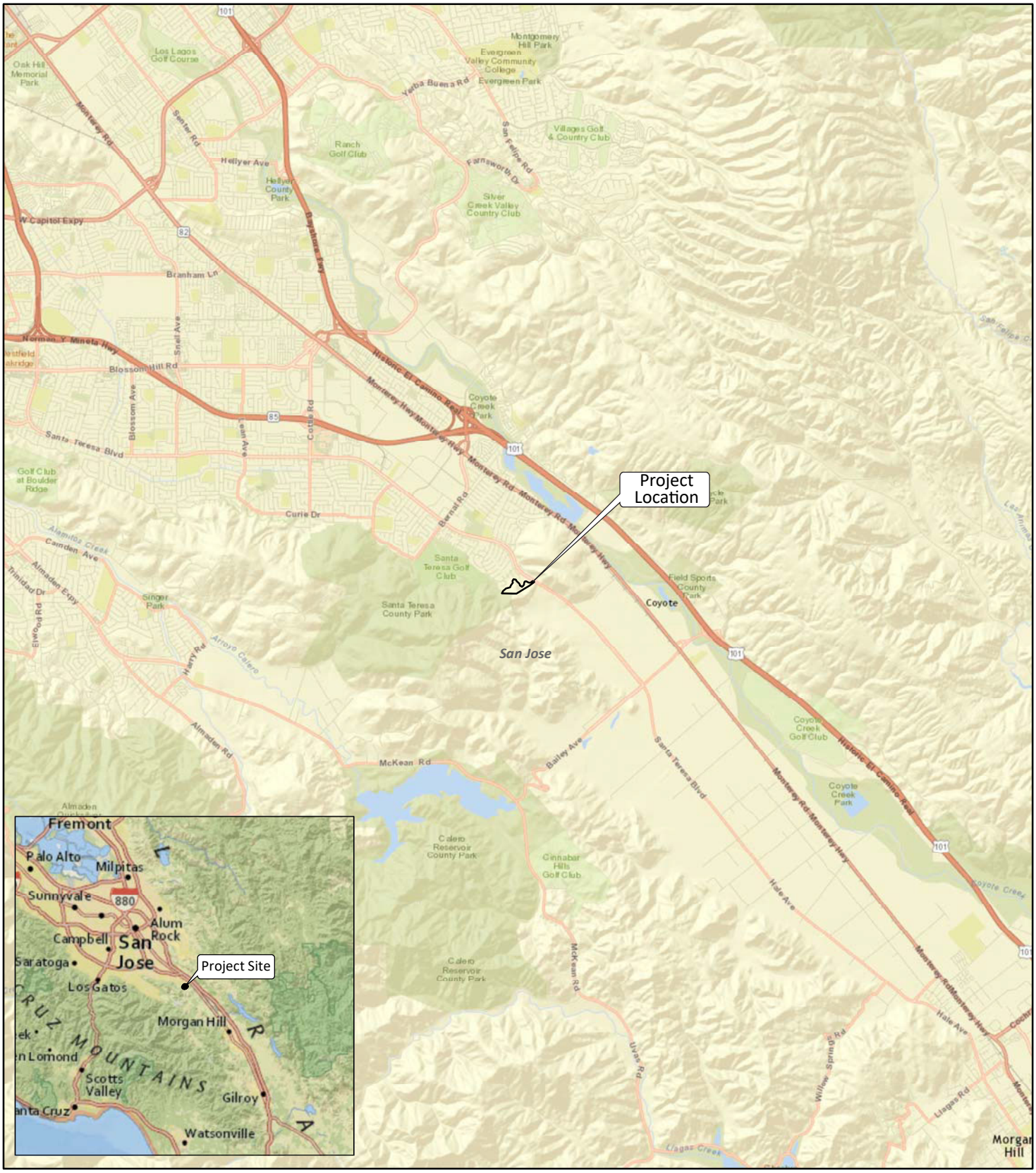

LSA

FIGURE 3-1

N

0 0.75 1.5

MILES

SOURCE: ESRI WORLD STREETMAP, NATIONAL GEOGRAPHIC WORLD BASEMAP

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Gschwend Residence Project Initial Study

Project Location and Regional Vicinity Map

LSA

FIGURE 3-2

Gschwend Residence Project Initial Study

Aerial Photograph of the Project Site and Surrounding Land Uses

SOURCES: GOOGLE EARTH, 6/19/19; LSA, 2020

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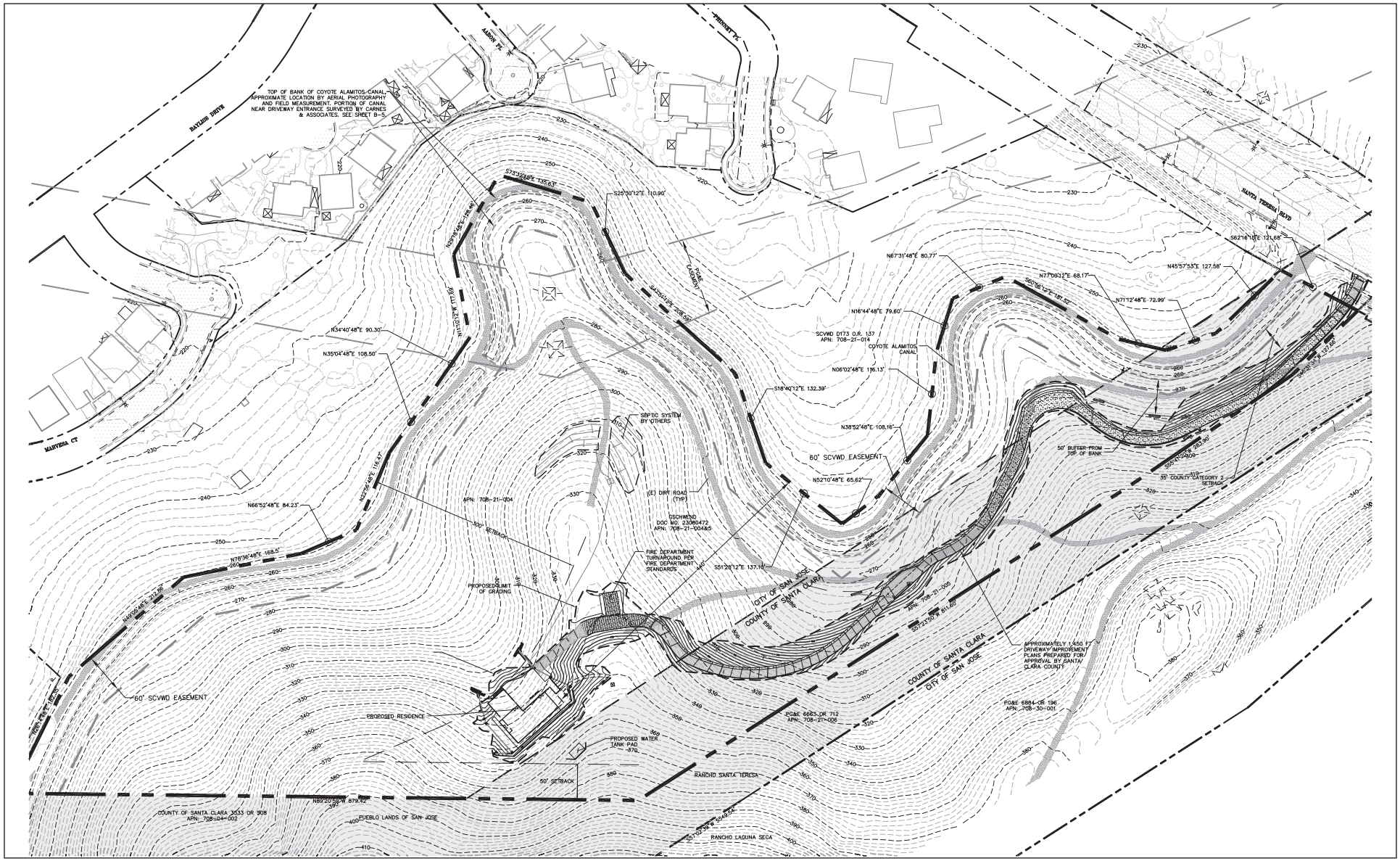

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LEGEND

- (E) AB
- (E) AC
- PROPOSED 2" AC OVER 6" AB
- PROPOSED 6" AB
- PROPOSED RETAINING WALL
- PROPERTY LINE

0 120 240
FEET

N

FIGURE 3-3

Gschwend Residence Project Initial Study
Conceptual Site Plan

SOURCE: R.I. ENGINEERING, APRIL 2020

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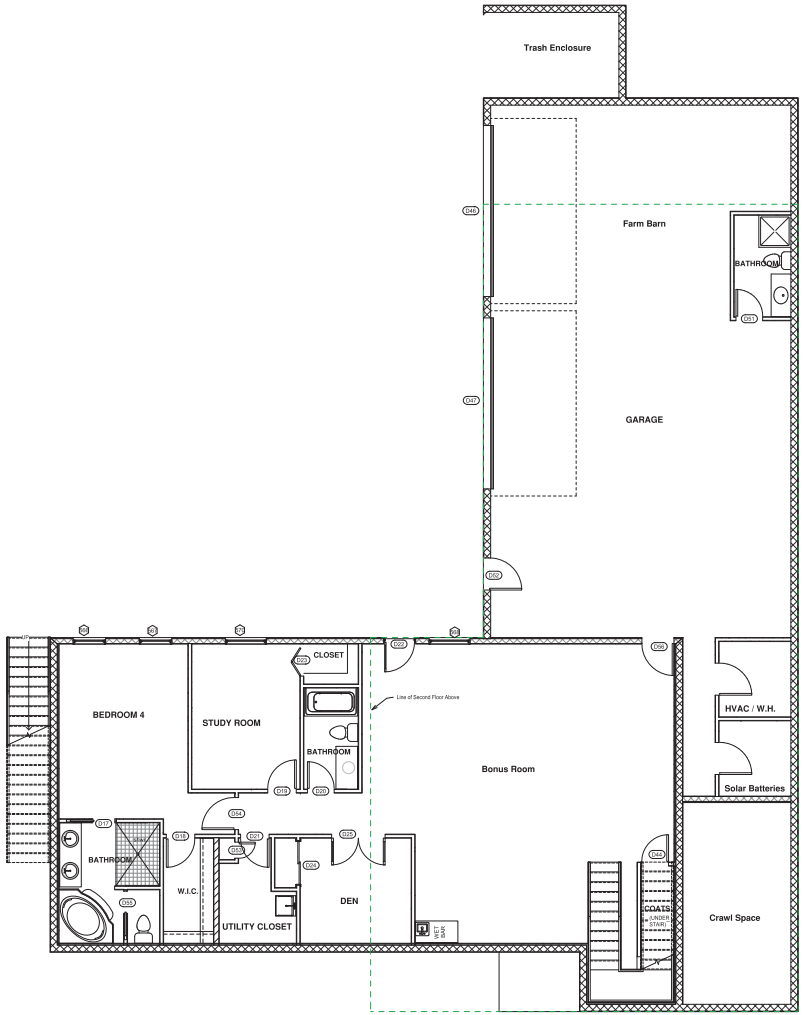
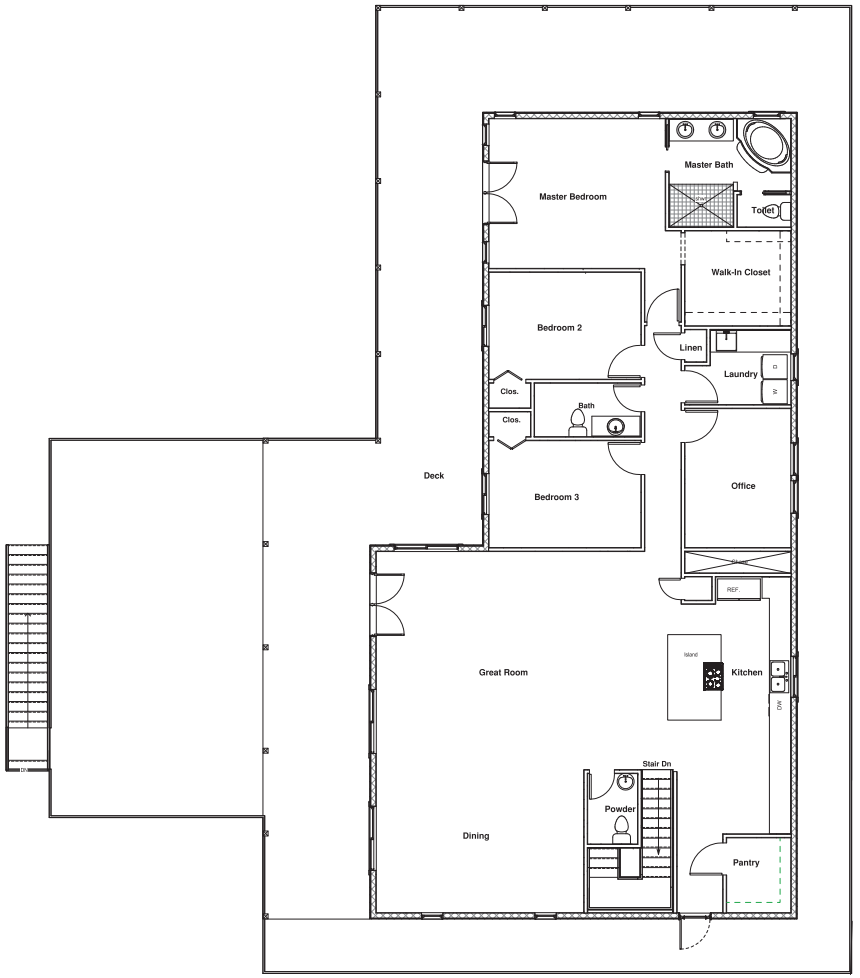


First Floor



Second Floor

FIGURE 3-4

NOT TO SCALE

SOURCE: ECCO DESIGN BUILD, 2020

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Gschwend Residence Project Initial Study
Conceptual First and Second Floor Plan

LSA

FIGURE 3-5

NOT TO SCALE

SOURCE: ECCO DESIGN BUILD, 2020

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Gschwend Residence Project Initial Study
Conceptual Elevations - Front and Right Side

LSA

FIGURE 3-6

NOT TO SCALE

SOURCE: ECCO DESIGN BUILD, 2020

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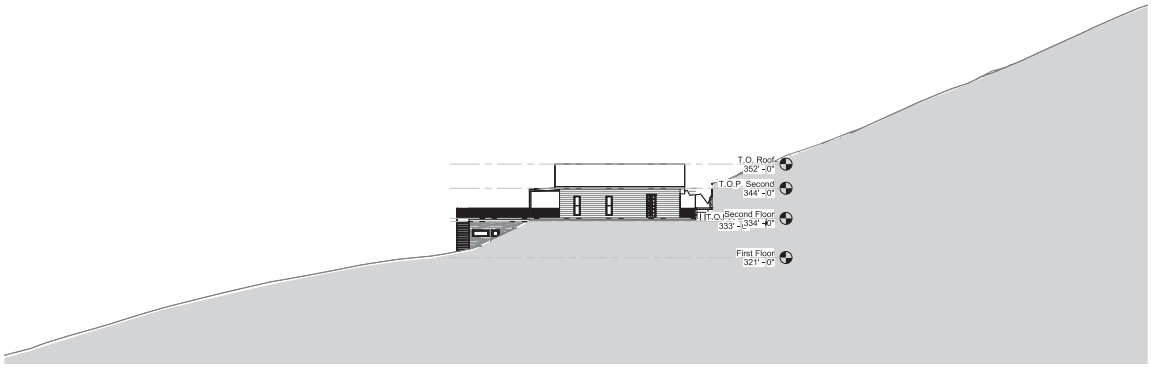
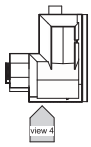
Gschwend Residence Project Initial Study
Conceptual Elevations - Rear and Left Side

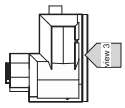


Extended Right Side Elevation

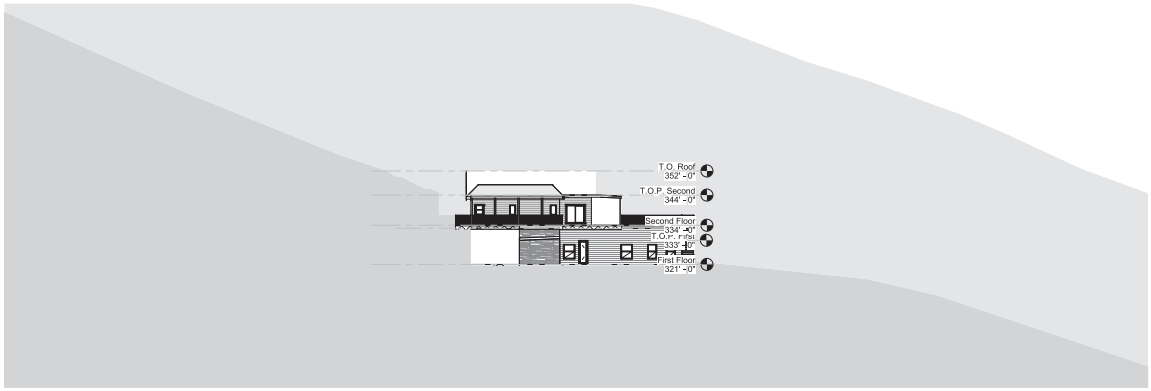


Key Plan

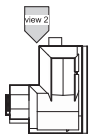
Extended Rear Elevation



Key Plan

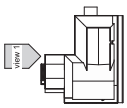


Extended Left Side Elevation



Key Plan

Extended Front Elevation



Key Plan

LSA

FIGURE 3-7

NOT TO SCALE

SOURCE: ECCO DESIGN BUILD, 2020

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Gschwend Residence Project Initial Study
Conceptual Elevations - Extended

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4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Less Than Significant Impact with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☐ Land Use Planning	☐ Mineral Resources
☐ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

The discussion for each environmental subject includes the following subsections:

- Environmental Setting – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the Project, and 2) describes the existing, physical environmental conditions at the Project site and in the surrounding area, as relevant.

- Checklist and Discussion of Impacts – This subsection includes a checklist for determining potential impacts and discusses the Project's environmental impact as it relates to the checklist questions. For significant impacts, feasible mitigation measures, if necessary, are identified. "Mitigation measures" are measures that will minimize, avoid, or eliminate a significant impact (*State CEQA Guidelines* Section 15370).

- Conclusion – This subsection provides a summary of the Project's impacts on the resource.

Important Note

The California Supreme Court in a December 2015 opinion in *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal. 4th 369 (BIA v. BAAQMD) confirmed that CEQA, with several specific exceptions, is concerned with the impacts of a Project on the environment, not the effects that the existing environment may have on a Project. Therefore, the evaluation of the significance of Project impacts under CEQA in the following sections focuses on impacts of the Project on the environment, including whether a Project may exacerbate existing environmental hazards.

The City of San José has policies that address existing conditions affecting a proposed Project, which are also discussed in this Initial Study. This is consistent with one of the primary objectives of CEQA, which is to provide objective information to decision-makers and the public. The State CEQA Guidelines and the courts are clear that a CEQA document can include information of interest even if such information is not an environmental impact as defined by CEQA.

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5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a Lead Agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the Project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on Project-specific factors as well as general standards (e.g., the Project will not expose sensitive receptors to pollutants, based on a Project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as Project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the Lead Agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced, as discussed below).

5. Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration (Section 15063 (c)(3)(D)). In this case, a brief discussion should identity the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less Than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

6. Lead Agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and Lead Agencies are free to use different formats; however, Lead Agencies should normally address the questions from this checklist that are relevant to a Project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

    a. The significance criteria or threshold, if any, used to evaluate each question; and

    b. The mitigation measure identified, if any, to reduce the impact to less than significant.

5.1 AESTHETICS

5.1.1 Environmental Setting

5.1.1.1 Regulatory Framework

State Regulations

State Scenic Highways Program

The California Department of Transportation's (Caltrans) Landscape Architecture Program administers the Scenic Highway Program contained in the Streets and Highways Code, Sections 260–263. The purpose of the program is to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special classifications. State Highways are classified as either Officially Listed or Eligible. A highway may be designated scenic based on the visibility of the natural landscape to travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

According to Caltrans' California Scenic Highway Mapping System, the closest Officially Designated scenic highway is a portion of Highway 9 between Los Gatos and Saratoga. There are no Officially Listed scenic highways in the City.[1]

Local Regulations

Outdoor Lighting Policy

The City's Outdoor Lighting Policy (City Council Policy No. 4-3) promotes energy efficient outdoor lighting on private development. The purpose of the policy is to provide adequate light for nighttime activities while allowing the continued enjoyment of the night sky and continuing operation of the Lick Observatory (located at 7281 Mt. Hamilton Road, Mount Hamilton, CA 95140) by reducing light pollution and sky glow.

Envision San José 2040 General Plan

The City's General Plan includes the following goals and policies related to aesthetics that are applicable to the proposed Project:

Policy CD-1.1 Require the highest standards of architectural and site design, and apply strong design controls for all development projects, both public and private, for the enhancement and development of community character and for the proper transition between areas with different types of land uses.

Policy CD-1.13 Use design review to encourage creative, high-quality, innovative, and distinctive architecture that helps to create unique, vibrant places that are both

[1] California Department of Transportation. 2017. Scenic Highway Program. Available online at: dot.ca.gov/-/media/dot-media/programs/design/documents/2017-03desigandeligible-a11y.xlsx (accessed June 30, 2020).

desirable urban places to live, work, and play and that lead to competitive advantages over other regions.

Policy CD-1.23 Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-4.9 For development subject to design review, ensure the design of new or remodeled structures is consistent or complementary with the surrounding neighborhood fabric (including but not limited to prevalent building scale, building materials, and orientation of structures to the street).

Policy LU-17.2 Apply strong architectural, site, and grading design controls through a discretionary development review process to all types of hillside and rural residential development that require significant grading activities in order to protect the hillsides and to minimize potential adverse visual and environmental impacts.

Single-Family Design Guidelines (1999)

The City's Single-Family Design Guidelines apply to all new single-family detached structures on individual lots. The major objective of these guidelines is to ensure that new homes are appropriately compatible with the surrounding neighborhood. The following policies are applicable to the proposed Project:

Policy I.B.3 Heights above 30 feet are discouraged on hillside areas.

Policy III.B.1 Lighting should never be allowed to shine directly onto adjacent residential properties.

Policy III.B.2 The view of light sources should be entirely shielded from adjacent properties.

5.1.1.2 Existing Conditions

While the Project site does not contain any buildings, high voltage PG&E electrical transmission towers and overhead power lines cross the north side of the Project site within an easement and additional transmission lines also border the Project site to the south. The Project site is partially bound by the SCVWD's Coyote-Alamitos Canal as it traverses the northern edge of the Project site within a 60-foot easement.

There are no existing sources of light within the Project site. Sources of light adjacent to the Project site include exterior lighting from adjacent properties, streetlights, and vehicle headlights.

Surrounding Area. The Project site is primarily surrounded by residential and open space uses, with some recreational uses, including Santa Teresa County Park, present to the northwest. The

surrounding views to the north include a built-out suburban residential environment, and open space and undeveloped hillsides in other directions. The residential uses north of the Project site are generally one to two stories in height. The surrounding buildings within the vicinity of the Project site do not represent a particular architectural style or color scheme.

The closest development to the Project site are the residential uses located approximately 140 feet north of the property line and approximately 650 feet north of the proposed residence site.

Scenic Vistas and Resources. According to the City of San José General Plan, scenic resources in the City include views of hills and mountains, baylands, and the urban skyline within the Santa Clara Valley.[2] Views of undeveloped hillsides are visible from the Project site and from Santa Teresa Boulevard near the site.

Scenic Corridors. The General Plan designates Scenic Corridors, which are defined as public thoroughfares that provide visual access to these scenic resources in order to preserve views throughout the City. There are three types of Scenic Corridors established in the City's General Plan: 1) Gateways, that are designated locations at which visitors enter the City or a unique neighborhood within the City; 2) Urban Corridors, which include all State and Interstate Highways within the City; and 3) Rural Scenic Corridors, which are routes that primarily travel through surrounding hillsides east and south of the City's center and are generally located outside of the Urban Growth Boundary. There are no Scenic Corridors in the immediate vicinity of the Project site. The nearest Scenic Corridor is designated as a Gateway, located approximately 1.5 miles northeast of the Project site at the intersection of Metcalf Road and Monterey Road.

5.1.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
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 non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

[2] San José, City of. 2011. *Final Program Environmental Impact Report: Envision San José 2040*. November.

a. Would the project have a substantial effect on a scenic vista?

Less than Significant Impact. California State Government Code Section 65560(b)(3) stipulates that city and county General Plans address "…Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakes shores, beaches, and rivers, and streams; and areas that serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors…"

A scenic vista is the view of an area that is visually or aesthetically pleasing from a certain vantage point. It is usually viewed from some distance away. Aesthetic components of a scenic vista include: 1) scenic quality; 2) sensitivity level; and 3) view access.[3]

A scenic vista can be impacted in two ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the "vista" of the scenic resource. Important factors in determining whether a proposed project would block scenic vistas include the project's proposed height, mass, and location.

As stated previously, hillsides are visible from various vantage points throughout the City, including from areas on and within the vicinity of the Project site. Within the vicinity of the Project site, views of hillsides are visible from Santa Teresa Boulevard and the Project site.

The General Plan designates Scenic Corridors, which are defined as public thoroughfares that provide visual access to scenic resources in order to preserve these views throughout the City. As noted previously, the nearest Scenic Corridor is designated as a Gateway, located 1.5 miles northeast of the Project site at the intersection of Metcalf Road and Monterey Road. Refer to Response 5.1.3(b), below for additional discussion of scenic corridors.

As previously noted, the Project site is located in an undeveloped area adjacent to residential uses. Figures 5-1 through 5-5, Visual Simulation – View A through Visual Simulation – View D, show visual simulations of the proposed Project from surrounding vantage points. As shown on Figure 5-3 through 5-5, the proposed Project would be partially visible from surrounding roadways including Phinney Place, Aaron Place, and Manresa Court, but would not block the vista from any of these viewpoints. The proposed Project would be set back into the hillside such that it would not substantially disrupt any ridgelines and would include materials that would blend into the surrounding setting. Additionally, scenic vistas in the area are already impacted by the presence of the high voltage PG&E electrical transmission towers and overhead power lines that cross the Project site. Therefore, the proposed Project would not result in a significant impact to scenic vistas.

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

No Impact. The nearest State-designated scenic highway to the Project site is SR 17, which is approximately 12.5 miles northwest of the Project site; the site is not within view of this roadway.[4]

[3] Bureau of Land Management. 2012. *Visual Resources Management Guide*.

Therefore, the proposed Project does not have the potential to damage resources within a State-designated scenic highway.

As discussed in Response 5.1.3(a), the General Plan identifies Scenic Corridors that provide views of scenic resources within and surrounding the City. There are no Scenic Corridors in the immediate vicinity of the Project site. The nearest Scenic Corridor is located 1.5 miles northeast of the Project site at the intersection of Metcalf Road and Monterey Road. No existing scenic rock outcroppings or buildings are located within the Project site. Therefore, the proposed Project would not result in a significant impact to scenic resources.

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

Less Than Significant Impact. As noted in Section 3.0, Project Description, the Project site is within the jurisdiction of both the City and the County, but the City is the Lead Agency under CEQA. The City has a population of more than 100,000, and is therefore an urbanized area.[5] However, given that the Project site is located in an undeveloped area of the City the following discussion includes an analysis of the Project's potential conflicts with the City's Zoning Code and General Plan.

Zoning. The proposed Project would be required to comply with the Municipal Code standards for the Agricultural zone, including a minimum 50-foot setback from abutting streets and highways and from abutting property zoned for non-residential uses, and a minimum 300-foot setback from residential zones or properties. As described in Section 3.0, Project Description, the proposed Project would be a maximum of 31 feet, 6 inches in height, and therefore would be below the maximum height of 35 feet. Furthermore, the project is more than 300 feet from residential zones or properties. Therefore, the proposed Project would be consistent with the applicable zoning regulations.

4 California Department of Transportation. 2017, op. cit.

5 Section 21071 of the Public Resources Code defines an urbanized area as an incorporated city that meets either of the following criteria: 1) Has a population of at least 100,000 persons; or 2) Has a population of less than 100,000 persons if the population of that city and not more than two continuous incorporated cities combined equals at least 100,000 persons.

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LSA

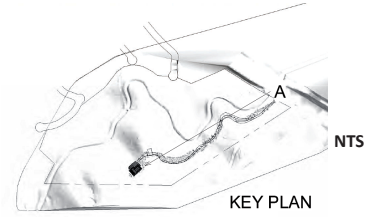


FIGURE 5-1

Gschwend Residence Project Initial Study
Visual Simulation - View A

SOURCE: ECCO DESIGN BUILD, 2018.

P:\GSC2001\PRODUCTS\Graphics\Figure 5-1.ai (7/7/2020)

LSA

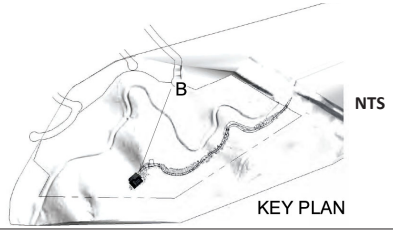


FIGURE 5-2

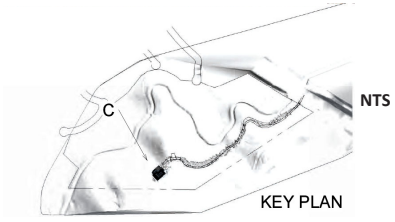
Gschwend Residence Project Initial Study
Visual Simulation - View B

SOURCE: ECCO DESIGN BUILD, 2018.

P:\GSC2001\PRODUCTS\Graphics\Figure 5-2.ai (7/7/2020)

LSA

FIGURE 5-3



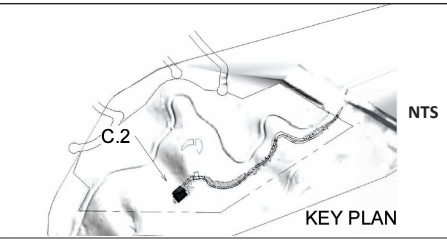
SOURCE: ECCO DESIGN BUILD, 2018.

Gschwend Residence Project Initial Study
Visual Simulation - View C.1

P:\GSC2001\PRODUCTS\Graphics\Figure 5-3.ai (7/7/2020)

LSA

FIGURE 5-4



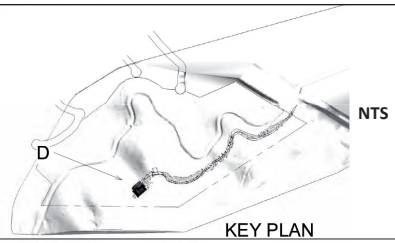
Gschwend Residence Project Initial Study
Visual Simulation - View C.2

SOURCE: ECCO DESIGN BUILD, 2018.

P:\GSC2001\PRODUCTS\Graphics\Figure 5-4.ai (7/7/2020)

LSA

FIGURE 5-5



Gschwend Residence Project Initial Study
Visual Simulation - View D

SOURCE: ECCO DESIGN BUILD, 2018.

P:\GSC2001\PRODUCTS\Graphics\Figure 5-5.ai (7/7/2020)

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General Plan. According to the City's General Plan, the Project site currently has a General Plan designation of Open Hillside. The proposed Project would be consistent with permitted uses in this designation, which allows for single-family dwellings on large, privately-owned sites. The proposed Project would also be consistent with the goals and policies listed in Section 5.1.1.1 regulating visual character and urban design in the City.

The design of the proposed Project would be compatible with the aforementioned zoning regulations and General Plan goals and policies, and would be consistent with the existing style of the surrounding neighborhoods. As noted previously, the proposed Project would be designed to set back into the hillside and would include earth-tone materials, including the roof shingle and siding, that would blend into the surrounding setting. Therefore, the proposed Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

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

Less Than Significant Impact. The impact of nighttime lighting depends upon the type of use affected, the proximity to the affected use, the intensity of specific lighting, and the background or ambient level of the combined nighttime lighting. Nighttime ambient light levels may vary considerably depending on the age, condition, and abundance of point-of-light sources present in a particular view. The use of exterior lighting for security and aesthetic illumination of architectural features may contribute to ambient nighttime lighting conditions.

The spillover of light onto adjacent properties has the potential to interfere with certain activities, including vision, sleep, privacy, and general enjoyment of the natural nighttime condition. Light-sensitive uses include residential, some commercial and institutional uses, and, in some situations, natural areas. Changes in nighttime lighting may become significant if a proposed project substantially increases ambient lighting conditions beyond its property lines, or if the project lighting routinely spills over into adjacent light-sensitive land use areas.

Reflective light (glare) is caused by sunlight or artificial light reflecting from finished surfaces (e.g., window glass) or other reflective materials. Glass and other materials can have many different reflectivity characteristics. Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. Reflective light is common in urban areas. Glare generally does not result in the illumination of off-site locations but results in a visible source of light viewable from a distance.

Nighttime illumination impacts are evaluated in terms of the project's net change in ambient lighting conditions and proximity to light-sensitive land uses (e.g., sensitive receptors). Sensitive receptors subject to potential light and glare impacts in the vicinity of the site include residential uses located directly north of the site.

Construction. Although construction activities would occur primarily during daylight hours, construction activities could extend into the evening hours, as permitted by the City's Municipal

Code.[6] Lighting required during the construction period could generate light spillover in the vicinity of the Project site. Any construction-related illumination would be shielded (shielded lighting contains a hood over the light source to direct it and prevent light trespass) to the extent feasible and would consist of the minimum lighting required for safety and security purposes only and would occur only for the duration required for the temporary construction process. By shielding lighting and using the minimum lighting necessary for safety and security purposes, light resulting from construction activities would not spillover onto adjacent properties and would not substantially impact sensitive uses, substantially alter the character of off-site areas surrounding the construction area or interfere with the performance of an off-site activity. Therefore, construction of the proposed Project would not create a new source of substantial light that would adversely affect day or nighttime views in the area, and light impacts associated with construction would be less than significant. No mitigation would be required.

Operation. The proposed Project would include lighting that would be typical of a single-family residential use. Consistent with the City's Outdoor Lighting on Private Development Policy 4-3,[7] all outdoor lighting would be directed downward and shielded to minimize off-site spill, and the location of all exterior lighting would comply with lighting standards for industrial zoning districts established in Section 20.50.250 of the City's Municipal Code.

Daytime glare can result from natural sunlight reflecting from a shiny surface that would interfere with the performance of an off-site activity, such as the operation of a motor vehicle. Reflective surfaces can be associated with window glass and polished surfaces. The finished facades of the proposed building would consist of earth tones with low reflectivity. Nighttime glare sources from the proposed Project would consist of exterior lighting and vehicle headlights. Nighttime glare would be shielded by the presence of mature trees and landscaping along the site boundaries and within the Project site.

5.1.3 Conclusion

Less Than Significant Impact. Conformance with existing General Plan policies, City design guidelines, and City Council policies would ensure that the proposed Project would not result in significant adverse visual or aesthetic impacts. No mitigation would be required.

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6 San José, City of. Municipal Code, Section 20.200.450: Hours of construction within 500 feet of a residential unit, allows for construction between the hours of 7:00 a.m. and 7:00 p.m. on a site located within 500 feet of a residential unit.

7 San José, City of. 2000. *Outdoor Lighting on Private Developments,* Resolution No. 56286. Adopted in March 1983, revised in June 2000. Available online at: https://www.sanjoseca.gov/home/showdocument?id=12835 (accessed June 30, 2020).

5.2 AGRICULTURAL RESOURCES

5.2.1 Environmental Setting

5.2.1.1 Regulatory Framework

Federal and State Regulations

California Department of Conservation Farmland Mapping and Monitoring Program

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. In each county, the land is analyzed for soil and irrigation quality, and the highest quality land is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Based on the results of these analyses, the DOC issues maps every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

Williamson Act

The Williamson Act, also known as the California Land Conservation Act of 1965, enables local governments and private landowners to enter into contracts that restrict specific parcels of land to agricultural or related open space use. As a result, landowners receive reduced property tax assessments because they are based upon farming and open space uses rather than market value.

Local Regulations

Envision San José 2040 General Plan

The Envision San José 2040 General Plan includes policies applicable to all development projects in San José, including policies specific to agricultural resources. However, due to the nature of the existing site as a developed light industrial use, existing policies aimed at preserving agricultural uses in the City are not applicable to the proposed Project.

5.2.1.2 Existing Conditions

The Project site is currently undeveloped and is not used for any agricultural purposes. The Project site has a land use designation of Open Hillside and is within the Agricultural zoning district. No forest land or timberland, as defined in Public Resources Code (PRC) Section 12220(g), is located on or near the Project site. Land uses surrounding the Project site include residential and industrial uses, with commercial uses also present directly southeast and east of the site.

5.2.2 Checklist and Discussion of Impacts

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California DOC as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the

Forest and Range Assessment Project and the carbon measurement methodology provided in the Forest Protocols adopted by the California Air Resources Board (CARB).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

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?

No Impact. The Project site is not used for agricultural production and is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.[8] The Project site is categorized as Grazing Land by the Farmland Mapping and Monitoring Program, which is defined as land on which the existing vegetation is suited to the grazing of livestock. Therefore, the proposed Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses. No impacts to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would occur, and no mitigation would be required.

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

No Impact. The Project site is classified as Agricultural on the City's Zoning Map, which includes single-family residences as a conditionally permitted use. The Project site is not currently used for agricultural purposes, and is not protected by a Williamson Act contract. Therefore, the proposed Project would not conflict with existing zoning or Williamson Act contracts. No impacts would occur, and no mitigation would be required.

[8] California Department of Conservation. California Farmland Conservancy. California Important Farmland Finder. Website: maps.conservation.ca.gov/dlrp/ciff (accessed July 20, 2020).

c. Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. The Project site is zoned Agricultural. The Project site is currently undeveloped as is not used as forest land or timberland. Tree farms and forestlands are permitted uses within the Agricultural zoning district, but only upon issuance and compliance with a special use permit, which has not been granted for the Project site. In addition, none the surrounding area is zoned as forest land, timberland, or timberland production. No impacts would occur, and no mitigation would be required.

d. Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No forest or timberland exists on the Project site or in the surrounding area. Therefore, the proposed Project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impacts would occur, and no mitigation would be required.

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

No Impact. The proposed Project would not result in the conversion of farmland on or off the Project site to non-agricultural uses because there are no agricultural uses on or in the immediate vicinity of the Project site. Likewise, the proposed Project would not result in impacts related to changes in the existing environment that could result in the conversion of agricultural land to non-agricultural uses. No impacts would occur, and no mitigation would be required.

5.2.3 Conclusion

No Impact. The proposed Project would have no impact on agricultural land, agricultural activities, or forestry resources. No mitigation would be required.

5.3 AIR QUALITY

5.3.1 Environmental Setting

5.3.1.1 Regulatory Framework

Federal and State Regulations

United States Environmental Protection Agency and the Federal Clean Air Act

The United States Environmental Protection Agency (USEPA) implements national air quality programs at the federal level. USEPA air quality mandates are drawn primarily from the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990.

California Air Resources Board and the California Clean Air Act

The California Air Resources Board (CARB) is the agency responsible for the coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA), adopted in 1988. The CCAA requires that all air districts in the State achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CCAA specifies that districts should focus on reducing the emissions from transportation and air-wide emission sources, and provides districts with the authority to regulate indirect sources.

Other CARB duties include monitoring air quality, establishing CAAQS, determining and updating area designations and maps, and setting emissions standards for mobile sources, consumer products, small utility engines, and off-road vehicles. CARB's Diesel Risk Reduction Plan[9] is intended to substantially reduce diesel particulate matter emissions and associated health risks through introduction of ultra-low-sulfur diesel fuel – a step already implemented – and cleaner-burning diesel engines.

Because of the robust evidence relating proximity to roadways and a range of non-cancer and cancer health effects, CARB also created guidance for avoiding air quality conflicts in land use planning in its *Air Quality and Land Use Handbook: A Community Health Perspective* (2005).[10] In its guidance, CARB advises that new sensitive uses (e.g., residences, schools, day care centers, playgrounds, and hospitals) not be located within 500 feet of a freeway or urban roads carrying 100,000 vehicles per day, or within 1,000 feet of a distribution center (warehouse) that accommodates more than 100 trucks or more than 90 refrigerator trucks per day. The Air Quality and Land Use Handbook specifically states that these recommendations are advisory and acknowledges that land use agencies must balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

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9 California Air Resources Board. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles.* Prepared by the Stationary Source Division and Mobile Source Control Division. October. Available online at: ww2.arb.ca.gov/sites/default/files/classic//diesel/documents/rrpfinal.pdf (accessed July 20, 2020).

10 California Environmental Protection Agency and California Air Resources Board. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. April. Available online at: www.arb.ca.gov/ch/handbook.pdf (accessed July 20, 2020).

Bay Area Air Quality Management District Regulations

The Bay Area Air Quality Management District (BAAQMD) seeks to attain and maintain air quality conditions in the San Francisco Bay Area Air Basin through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. The clean air strategy includes the preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. The BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by law.

For commercial and industrial sources, the BAAQMD regulates TACs using a risk-based approach. This approach uses a health risk assessment (HRA) to determine what sources and pollutants to control as well as the degree of control. An HRA is an analysis in which human health exposure to toxic substances is estimated and considered together with information regarding the toxic potency of the substances, in order to provide a quantitative estimate of health risks.[11] As part of ongoing efforts to identify and assess potential health risks to the public, the BAAQMD has collected and compiled air toxics emissions data from industrial and commercial sources of air pollution throughout the Bay Area. The BAAQMD has identified seven impacted communities; portions of Santa Clara County have been identified as an affected community. The Project site is also within an area of the County that has been identified as an affected community.

BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and greenhouse gas (GHG) emissions.

In June 2010, BAAQMD adopted updated draft *CEQA Air Quality Guidelines* and finalized them in May 2011. In May 2017, the BAAQMD published an updated version of the *CEQA Air Quality Guidelines*. The 2017 *CEQA Air Quality Guidelines* include thresholds to evaluate Project impacts in order to protectively evaluate the potential effects of the Project on air quality. These protective thresholds are appropriate in the context of the size, scale, and location of the proposed Project.

Clean Air Plan

Regional air quality management districts, such as the BAAQMD must prepare air quality plans specifying how State air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP defines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone (O_3) precursors, and greenhouse gases (GHGs). The proposed control strategy is designed to complement State, regional,

[11] In general, a health risk assessment is required if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggests a potential public health risk. Such an assessment generally evaluates chronic, long-term effects, including the increased risk of cancer as a result of exposure to one or more TACs.

and local efforts to improve air quality and protect the climate. The control strategy encompasses 85 individual control measures that describe specific actions to reduce emissions of air and climate pollutants from the full range of emission sources and is based on the following four key priorities:

- Reduce emissions of criteria air pollutants and TACs from all key sources;
- Reduce emissions of "super-GHGs" such as methane, black carbon, and fluorinated gases;
- Decrease demand for fossil fuels (gasoline, diesel, and natural gas); and
- Decarbonize our energy system.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NOx). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is a pollutant that exceeds State air quality standards in the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM10) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM2.5). Elevated concentrations of PM10 and PM2.5 are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Local Regulations

Envision San José 2040 General Plan

The Measurable Environmental Sustainability (MS) section of City's General Plan includes the following goals and policies related to air quality that are applicable to the proposed Project:

Policy MS-10.1 Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to State and federal standards. Identify and implement feasible air emission reduction measures.

Policy MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

Policy MS-10.4 Encourage effective regulation of mobile and stationary sources of air pollution, both inside and outside of San José. In particular, support federal and State regulations to improve automobile emission controls.

Policy MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

Policy MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Policy MS-13.1 Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant Project size and type.

City of San José Grading Ordinance

Chapter 17.04.280 of the Municipal Code requires that all earth-moving activities control fugitive dust through steps such as regular watering of the ground surface, cleaning of nearby streets, and planting any areas left vacant for extensive periods of time.

5.3.1.2 Existing Conditions

Regional and Local Criteria Pollutants. Major criteria pollutants, listed in "criteria" documents by the USEPA and CARB include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and suspended particulate matter (PM). These pollutants can have health effects such as respiratory impairment and heart/lung disease symptoms. The Project is located in the northern portion of Santa Clara County, which is in the San Francisco Bay Area Air Basin. Based on the California standards, the Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$); which are described further below.

Regional and Local Air Quality. The City of San José is located in the southern part of the San Francisco Bay Area Air Basin, a large shallow air basin ringed by hills that taper into a number of sheltered valleys around the perimeter. Two primary atmospheric outlets exist. One is through the strait known as the Golden Gate, a direct outlet to the Pacific Ocean. The second extends to the northeast, along the west delta region of the Sacramento and San Joaquin Rivers.

The City of San José is within the jurisdiction of the BAAQMD, which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since the BAAQMD was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen dramatically. The San Francisco Bay Area attainment status is shown in Table 5.A, below. Neither State nor national ambient air quality standards of these chemicals have been violated in recent decades: nitrogen dioxide, sulfur dioxide, sulfates, lead, hydrogen sulfide, and vinyl chloride. Those exceedances of air quality standards that do occur primarily happen during meteorological conditions conducive to high pollution levels, such as cold, windless nights or hot, sunny summer afternoons.

Table 5.A: San Francisco Bay Area Basin Attainment Status

	Averaging Time	California Standards [a]		National Standards [b]	
		Concentration	Attainment Status	Concentration [c]	Attainment Status
Ozone (O_3)	8-Hour	0.070 ppm (137 µg/m^3)	Nonattainment [l]	0.070 ppm	Nonattainment [d]
	1-Hour	0.09 ppm (180 µg/m^3)	Nonattainment	Not Applicable	[e]
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Attainment [f]
	1-Hour	20 ppm (23 mg/m^3)	Attainment	35 ppm (40 mg/m^3)	Attainment
Nitrogen Dioxide (NO_2)	1-Hour	0.18 ppm (339 µg/m^3)	Attainment	0.100 ppm [k]	[k]
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)	Not Applicable	0.053 ppm (100 µg/m^3)	Attainment
Sulfur Dioxide (SO_2) [l]	24-Hour	0.04 ppm (105 µg/m^3)	Attainment	0.14 ppm (365 µg/m^3)	Unclassified/ Attainment l
	1-Hour	0.25 ppm (655 µg/m^3)	Attainment	0.075 ppm (196 µg/m^3)	Unclassified/ Attainment [l]
	Annual Arithmetic Mean	Not Applicable	Not Applicable	0.030 ppm (80 µg/m^3)	Unclassified/ Attainment [l]
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	Nonattainment [g]	Not Applicable	Not Applicable
	24-Hour	50 µg/m^3	Nonattainment	150 µg/m^3	Unclassified
Fine Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 µg/m^3	Nonattainment [g]	15 µg/m^3 [o]	Unclassified/ Attainment
	24-Hour	Not Applicable	Not Applicable	35 µg/m^3 [j]	Nonattainment
Sulfates	24-Hour	25 µg/m^3	Attainment	Not Applicable	Not Applicable
Lead (Pb) [m]	30-Day Average	1.5 µg/m^3	Not Applicable	Not Applicable	Attainment
	Calendar Quarter	Not Applicable	Not Applicable	1.5 µg/m^3	Attainment
	Rolling 3-Month Average n	Not Applicable	Not Applicable	0.15 µg/m^3	[n]
Hydrogen Sulfide	1-Hour	0.010 ppm (26 µg/m^3)	Unclassified	Not Applicable	Not Applicable
Vinyl Chloride (chloroethene)	24-Hour	0.010 ppm (26 µg/m^3)	No Information Available	Not Applicable	Not Applicable
Visibility Reducing Particles	8-Hour (10:00 to 18:00 PST)	[h]	Unclassified	Not Applicable	Not Applicable

Source: Bay Area Air Quality Management District, Bay Area Attainment Status (2017).
Table notes are provided on the following page.

[a] California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM_{10}, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM_{10} annual standard), then some measurements may be excluded. In particular, measurements are excluded that CARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the State standard.

[b] National standards shown are the "primary standards" designed to protect public health. National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent 3-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than 1. The 8-hour ozone standard is attained when the 3-year average of the 4th-highest daily concentrations is 0.070 ppm (70 ppb) or less. The 24-hour PM_{10} standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m^3. The 24-hour $PM_{2.5}$ standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m^3.

Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM_{10} is met if the 3-year average falls below the standard at every site. The annual $PM_{2.5}$ standard is met if the 3-year average of annual averages spatially averaged across officially designed clusters of sites falls below the standard.

[c] National air quality standards are set by the USEPA at levels determined to be protective of public health with an adequate margin of safety.

[d] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. An area will meet the standard if the 4th-highest maximum daily 8-hour ozone concentration per year, averaged over 3 years, is equal to or less than 0.070 ppm. The USEPA will make recommendations on attainment designations by October 1, 2016, and issue final designations October 1, 2017. Nonattainment areas will have until 2020 to late 2037 to meet the health standard, with attainment dates varying based on the ozone level in the area.

[e] The national 1-hour ozone standard was revoked by USEPA on June 15, 2005.

[f] In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.

[g] In June 2002, CARB established new annual standards for $PM_{2.5}$ and PM_{10}.

[h] Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This 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.

[i] The State 8-hour ozone standard was approved by CARB on April 28, 2005, and became effective on May 17, 2006.

[j] On January 9, 2013, USEPA issued a final rule to determine that the Bay Area attains the 24-hour PM2.5 national standard. This USEPA rule suspends key SIP requirements as long as monitoring data continue to show that the Bay Area attains the standard. Despite this USEPA action, the Bay Area will continue to be designated as “non-attainment” for the national 24-hour $PM_{2.5}$ standard until such time as the Air District submits a “redesignation request” and a “maintenance plan” to the USEPA, and the USEPA approves the proposed redesignation.

[k] To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010). The USEPA was expected to make a designation for the Bay Area by the end of 2017, but has yet to issue a designation.

[l] On June 2, 2010, the USEPA established a new 1-hour SO2 standard, effective August 23, 2010, which is based on the 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. The USEPA has initially designated the entire State as Unclassified/ Attainment for the new 1-hour SO_2 NAAQS.

[m] CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure below which there are no adverse health effects determined.

[n] National lead standard, rolling 3-month average: final rule signed October 15, 2008. Final designations became effective on December 31, 2011.

[o] In December 2012, USEPA strengthened the annual $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS) from 15.0 to 12.0 micrograms per cubic meter (µg/m^3). In December 2014, USEPA issued final area designations for the 2012 primary annual $PM_{2.5}$ NAAQS. Areas designated “unclassifiable/attainment” must continue to take steps to prevent their air quality from deteriorating to unhealthy levels. The effective date of this standard is April 15, 2015.

µg/m^3 = micrograms per cubic meter
CARB = California Air Resources Board
ppm = parts per million
mg/m^3 = milligrams per cubic meter
SIP = State Implementation Plan
USEPA = United States Environmental Protection Agency

Ozone levels, measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by the BAAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Bay Area still exceeds the State standard for 1-hour ozone as well as the State and federal 8-hour standards. Levels of particulate matter less than 10 microns in size (PM_{10}) have exceeded State standards two of the last three years, and the area is considered a nonattainment area for this pollutant relative to the State standards. The San Francisco Bay Area is an unclassified area for the federal PM_{10} standard.

No exceedances of the State or federal CO standards have been recorded at any of the region's monitoring stations since 1991. The San Francisco Bay Area is currently considered a maintenance area for State and federal CO standards.

As shown in Table 5.A, the San Francisco Bay Area meets all State and federal attainment standards with the exception of ozone, PM_{10} and $PM_{2.5}$.

Local Climate and Air Quality. The City of San José is located within Santa Clara County. In Santa Clara County, during the summer, mostly clear skies result in warm daytime temperatures and cool nights. Winter temperatures are mild, except for very cool but generally frost-less mornings. Further inland where the moderating effect of the bay is not as strong, temperature extremes are greater. Wind patterns are influenced by local terrain, with a northwesterly sea breeze typically developing during the daytime. Winds are usually stronger in the spring and summer. Rainfall amounts are modest, ranging from 13 inches in the lowlands to 20 inches in the hills.

Most of Santa Clara County is well south of the cooler waters of the San Francisco Bay and far from the cooler marine air, which usually reaches across San Mateo County in summer. Ozone frequently forms on hot summer days when the prevailing seasonal northerly winds carry ozone precursors southward across the County, causing health standards to be exceeded. Santa Clara County experiences many exceedances of the particulate matter less than 2.5 microns in size ($PM_{2.5}$) standard each winter. This is due to its high population density, wood smoke, industrial and freeway traffic, and poor wintertime air circulation caused by extensive hills to the east and west that block wind flow into the region.[12]

Sensitive Receptors. Occupants of facilities such as schools, daycare centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered to be more sensitive than the general public to air pollutants because these population groups have increased susceptibility to respiratory disease. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions, compared to commercial and industrial areas, because people generally spend longer periods of time at their residences, with greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared to commercial and industrial uses due to greater exposure to ambient air quality conditions associated with exercise.

[12] Bay Area Air Quality Management District. 2019. *Climate and Air Quality in Santa Clara County*. February.

The closest sensitive receptors to the Project site include the residential uses to the north and the open space and recreational uses to the northwest.

Toxic Air Contaminants. In addition to the criteria pollutants discussed above, TACs are another group of pollutants of concern. Some examples of TACs include: benzene, butadiene, formaldehyde, and hydrogen sulfide. Potential human health effects of TACs include birth defects, neurological damage, cancer, and death.

TACs do not have ambient air quality standards, but are regulated by the USEPA and CARB. In 1998, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. CARB has completed a risk management process that identified potential cancer risks for a range of activities and land uses that are characterized by use of diesel fueled engines.[13] High volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops, etc.) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure.

The BAAQMD regulates TACs using a risk-based approach. This approach uses a health risk assessment to determine what sources and pollutants to control as well as the degree of control. A health risk assessment is an analysis in which human health exposure to toxic substances is estimated, and considered together with information regarding the toxic potency of the substances, in order to provide a quantitative estimate of health risks.[14] As part of ongoing efforts to identify and assess potential health risks to the public, the BAAQMD has collected and compiled air toxics emissions data from industrial and commercial sources of air pollution throughout the Bay Area. Monitoring data and emissions inventories of TACs help the BAAQMD determine health risk to Bay Area residents. The project site is located adjacent to open space and residential uses, and no high-volume freeways, stationary diesel engines, or facilities attracting heavy and constant diesel vehicle traffic are located within close proximity to the project site.

Odors. Odors are also an important element of local air quality conditions. Specific activities can raise concerns related to odors on the part of nearby neighbors. Major sources of odors include restaurants and manufacturing plants. Other odor producers include the industrial facilities within the region. While sources that generate objectionable odors must comply with air quality regulations, the public's sensitivity to locally produced odors often exceeds regulatory thresholds. The project site is located adjacent to open space and residential uses, and odor-

13 California Air Resources Board. 2000. *Fact Sheet – California's Plan to Reduce Diesel Particulate Matter Emissions*. October. Available online at: www.arb.ca.gov/diesel/factsheets/rrpfactsheet.pdf (accessed July 20, 2020).

14 In general, a health risk assessment is required if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggests a potential public health risk. Such an assessment generally evaluates chronic, long-term effects, including the increased risk of cancer as a result of exposure to one or more TACs.

generating land uses, such as restaurants and manufacturing plants are not located within close proximity to the project site.

5.3.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☒	☐

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

Less Than Significant Impact. The Project site is located within the City of San José, which is part of the San Francisco Bay Area Air Basin (Basin). The Air Basin includes cities and communities within Sonoma, Marin, San Francisco, San Mateo, Santa Clara, Napa, Solano, Contra Costa, and Alameda counties. Air quality within the Basin is under the jurisdiction of the BAAQMD.

The BAAQMD adopted the BAAQMD 2017 Clean Air Plan (Clean Air Plan) on April 19, 2017. The primary purpose of the Clean Air Plan is to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; and safeguards public health by reducing exposure to air pollutants that pose the greatest heath risk, with an emphasis on protecting the communities most heavily affected by air pollution.

Consistency with the Clean Air Plan can be determined if a Project: 1) supports the goals of the Clean Air Plan; 2) includes applicable control measures from the Clean Air Plan; and 3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan.

Clean Air Plan Goals. The primary goals of the Bay Area Clean Air Plan are to: attain air quality standards, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect climate.

The BAAQMD has established significance thresholds for Project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards.

Clean Air Plan Control Measures. The control strategies of the Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-GHG Pollutants Measures. The proposed Project would include the construction of one single-family residence, which is estimated to be completed in the course of three months, and would not be of substantial enough size to materially conflict with any Clean Air Plan control measures. In addition, as discussed below, construction of the Project would not result in the generation of criteria air pollutants that would exceed BAAQMD thresholds of significance and the proposed Project would be required to implement BAAQMD's dust control measures as a condition of Project approval. Operational emissions associated with the Project would also not exceed established BAAQMD significance thresholds. Therefore, the Project would not conflict with or obstruct implementation of applicable air quality plans. This impact would be less than significant.

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?

Less Than Significant Impact. Both State and federal governments have established health-based Ambient Air Quality Standards for six criteria air pollutants: CO, ozone (O_3), NO_2, SO_2, Pb, and suspended particulate matter (PM). These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. As identified above, the BAAQMD is under State non-attainment status for ozone, PM_{10}, and $PM_{2.5}$ standards. The Air Basin is also classified as non-attainment for both the federal ozone 8-hour standard and the federal $PM_{2.5}$ 24-hour standard.

Air quality standards for the proposed Project are regulated by the BAAQMD CEQA Air Quality Guidelines. According to the BAAQMD CEQA Air Quality Guidelines, to meet air quality standards for operational-related criteria air pollutant and air precursor impacts, the Project must not:

- Contribute to CO concentrations exceeding the State ambient air quality standards;
- Generate average daily construction emissions of reactive organic gases (ROG), nitrogen oxides (NO_x) or $PM_{2.5}$ greater than 54 pounds per day or PM_{10} exhaust emissions greater than 82 pounds per day; or
- Generate average operational emissions of ROG, NO_x or $PM_{2.5}$ of greater than 10 tons per year or 54 pounds per day or PM_{10} emissions greater than 15 tons per year or 82 pounds per day.

The following sections describe the proposed Project's construction- and operation-related air quality impacts and CO impacts.

Construction Emissions. During construction, short-term air quality impacts could occur due to the release of particulate emissions generated by demolition, grading, paving, building, and other activities. Major sources of emission during demolition, grading, building construction and site work, paving, and architectural coatings include the following: 1) exhaust emissions from construction vehicles, 2) equipment and fugitive dust generated by vehicles and equipment traveling over exposed surfaces, and 3) sand disturbances from compacting and cement paving.

Construction of the proposed Project would include the following tasks: grading, building construction and site work, paving, and architectural coatings. The Project phasing would generally start with site preparation, and grading, and would continue with construction of the Project. It is anticipated that construction would occur over the course of three months.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The BAAQMD has established standard measures for reducing fugitive dust emissions (PM_{10}). With the implementation of these Basic Construction Mitigation Measures, which would be required as a condition of approval for the proposed Project, dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site. As the proposed Project would only require minor excavation for the construction of the light poles and foundations for the volleyball nets and underground trenching for electrical connections, construction emissions associated with the Project would be less than significant for ROG, NO_x, and $PM_{2.5}$ and PM_{10} exhaust emissions.

Construction emissions associated with the Project would be minimal. Therefore, construction of the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable federal or State AAQS.

Standard Permit Conditions:

- The following best management practices shall be implemented during all phases of construction to control dust and exhaust at the Project site:
    - Water active construction areas at least twice daily or as often as needed to control dust emissions.
    - Cover trucks hauling soil, sand, and other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
    - Remove visible mud or dirt track-out onto adjacent public roads using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
    - Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
    - Pave new or improved roadways, driveways, and sidewalks as soon as possible.
    - Lay building pads as soon as possible after grading unless seeding or soil binders are used.
    - Replant vegetation in disturbed areas as quickly as possible.
    - Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

- Minimize idling times either by shutting off equipment when not in use, or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of the California Code of Regulations). Provide clear signage for construction workers at all access points.
- Maintain and properly tune construction equipment in accordance with manufacturers' specifications. Check all equipment by a certified mechanic and record a determination of running in proper condition prior to operation.
- Post a publicly visible sign with the telephone number and person to contact at the City of San José regarding dust complaints.

Operational Emissions. Long-term air emission impacts are associated with stationary sources and mobile sources. Stationary source emissions typically result from the consumption of natural gas and electricity. Mobile source emissions typically result from vehicle trips and result in air pollutant emissions affecting the entire air basin. The proposed Project would consist of a new single-family residence on the Project site. Long-term air emissions generated by the proposed Project would be associated Project-generated vehicle trips and increased electricity demand.

Table 3-1 of the BAAQMD 2017 CEQA Guidelines includes screening levels for operational-period criteria air pollutants. If a Project meets the screening criteria in Table 3-1, the Project would not result in the generation of operational-related criteria air pollutants and/or precursors that would exceed the BAAQMD's thresholds of significance. The operational screening level for single-family residences is 325 dwelling units. As noted above, the proposed Project would consist of one single-family residence. Therefore, the proposed Project would meet the screening criteria, and impacts related to operational emissions would be less than significant.

Localized CO Impact. As previously stated, the BAAQMD considers a Project to have less than significant CO impacts if it is consistent with an applicable congestion management program, would not increase traffic volumes at affected intersections by more than 44,000 vehicles per hour, and would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, or below-grade roadways.

Implementation of the proposed Project would not conflict with the Contra Costa Transportation Authority for designated roads or highways, a regional transportation plan, or other agency plans. The Project site is not located in an area where vertical or horizontal mixing of air is substantially limited, such as those listed above. The Project would not increase traffic volumes at intersections to more than 44,000 vehicles per hour and intersection level of service associated with the Project would not decline with the Project. Therefore, the proposed Project would not result in localized CO concentrations that exceed State or federal standards and this impact would be less than significant.

Summary. CEQA defines a cumulative impact as two or more individual effects, which when considered together, are considerable or which compound or increase other environmental impacts. Therefore, if annual emissions of construction- or operational-related criteria air pollutants exceed any applicable threshold established by the BAAQMD, the proposed Project would result in a cumulatively significant impact. As discussed above, no exceedance of BAAQMD emission thresholds

would occur as a result of construction or operation of the proposed Project. The proposed Project's construction and operational emissions of criteria pollutants are estimated to be well below the emissions threshold established for the region. Further, implementation of the Standard Permit Conditions would further reduce impacts related to construction emissions. Therefore, the Project would not result in a cumulatively considerable contribution to regional air quality impacts, and no mitigation would be required.

c. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include the single-family residences located approximately 550 feet north of the limits of construction on the Project site.

Construction of the proposed Project may expose these nearby sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, as noted in Section 3.3.b, above, construction emissions would be minimal and the proposed Project would be required to implement the BAAQMD's Basic Construction Mitigation Measures. Once the Project is constructed, the Project would not be a source of substantial emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during Project construction or operation, and potential impacts would be considered less than significant.

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

Less Than Significant Impact. Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills, or heavy manufacturing uses.

During Project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed Project would not include any activities or operations that would generate objectionable odors and once operational, the Project would not be a source of odors. Therefore, the proposed Project would result in less than significant impacts related to other emissions (such as those leading to odors) that would adversely affect a substantial number of people. No mitigation would be required.

5.3.3 Conclusion

Less Than Significant. Implementation of Standard Permit Conditions would ensure that air quality impacts associated with Project construction would be considered less than significant level. No mitigation would be required.

5.4 BIOLOGICAL RESOURCES

The discussion and analysis provided in this section is based on information contained in the Biological Resources Assessment prepared for the Project site (included as Appendix A).[15]

5.4.1 Environmental Setting

5.4.1.1 Regulatory Framework

Federal and State Regulations

Special-Status Species

Individual plant and animal species listed as rare, threatened, or endangered under state and federal Endangered Species Acts are considered 'special-status species.' Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed Project would result in the "take" of a species listed as threatened or endangered. To "take" a listed species, as defined by the State, is "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill" said species. "Take" is more broadly defined by the Federal Endangered Species Act to include inflicting harm upon a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the State CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, are considered for environmental review. These may include plant species of concern in the State listed by the California Native Plant Society and CDFW listed "Species of Special Concern."

Federal Status Species

Special-status species are individual plant and animal species that are protected under federal and state Endangered Species Acts. These species are classified as rare, threatened, or endangered. The USFWS and the CDFW have adopted a system to conserve and protect plant and animal species that are limited in distribution as well as species that have a low or declining population. If a proposed Project or activities associated with a proposed Project result in the "take" of a threatened or endangered species, the necessary permits must be obtained from the USFWS and CDFW. The State of California defines take as any action or attempt to "hunt, pursue, catch, capture, or kill" a listed species. Additionally, the Federal Endangered Species Act includes the "harm" of a listed species in the definition of take.

Section 15380(b) of the State CEQA Guidelines also considers all potential rare or sensitive species and habitats that are capable of supporting such species in addition to those species listed under the federal and state Endangered Species Acts. These additional species considered under CEQA may

[15] LSA Associates, Inc. 2020. *Biological Resources Survey, Gschwend Residence, Santa Teresa Boulevard, San José, Santa Clara County, California.* September.

include California plant species of concern as listed by the California Native Plant Society as well as "Species of Special Concern" listed by CDFW.

Sensitive Habitats

Wetland and riparian habitats are considered to be sensitive habitats, and are protected under various Federal, State, and local regulations. These habitats are generally subject to regulation, protection, or consideration by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS as per Sections 303, 304, and 404 of the Federal Clean Water Act and the State of California Porter-Cologne Water Quality Control Act. Wetland and riparian habitats are also subject to the National Pollutant Discharge Elimination System (NPDES) permit program under Section 402 of the Clean Water Act, which regulates discharge into waters of the United States.

Federal Migratory Bird Treaty Act

Under the federal Migratory Bird Treaty Act (MBTA), the killing, possessing, or trading of migratory birds is prohibited unless exempt by regulations prescribed by the Secretary of the Interior. The MBTA prohibits the possession of protected bird species and their nests, regardless of whether nests are active.[16]

Birds of prey, such as owls and hawks, are protected in California under provisions of the State Fish and Game Code. The code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by the CDFW.

California Department of Fish and Game Code 3503

California Department of Fish and Game Code 3503 stipulates that is unlawful to take, posses, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

[16] An active nest is defined as having eggs or young.

Local Regulations

Santa Clara Valley Habitat Plan/Natural Communities Conservation Plan

The Project site is located within the boundaries of the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP). The HCP/NCCP helps public and private agencies preserve natural resources and minimize impacts on threatened and endangered species when planning, permitting, and developing projects and activities within the boundaries of the plan. The HCP/NCCP covers approximately 520,000 acres and was adopted by Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, the Santa Clara Valley Water District, the Santa Clara Valley Transportation Authority, the U.S. Fish and Wildlife Service (USFWS), and the California Department of Fish and Wildlife (CDFW).

The Project site is located within the boundaries of the Santa Clara Valley HCP/NCCP and the land cover is identified as California Annual Grassland and Valley Oak Woodland. The Project site is also covered by two Private Development Areas, as identified by the HCP. The majority of the Project site, approximately 12.6 acres, is located within Area 1: Private Development Covered. The remaining approximately 4.2 acres, located along the northern edge of the Project site, and along Santa Theresa Boulevard.

Envision San José 2040 General Plan

The Environmental Resources (ER), Measurable Environmental Sustainability (MS), and Community Design (CD) sections of the City's General Plan include the following goals and policies related to biological resources that are applicable to the proposed Project.

Goal ER-1 **Grassland, Oak Woodlands, Chaparral and Coast Scrub:** Preserve, protect and restore the ecological integrity and scenic characteristics of grasslands, oak woodlands, chaparral and coastal scrub in hillside areas.

Policy ER-1.3 Cooperate with other agencies in the preservation and management of native hillside vegetation.

Policy ER-1.4 Minimize the removal of ecologically valuable vegetation such as serpentine and non-serpentine grassland, oak woodland, chaparral, and coastal scrub during development and grading for projects within the City.

Policy ER-1.5 Preserve and protect oak woodlands, and individual oak trees. Any loss of oak woodland and/or native oak trees must be fully mitigated.

Policy ER-1.7 Prohibit planting of invasive non-native plant species in oak woodlands, grasslands, chaparral and coastal scrub habitats, and in hillside areas.

Goal ER-4 **Special-Status Plants and Animals:** Preserve, manage, and restore habitat suitable for special-status species, including threatened and endangered species.

Policy ER-4.4 Require that development projects incorporate mitigation measures to avoid and minimize impacts to individuals of special-status species.

Goal ER-5 **Migratory Birds:** Protect migratory birds from injury or mortality.

Policy ER-5.1 Avoid implementing activities that result in the loss of active native birds' nests, including both direct loss and indirect loss through abandonment, of native birds. Avoidance of activities that could result in impacts to nests during the breeding season or maintenance of buffers between such activities and active nests would avoid such impacts.

Policy ER-5.2 Require that development projects incorporate measures to avoid impacts to nesting migratory birds.

Goal MS-21 **Community Forest:** Preserve and protect existing trees and increase planting of new trees within San José to create and maintain a thriving Community Forest that contributes to the City's quality of life, its sense of community, and its economic and environmental well-being.

Policy MS-21.4 Encourage the maintenance of mature trees, especially natives, on public and private property as an integral part of the community forest. Prior to allowing the removal of any mature tree, pursue all reasonable measures to preserve it.

Policy MS-21.5 As part of the development review process, preserve protected trees (as defined by the Municipal Code), and other significant trees. Avoid any adverse effects on the health and longevity of protected or other significant trees through appropriate design measures and construction practices. Special priority should be given to the preservation of native oaks and native sycamores. When tree preservation is not feasible, include appropriate tree replacement, both in number and spread of canopy.

Policy MS-21.6 As a condition of new development, require, where appropriate, the planting and maintenance of both street trees and trees on private property to achieve a level of tree coverage in compliance with and that implements City laws, policies, or guidelines.

Policy CD-1.23 Further the Community Forest Goals and Policies in this Plan by requiring new development to plant and maintain trees at appropriate locations on private property and along public street frontages. Use trees to help soften the appearance of the built environment, help provide transitions between land uses, and shade pedestrian and bicycle areas.

Policy CD-1.24 Within new development projects, include preservation of ordinance-sized and other significant trees, particularly natives. Any adverse effect on the health and longevity of such trees should be avoided through design measures, construction, and best maintenance practices. When tree preservation is not feasible, include replacements or alternative mitigation measures in the Project to maintain and enhance our Community Forest.

Policy LU-17.7 Consider habitat conservation objectives as part of hillside development proposals.

Policy LU-17.8 Encourage the preservation of hillside vegetation and require appropriate revegetation and planting of non-invasive plant materials that do not require routine irrigation for projects in hillside areas, if existing vegetation must be removed or substantially disturbed.

City of San José Tree Ordinance

Ordinance-sized trees, heritage trees, and street trees make up the urban forest and are protected under the City of San José Tree Ordinance. The City of San José Tree Removal Controls (San José City Code, Sections 13.31.010 to 13.32.100) protect all trees having a trunk that measures 38 inches or more in circumference (12.1 inches in diameter) at the height of 54 inches above the natural grade. The ordinance protects both native and non-native species. A tree removal permit is required from the City for the removal of ordinance-size trees. In addition, any tree found by the City Council to have special significance due to history, girth, height, species, or unique quality can be designated as a Heritage Tree, regardless of tree size or species. It is illegal to prune or remove a heritage tree without first consulting the City Arborist and obtaining a permit.

City of San José Riparian Corridor Protection and Bird-Safe Design Policy

The City of San José's Riparian Corridor Protection and Bird-Safe Design Policy, Council Policy 6-34, provides guidance consistent with the goals, policies, and actions of the City's General Plan to protect, preserve, or restore riparian habitat. In addition, the policy limits the creation of new impervious surface within Riparian Corridor setbacks to minimize flooding from urban runoff, and control erosion, and encourages bird-safe design in baylands and riparian habitats of lower Coyote Creek, north of SR 237. The policy includes guidelines that supplement the regulations for Riparian Corridor protection in the Habitat Plan, the Zoning Code, and other existing City policies that may

provide for riparian protection and bird-safe design. The policy defines a riparian corridor as any stream channel, including the area up to the bank full-flow line, as well as all riparian (streamside vegetation) in contiguous adjacent uplands. The policy states that riparian setbacks should be measured 100 feet from the outside edges of riparian habitat or the top of bank, whichever is greater.

5.4.1.2 Existing Conditions

The Project site is located on generally undeveloped land in the hillside above an existing residential subdivision. An existing dirt road from Santa Teresa Boulevard occurs along the northern boundary of the site at the base of the hills. A second dirt road connects to the proposed development site on the hillside to the south. Two high-voltage power lines border the northern boundary of the Project site. A third power line is located on the hilltop along the southern boundary of the site.

Prior to conducting fieldwork in 2016, LSA compiled a list of the special-status plant and animal species that could occur in the project area based on records in the California Natural Diversity Data Base (CNDDB) (CDFW 2016), the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (8th edition) (electronic version) (CNPS 2016), and in-house knowledge of special-status plants and animal species distribution in Santa Clara County. LSA biologist Tim O'Donnell surveyed the project site on December 30, 2016. The entire project site was covered on foot. Plants and animals (wildlife) observed within and adjacent to the project area were recorded in a field notebook.

LSA GIS specialist Greg Gallaugher queried the CNDDB again in June 2020 to obtain updated occurrences of special-status plant and animal species (CDFW 2020). LSA also reviewed current and historical aerial imagery of the project site. LSA biologist John Kunna surveyed the site on June 5, 2020. Mr. Kunna walked the entire site, measured trees to determine if they are protected, and photographed features that serve as components of habitats for special-status species.

The Project site consists primarily of non-native annual grassland. A valley oak woodland occurs in the southwest corner of the parcels. The concrete lined Coyote-Alamitos Canal runs along the northern property boundary. At the time of the site visit, no ponding or flows were observed in the canal. No other seasonal wetlands or drainage features were observed. Rodent burrows were observed throughout the property and were likely occupied by California ground squirrels (*Otospermophilus beecheyi*) or Botta's pocket gophers (*Thomomys bottae*), although neither species was directly observed during the field surveys. It is likely that there will be burrows within the grading limits when grading activities are commence.

The CNDDB query conducted in 2020 resulted in occurrences for 14 special-status plant species (Table A of the BRA). Most of these plants are considered rare because they only grow on serpentine soils. None of these 14 species are expected to occur on the project site due to the absence of suitable habitat (i.e., serpentine soils, rocky serpentine slopes, chaparral). The project site is not within a Habitat Plan Serpentine Fee Zone as mapped by the Habitat Plan. The northeastern end of the project site is mapped as being within a Plant Survey Area, but the area has only non-native annual grasses or ruderal vegetation where there is disturbance associated with maintenance and use of the access roads.

There are CNDDB occurrences for 25 special-status animal species within 5 miles of the project site (Table B of the BRA). Most of these species have no potential to occur on the site due to lack of suitable habitat. Five of the species—burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), loggerhead shrike (*Lanius ludovicianus*), grasshopper sparrow (*Ammodramus savannarum*), and American badger (*Taxidea taxus*)—have some potential to occur on the site. These five species are discussed in further detail below.

Burrowing Owl. The burrowing owl is a Species of Special Concern. It is a covered species under the Habitat Plan. The project site is not within one of the Habitat Plan's Burrowing Owl Survey Areas.

Burrowing owls have undergone substantial population declines throughout central and coastal California, primarily due to habitat loss.[17] This species occurs in open, well-drained grasslands with abundant small mammal burrows, particularly those of California ground squirrels. Burrowing owls also prefer areas with short vegetation so they can easily scan their surroundings and spot potential predators.

The CNDDB contains a burrowing owl occurrence within 0.1 mile of the site on the other side of Santa Teresa Boulevard on Tulare Hill. The most recent observation in the CNDDB at this location was made in 2015. No owls or sign of their presence were observed during LSA's surveys. Although the site has few mammal burrows or open areas with short vegetation, there is still some potential for burrowing owls to forage on the site and they may occupy burrows on the site in the future.

White-Tailed Kite. The white-tailed kite is considered Fully Protected; therefore, the CDFW cannot issue a permit for take of the species. It is not a covered species under the Habitat Plan. The species could nest in the trees on or adjacent to the site. The white-tailed kite is commonly seen hovering over grasslands like those on the project site, where it hunts for small mammals and reptiles that form the bulk of its diet.

Loggerhead Shrike. The loggerhead shrike is a Species of Special Concern. It is not a covered species under the Habitat Plan. The species usually nests in dense, thorny brush approximately 3 feet above the ground. There is a low potential that the species would nest in the trees on the site.

Grasshopper Sparrow. The grasshopper sparrow is considered a Species of Special Concern. It is not a covered species under the Habitat Plan. The species builds concealed nests at ground level in grasslands. There is a moderate potential for the species to nest in the grasslands on the project site.

American Badger. The American badger is a Species of Special Concern. It is not a covered species under the Habitat Plan. Badgers prey mainly upon fossorial mammals by using their powerful claws to dig out their burrows. Individual badgers have a large home range and may use several dens. There is a moderate potential for the species to hunt on the project site.

[17] DeSante, D.F., et al. 2007. A census of Burrowing Owls in central California in 1991. Pages 38-48. J.L. Lincer and K. Steenhof, editors. In *The Burrowing Owl, Its Biology and Management: Including the Proceedings of the First International Symposium. Raptor Research Report No. 9*.

5.4.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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 (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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 (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?	☐	☐	☒	☐

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 (CDFW) or United States Fish and Wildlife Service (USFWS)?

Less Than Significant Impact with Mitigation Incorporated. As discussed in Section 5.4.1.2, and as detailed in the Biological Resources Assessment (included as Appendix A),[18] no special-status plant species are likely to occur on the Project site due to the absence of suitable habitat (i.e., serpentine soils and rocky serpentine slopes). Therefore, the proposed Project would not impact special-status plants.

However, as detailed above and in Appendix A, there is a possibility that five special-status wildlife species could occur on the project site. If these species are present during construction, they could be adversely impacted by the proposed Project.

[18] LSA Associates, Inc. 2020, op. cit.

Initial grading and ground disturbance of the Project site could injure or kill American badgers in dens, in the event any are present on the site at the time of the disturbance. To ensure that potential impacts to American badgers would be considered less than significant, Mitigation Measure BIO-1 would be required.

Proposed construction activities would result in the removal of vegetation and possibly burrows that could be used by special-status birds. If conducted during the nesting season (February 1 to August 31), such activities could directly impact nesting birds. Construction-related disturbance (e.g., noise, vehicle traffic, personnel working adjacent to occupied nesting habitat) could also indirectly impact nesting birds by causing adults to abandon nests in nearby trees or other vegetation, resulting in nest failure and reduced reproductive potential. To ensure that potential impacts to special-status birds would be considered less than significant, Mitigation Measure BIO-2 and Mitigation Measure BIO-3 would be required.

Development of the Project site may result in impacts to the American badger and special-status birds including burrowing owl, white-tailed kite, loggerhead shrike, and grasshopper sparrow. However, consistent with federal and State regulations, with implementation of the following conditions of approval adopted as part of the project, impacts would be considered less-than-significant.

Mitigation Measure BIO-1: Preconstruction Surveys for the American Badger.

a. Preconstruction surveys shall be conducted for the American badger no more than 14 days prior to the initiation of ground-disturbing activities. Surveys shall be conducted by a qualified wildlife biologist with experience and knowledge in identifying badger burrows and include walking parallel transects looking for badger burrows and sign. Any badger burrows identified shall be flagged and mapped.

b. In the event active badger dens are identified, a no-work buffer of 200 feet shall be established around the den and associated occupied areas. If avoidance is not feasible, a biologist shall determine if the burrow is being used as an active maternity den through utilization of remote cameras. If young are determined to be present, the burrow shall be avoided until the young have vacated the burrow as determined by a qualified biologist. If the burrow is determined not to be an active maternity den and young are not present, in coordination with the CDFW, a one-way eviction door shall be installed between September 1 and January 1 to passively relocate the badger and to avoid impacts during the breeding season. If the badger digs back into the burrow, CDFW staff may allow the use of live traps to relocate badgers to suitable habitat from the area of Project impact.

The proposed Project would result in construction activities that could remove vegetation and possibly burrows used by special-status birds include the burrowing owl, white-tailed kite, loggerhead shrike, and grasshopper sparrow. If conducted during the nesting season (February 1 to August 31), such activities could directly impact nesting birds. Construction-related disturbance (e.g., noise, vehicle traffic, personnel working adjacent to occupied nesting habitat) could indirectly impact nesting birds by causing adults to abandon nests in nearby trees or other vegetation, resulting in nest failure and reduced reproductive potential.

Mitigation Measure BIO-2: **Avoidance.** To avoid disturbance of nesting and special-status birds, the Project applicant shall schedule activities related to the Project, including, but not limited to, vegetation removal, ground disturbance, construction, and demolition, to occur outside of the bird nesting season. The nesting season for most birds, including most raptors in the San Francisco Bay Area, extends from February 1 through August 31 (inclusive).

Mitigation Measure BIO-3: **Preconstruction Surveys.** If vegetation removal and initial ground-disturbing activities cannot be scheduled to occur between September 1 and January 31 (inclusive), preconstruction surveys for nesting birds shall be completed by a qualified biologist or ornithologist to ensure that no nests will be disturbed during Project implementation. The nesting bird preconstruction survey shall be conducted within the Project boundary, including a 250-foot buffer (500-foot buffer for raptors), where accessible and appropriate. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the area. The preconstruction survey shall be completed no more than 7 days prior to the initiation of construction activities during the early part of the breeding season (February 1 through April 30, inclusive) and no more than 14 days prior to the initiation of these activities during the late part of the breeding season (May 1 through August 31, inclusive). The surveys may be done concurrently with the American badger surveys described in Mitigation Measure BIO-1.If active nests are found, the qualified biologist shall determine the extent of a construction-free buffer zone to be established around the nest, typically 250 feet, to ensure that active bird nests will not be disturbed during Project construction. The size of the buffer will vary depending upon the species, the proposed work activity, and existing disturbances associated with land uses on and near the site. The buffer zone shall be demarcated by the qualified biologist or ornithologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and shall be instructed to avoid entering the buffer zone during the nesting season. No construction activities shall occur

within this buffer until the qualified biologist or ornithologist has confirmed that breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

The project applicant shall submit a report to the City's Director of Planning, Building and Code Enforcement and Director of Public Works or Director's designee indicating the results of the survey and any designated buffer zones, and is to be completed to the satisfaction of the Director of Planning, Building and Code Enforcement or Director's designee prior to the issuance of any demolition or grading permits.

The Project site is located within the Santa Clara Valley Habitat Plan Study Area and Permit Area. A Habitat Plan Application Package shall be submitted to the City of San Jose prior to issuance of any grading permits to ensure compliance with the Habitat Agency's requirements. Compliance with the Habitat Plan's requirements, including payment of impact fees, would further mitigate potential impacts to covered special-status species. As a result, the proposed project would not result in a substantial adverse effect on special-status species.

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, and regulations or by the CDFW or USFWS?

No Impact. The CNDDB contains occurrences for two sensitive natural communities within five miles of the Project site: Serpentine Bunchgrass and Sycamore Alluvial Woodland. Neither community is present on the Project site. The Coyote-Alamitos Canal, a stormwater conveyance facility, traverses the northern edge of the Project site, but is entirely artificial and does not have any riparian vegetation associated with it. The permanent and temporary development areas of the proposed single family home and the associated driveway and amenities would be outside of the 35-foot setback from the top of bank. Therefore, the Project does not propose any work or disturbance that would have any effect to the canal. The proposed Project would not adversely affect riparian habitat or sensitive natural communities, and no impacts would occur.

c. Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. As discussed in Section 5.4.1.2, there are no federally or State-protected wetlands located within the Project site. As a result, no impact would occur.

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

Less Than Significant Impact with Mitigation Incorporated. The Habitat Plan defines Landscape Linkages as "areas that allow for the movement of species from one area of suitable habitat to another. A linkage can vary from a narrow strip of habitat that only functions as a conduit for movement (i.e. a corridor) or a large area of intact habitat that is used for movement, dispersal, and other life functions such as foraging and breeding" (Habitat Plan, p.5-18). The Project site is in the vicinity of Linkage #8, linking Santa Teresa Hills to the west to Metcalf Canyon to the east. Its general linkage purpose is described as the "most northerly and narrowest connection between Diablo Range and the Santa Cruz Mountains. It provides important linkages for variety of mammals and invertebrates." Covered and other native species likely to use the linkage include "Bay checkerspot butterfly, Mt. Hamilton thistle, American badger, bobcat." Other common species such as raccoon, deer, coyote, and skunk likely use the linkage. Linkage #8 is depicted in Figure 5-6 of the Habitat Plan.

The primary barrier to terrestrial wildlife movement between open areas west of the Project site and Tulare Hill east of the site is the heavily trafficked Santa Teresa Boulevard. The Coyote-Alamitos Canal is culverted under Santa Teresa Boulevard and may provide a way for some wildlife species to move between the areas safely. The proposed Project would not impact the Coyote-Alamitos Canal or result in any permanent barriers to local wildlife movement.

The improvements proposed with the Project (driveway improvements, new home and garage) amount to relatively minor changes to the 17-acre property, and most new human activity on the site would occur within or adjacent to the proposed home. Barbed wire currently exists around the property along Santa Teresa Boulevard and the southeastern and southwestern property boundaries, and no new fencing is proposed. The residential development north of the Project site is also fenced with chain link and/or wood fences. No lighting would be installed along the driveway. The limited changes to the property as a result of the Project would not present a barrier to local wildlife movement through the site, and would therefore not significantly impact the use of the property by wildlife as a landscape linkage between the Santa Teresa Hills to Metcalf Canyon.

Areas where native birds can nest are generally considered native wildlife nursery sites. Several species of native birds likely nest in the trees and grasslands on the site. Incorporation of Mitigation Measure BIO-2 and Mitigation Measure BIO-3 would prevent impacts to all species of nesting birds.

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

Less Than Significant Impact. As previously noted, Chapter 13.32 of the City's Municipal Code regulates the care and removal of trees on public property. In addition, the City has adopted the *Guidelines for Inventorying, Evaluating, and Mitigating Impacts to Landscaping Trees in the City of San José* (May 2006), which outlines tree survey requirements and applicable mitigation for projects that could impact trees within the City. Trees subject to Chapter 13.32 are referred to as ordinance trees.

The proposed Project would impact ordinance trees by removing trees and grading within existing tree driplines, but would allow for most of the existing trees to remain in place on the Project site. With implementation of the following Standard Permit Conditions, potentially-significant impacts related to tree removal would be less than significant because the project would not conflict with Chapter 13.32 of the City's Municipal Code. No mitigation would be required.

Standard Permit Conditions: Prior to initiation of ground-disturbing activities, the Project Applicant shall submit to the City a certified arborist report that identifies the trees to be removed by the Project. Trees to be removed as part of the Project would be replaced according to tree replacement ratios required by the City, as provided in Table 5.B below, as amended.

Table 5.B: Tree Replacement Ratios

Circumference of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
38 inches or more	5:1	4:1	3:1	15-gallon
19 up to 38 inches	3:1	2:1	none	15-gallon
Less than 19 inches	1:1	1:1	none	15-gallon

Source: City of San José
x:x = tree replacement to tree loss ratio
Note: Trees having a greater than or equal to 38-inch circumference shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees. For Multi-Family residential, Commercial, and Industrial properties, a permit is required for removal of trees of any size.
A 38-inch tree equals 12.1 inches in diameter.
A 24-inch box tree = two 15-gallon trees
Single-family and two-dwelling properties may be mitigated at a 1:1 ratio.

In the event the Project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures would be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage.

- The size of a 15-gallon replacement tree may be increased to a 24-inch box and may count as two replacement trees to be planted on the Project site, at the development permit stage.

- Pay Off-Site Tree Replacement Fee(s) to the City, prior to the issuance of Public Works grading permit(s), in accordance to the City Council-approved Fee Resolution. The City will use the off-site tree replacement fee(s) to plant trees at alternative sites.

f. Would the Project conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan?

Less Than Significant Impact. The Project site is located within the Santa Clara Valley Habitat Plan Study Area and Permit Area. A Habitat Plan Application Package would be submitted to the City of

San Jose. The application involves the submittal of a Coverage Screening Form to determine if the proposed development is eligible for coverage under the Habitat Plan.

The Project site is located in a rural area, and therefore the development area is defined by the Habitat Plan as all permanent improvements plus a 50-foot buffer and temporary improvements plus a 10-foot buffer. Therefore, the proposed construction of a residence, water tanks, well, and driveway to the Santa Teresa Boulevard area and 50-foot buffer will impact 3.94 acres of California annual grassland habitat, and 0.99 acre of valley oak woodland habitat. Additionally, 0.34 acre of annual grassland will be temporarily disturbed.

Bordering the northern parcel of the project site is the Coyote-Alamitos Canal and the grading limit is outside of the 35-foot buffer area from top-of-bank of the Coyote-Alamitos Canal. The canal is a man-made canal and therefore, is considered a Category 2 stream. The Project applicant would be required to identify potential Habitat Plan fees and conditions for the proposed Project in the Habitat Plan Application Package. Because the proposed Project would be required to comply with the SCHVP requirements, including payment the required mitigation fees, the proposed Project would not conflict with the SCVHP.

Standard Permit Conditions: The proposed Project is subject to applicable SCVHP conditions and fees (including the nitrogen deposition fee) prior to issuance of any grading permits. The Project Applicant would be required to submit the Santa Clara Valley Habitat Plan Coverage Screening Form to the Director of Planning, Building and Code Enforcement (PBCE) or the Director's designee for approval and payment of the nitrogen deposition fee prior to the issuance of a grading permit. The Habitat Plan and supporting materials can be viewed at www.scv-habitatplan.org.

5.4.3 Conclusion

Less Than Significant Impact. Conformance with Standard Permit Conditions, General Plan policies, SCVHP requirements, and State and federal laws discussed above, as well as incorporation of Mitigation Measure BIO-1, Mitigation Measure BIO-2, and Mitigation Measure BIO-3, would ensure that biological impacts from the development of this property would be considered less than significant. No additional mitigation would be required.

5.5 CULTURAL RESOURCES

The discussion and analysis provided in this section is based on the Cultural and Paleontological Resources Assessment prepared for the Project site (included as Appendix B).[19]

5.5.1 Environmental Setting

5.5.1.1 Regulatory Framework

Federal and State Regulations

National Register of Historic Places (NRHP)

The National Register of Historic Places (NRHP) lists the historic significance and the eligibility for qualifying for such significance for a building, structure, or other site. Significance eligibility is determined based on the quality and integrity of the resource and its association to American history, architecture, and culture. The resources must also possess one or more of the following characteristics:

1. It is associated with events that have made a significant contribution to the broad pattern of our history; or
2. It is associated with the lives of persons significant to our past; or
3. It embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. It yields, or may be likely to yield, information important in prehistory or history.

California Register of Historical Resources

The California Register of Historical Resources (CRHR) operates similarly to the National Register of Historic Places (NRHP) with almost the same structure for determining significance eligibility for potential historical resources. Generally, a resource is eligible for historical status under CRHR if it is greater than 50 years old as well as meets one or more of the following criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
2. It is associated with the lives of persons important to local, California, or national history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or important creative individual, or possesses high artistic values.

[19] LSA Associates, Inc. 2017. *Cultural and Paleontological Resources Assessment of the Gschwend Property, Santa Clara County, California (LSA Project No. GSC1602).* January 30.

California Historical Landmarks

California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. To be eligible for designation as a California Historic Landmark, a resource must meet at least one of the following criteria:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- 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 Environmental Quality Act

Historical resources are recognized as part of the environment under CEQA. The California Register is the authoritative guide to the state's historical resources and to which properties are considered significant for the purposes of CEQA, including resources listed in or formally determined eligible for listing in the National Register of Historic Places, as well as some, California State Landmarks and Points of Historical Interest. Properties of local significance that have been designed under a local preservation ordinance (local landmarks or landmark district) or that have been identified in a local historical resources inventory may be eligible for listing in the California Register and are presumed to be significant resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise. However, a resources does not need to have been identified previously either through listing or survey to be considered significant under CEQA. In addition, to assessing whether historical resources potentially impacted by a project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the California Register criteria prior to making a finding as to a proposed project's impacts to historical resources.

Public Resources Code Section 5097.5

California PRC Section 5097.5(a) mandates that one cannot, "knowingly and willfully" excavate, remove, or destroy any "historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site," or "any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over the lands." PRC Section 5097.5(b) defines public lands as those that are owned by or under the jurisdiction of any state or public authority or agency.

Local Regulations

Envision San José 2040 General Plan

The Environmental Resources (ER) and Land Use/Transportation (LU) sections of the City's General Plan include the following goals and policies related to cultural resources that are applicable to the proposed Project:

Goal ER-10 **Archaeology and Paleontology:** Preserve and conserve archaeologically significant structures, sites, districts and artifacts in order to promote a greater sense of historic awareness and community identity.

Policy ER-10.1 For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological information may be affected by the Project and then require, if needed, that appropriate mitigation measures be incorporated into the Project design.

Policy ER-10.2 Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon their discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable State laws shall be enforced.

Policy ER-10.3 Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

Municipal Code

The Historic Preservation Ordinance in Chapter 13.48 of the City's Municipal Code outlines the process and requirements of obtaining a Historic Preservation Permit and describes associated benefits of a potential property tax reduction through the Mills Act Historical Property Contract. As per the City's Municipal Code, a landmark has a significant historical, architectural, cultural, aesthetic, or engineering interest or value pertaining to its historical nature. A landmark can include any combination of the following: an individual structure, an integrated group of structures on a single lot, or a site or portion of a site.

Historic Resources Inventory

The City manages a geographic information system (GIS) database that includes information on historic properties and resources that have been documented and assessed based on their significance. The Historic Resources Inventory exists within the database as a source for finding the location and significance category of these historic properties and resources. A resource is classified as a City Landmark if it has some historical, architectural, cultural, aesthetic, or engineering value.

5.5.1.2 Existing Conditions

Historic and Archaeological Resources. The Project site is undeveloped and located within a hillside area primarily comprised of non-native annual grasslands with scattered oak trees. The northern boundary of the Project site is partially formed by segments of the Coyote-Alamitos Canal. The Project site contains high-voltage electrical transmission towers and overheard power lines, as well as multiple graded access roads. The surface geology within the area is composed of Franciscan Complex sandstone bedrock and soil consists of Zeppelin-Alumrock complex. While this surface geology does not indicate sensitivity for archaeological resources, the steep terrain of the project site generally indicates a low potential for archaeological sites. However, the possibility for an accidental discovery cannot be ruled out. Additionally, two previously-recorded cultural resources have been recorded within a 0.25-mile radius of the project site. One previously-conducted cultural resource study has been conducted within the project site, but it did not identify any archaeological resources or human remains.

5.5.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

a. Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources; (2) listed in a local register of historical resources as defined in PRC Section 5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by a Project's Lead Agency (PRC Section 21084.1 and State CEQA Guidelines Section 15064.5[a]).

The California Register defines a "historical resource" as a resource that meets one or more of the following criteria: (1) associated with events that have made a significant contribution to the broad patterns or local or regional history of the cultural heritage of California or the United States; (2) associated with the lives of persons important to local, California, or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or (4) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

As previously discussed, the Project site is undeveloped and does not contain any existing structures. The Project site is bordered by dense residential development in a previously-agricultural area. A field survey identified one potential historical resource: a 0.5-mile segment of the Coyote-Alamitos Canal constructed circa 1951. However, none of the Project-related ground disturbance will physically impact the canal. Therefore, because construction-related activities will be sufficiently distant, no protective measures are recommended for the canal, and this impact would be less than significant.

b. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact

Construction. No cultural resources were identified within the Project site that would be subject to impacts. However, as described above, two previously-recorded cultural resources were recorded within a 0.25-mile radius of the Project site and there is always the possibility that the Project site contains intact archaeological deposits or human remains that were not identified during this study. Therefore, the following Standard Permit Condition is required in the unlikely event that unknown archaeological resources are discovered at any time during grading and construction activities. No mitigation would be required.

Standard Permit Conditions: Consistent with General Plan Policies ER-10.2 and ER-10.3, the following Standard Permit Conditions shall be implemented by the Project to reduce or avoid impacts to subsurface cultural resources to a less than significant level:

- If prehistoric or historic resources are encountered during excavation and/or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the Director of Planning, Building and Code Enforcement (PBCE), or the Director's designee, and the City's Historic Preservation Officer shall be notified, and a qualified archaeologist shall examine the find. The archaeologist shall (1) evaluate the find(s) to determine if they meet the definition of a historical or archaeological resource; and (2) make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits. Recommendations could include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the Director of PBCE, or the Director's designee, and the City's Historic Preservation Officer and the Northwest Information Center (if applicable). Project personnel shall not collect or move any cultural materials.

Operation. At the completion of Project construction, the proposed Project would not result in further disturbance of native soils on the Project site. Therefore, operation of the proposed

Project would not result in a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the State CEQA Guidelines. No mitigation would be required.

c. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. As noted above, no known human remains are present on the Project site, and there are no facts or evidence to support the idea that Native Americans or people of European descent are buried on the Project site. As noted above, the steep nature of the project site generally indicates a low sensitivity for archaeological sites, including human remains. However, as described previously, buried and undiscovered archaeological remains, including human remains, may be present below the ground surface in portions of the Project site. Disturbing human remains could violate the State's Health and Safety Code, as well as destroy the resource. The following Standard Permit Condition applies in the unlikely event that human remains are encountered during Project excavation or grading.

Standard Permit Conditions: If any human remains are found during any field investigations, grading, or other construction activities, all provisions of California Health and Safety Code Sections 7054 and 7050.5 and Public Resources Code (PRC) Sections 5097.9 through 5097.99, as amended per Assembly Bill (AB) 2641, shall be followed. If human remains are discovered during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Project Applicant shall immediately notify the Director of Planning, Building and Code Enforcement (PBCE), or the Director's designee, and the qualified archaeologist, who shall then notify the Santa Clara County Coroner. The Coroner will make a determination as to whether the remains are Native American. If the remains are believed to be Native American, the Coroner will contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then designate a Most Likely Descendant (MLD). The MLD will inspect the remains and make a recommendation on the treatment of the remains and associated artifacts. If one of the following conditions occurs, the landowner or his authorized representative shall work with the Coroner to re-inter the Native American human remains and associated grave goods with appropriate dignity in a location not subject to further subsurface disturbance:

- The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being given access to the site.
- The identified MLD fails to make a recommendation; or

- The landowner or his authorized representative rejects the recommendation of the MLD, and mediation by the NAHC fails to provide measures acceptable to the landowner.

5.5.3 Conclusion

Less Than Significant Impact. Implementation of the proposed Project would ensure that the Project would result in a less than significant impact to cultural resources through compliance with State and local regulations, as stated in the Standard Permit Conditions. No mitigation would be required.

5.6 ENERGY

5.6.1 Environmental Setting

5.6.1.1 Regulatory Framework

Federal and State Regulations

The United States Environmental Protection Agency (EPA) establishes energy standards at the federal level. The United States EPA also establishes fuel efficiency standards for automobiles and other modes of transportation.

Renewables Portfolio Standard Program

Established in 2002 under Senate Bill 1078, California established its Renewables Portfolio Standard (RPS) Program, which was accelerated in 2006 under Senate Bill 107. The RPS required 20 percent of electricity sales to be served by renewable energy sources by 2010. In 2008, Executive Order S-14-08 was signed into law requiring retail sellers of electricity to serve 33 percent of their load with renewable energy by 2020. In October 2015, SB 350 was enacted to codify California's climate and clean energy goals. SB 350 requires retail sellers of electricity and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030.[20]

California Building Code

The State of California provides a minimum standard for building design and construction standards through Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CBC is updated every three years, and the current 2016 CBC went into effect in January 2017. Compliance with Title 24 is mandatory at the time new building permits are issued by local governments. Generally, the CBC is adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions.

The California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards (also referred to as the California Green Building Standards Code, or CALGreen) in 2010 as part of the State's efforts to reduce GHG emissions and reducing energy consumption from residential and nonresidential buildings. CALGreen code covers the following five categories: 1) planning and design, 2) energy efficiency, 3) water efficiency and conservation, 4) material conservation and resource efficiency, and 5) indoor environmental quality.

Local Regulations

Envision San José 2040 General Plan

The Environmental Leadership Measurable Standards (MS) and Community Design (CD) sections of the City's General Plan include the following goals and policies related to energy that are applicable to the proposed Project.

[20] California Energy Commission. Renewable Portfolio Standard. Website: www.energy.ca.gov/programs-and-topics/programs/renewables-portfolio-standard (accessed July 20, 2020).

Goal MS-1 **Green Building Policy Leadership:** Demonstrate San José's commitment to local and global Environmental Leadership through progressive use of green building policies, practices, and technologies to achieve 100 million square feet of new or retrofitted green buildings by 2040.

Policy MS-1.6 Recognize the interconnected nature of green building systems, and, in the implementation of Green Building Policies, give priority to green building options that provide environmental benefit by reducing water and/or energy use and solid waste.

Goal MS-2 Maximize the use of green building practices in new and existing development to maximize energy efficiency and conservation and to maximize the use of renewable energy sources.

Policy MS-2.1 Develop and maintain policies, zoning regulations, and guidelines that require energy conservation and use of renewable energy sources.

Policy MS-2.2 Encourage maximized use of on-site generation of renewable energy for all new and existing buildings.

Policy MS-2.3 Utilize solar orientation (i.e., building placement), landscaping, design, and construction techniques for new construction to minimize energy consumption.

Policy MS-2.4 Promote energy efficient construction industry practices.

Policy MS-2.5 Encourage responsible forest management in wood material selections and encourage the use of rapidly renewable materials.

Policy MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

Policy CD-5.6 Design lighting locations and levels to enhance the public realm, promote safety and comfort, and create engaging public spaces. Seek to balance minimum energy use of outdoor lighting with goal of providing safe and pleasing well-lit spaces. Consider the City's outdoor lighting policies in development review processes.

Municipal Code

Section 24 of the San José Municipal Code adopts Title 24 of the CCR under the California Building Standards Code. The California Energy Commission sets standards for energy efficiency and green

building standards as part of Title 24 in order to reduce California's energy consumption. Sections 24.10.100 and 24.12.100 of the San José Municipal Code adopt these technical provisions of the California Green Building Standard Code and the California Building Energy Efficiency Standards, respectively.

City of San José Private Sector Green Building Policy (Policy 6-32)

The City encourages new development to "build green" by incorporating green building practices that are targeted at energy efficiency, water conservation, and improved air and water quality. In accordance with the City's Private Sector Green Building Policy,[21] new projects must achieve minimum green building performance levels using City Council adopted reference standards as specified below in Table 5.B.

Table 5.C: Private Sector Green Building Policy

Applicable Project	Minimum Green Building Rating
Commercial/Industrial Tier 1	< 25,000 square feet = LEED Applicable NC Checklist
Commercial/Industrial Tier 2	≥ 25,000 square feet = LEED Silver
Residential < 10 units Tier 1	GreenPoint or LEED Checklist
Residential ≥ 10 units Tier 2	GreenPoint Rated 50 points or LEED Certified
High Rise Residential (75 feet or higher)	LEED Certified

Source: City of San José (2008).
LEED = Leadership in Energy and Environmental Design

5.6.1.2 Existing Conditions

Electricity. Electricity is a man-made resource. The production of electricity requires the consumption or conversion of energy resources (including water, wind, oil, gas, coal, solar, geothermal, or nuclear resources) into energy. Electricity is used for a variety of purposes (e.g., lighting, heating, cooling, and refrigeration, and for operating appliances, computers, electronics, machinery, and public transportation systems).[22]

According to the most recent data available, in 2017, California's electricity was generated primarily by natural gas (33.67 percent), coal (4.13 percent), large hydroelectric (14.72 percent), nuclear (9.08 percent), and renewable sources (29 percent). Total electric generation in California in 2017 was 292,039 gigawatt-hours (GWh), up 0.5 percent from the 2016 total generation of 290,567 GWh. In 2017, California produced approximately 70.7 percent and imported 29.3 percent of the electricity it used.[23]

[21] San José, City of. 2008. *Private Sector Green Building Policy*. Available online at: www.sanjoseca.gov/home/showdocument?id=37865 (accessed July 20, 2020). October 7.

[22] U.S. Energy Information Administration. 2019a. Electricity Explained. Website: www.eia.gov/energy explained/electricity/ (accessed August 2020).

[23] California Energy Commission. 2019a. *Notice of Request for Public Comments on the Draft Scoping Order for the 2019 Integrated Energy Policy Report*. Docket No. 19-IEPR-01.

The City receives its electricity from PG&E. According to the California Energy Commission (CEC), total electricity consumption in the PG&E service area in 2018 was 80,368.7 gigawatt hours (GWh) (27,700.2 GWh for the residential sector and 52,668.4 GWh for the nonresidential sector).[24] Total electricity consumption in Santa Clara County in 2018 was 16,708 GWh or 16,708,080,341 kWh.[25]

Natural Gas. Natural gas is a non-renewable fossil fuel. Fossil fuels are formed when layers of decomposing plant and animal matter are exposed to intense heat and pressure under the surface of the Earth over many years. Natural gas is a combustible mixture of hydrocarbon compounds (primarily methane) that is found in naturally occurring reservoirs in deep underground rock formations. Natural gas is used as a fuel source for a variety of uses (e.g., heating buildings, generating electricity, and powering appliances such as stoves, washing machines and dryers, gas fireplaces, and gas grills).[26]

Natural gas consumed in California is used for electricity generation (35 percent), residential uses (17 percent), industrial uses (33 percent), commercial uses (12 percent), and transportation uses (3 percent). California continues to depend on out-of-state imports for nearly 90 percent of its natural gas supply.[27]

PG&E is the natural gas service provider for the City. According to the CEC, total natural gas consumption in the PG&E service area in 2018 was 4,794.4 million therms (1,832.8 million therms for the residential sector and 2,961.6 million therms for the nonresidential sector).[28] Total natural gas consumption in Santa Clara County in 2018 was 440 million therms or approximately 440,030,822 therms.[29]

Gasoline. California crude oil production levels have been declining over the last 30 years; however, the State still accounts for 5 percent of the United States' crude oil production and petroleum refining capacity.[30] In 2017, approximately 143 billion gallons of gasoline were consumed in the United States[31] (setting an annual gasoline consumption record) and 15.5 billion gallons were

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24 California Energy Commission. 2019b. Electricity Consumption by Entity. Website: www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed August 2020).

25 California Energy Commission. 2019c. Electricity Consumption by County. Website: www.ecdms.energy.ca. gov/elecbycounty.aspx (accessed August 2020).

26 U.S. Energy Information Administration. 2019b. Natural Gas Explained-Use of Natural Gas. Website: eia.gov/energyexplained/index.php?page=natural_gas_use (accessed August 2020).

27 California Energy Commission. 2019d. Supply and Demand of Natural Gas in California. Website: www.energy.ca.gov/almanac/naturalgas_data/overview.html (accessed August 2020).

28 California Energy Commission. 2019e. Gas Consumption by Entity. Website: www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed August 2020).

29 California Energy Commission. 2019f. Gas Consumption by County. Website: www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed August 2020).

30 U.S. Energy Information Administration. 2020. California State Profile and Energy Estimates, Profile Analysis. January 16. Available online at: www.eia.gov/state/analysis.php?sid=CA (accessed July 20, 2020).

31 U.S. Energy Information Administration. 2020. Frequently Asked Questions. "How much gasoline does the United States consume?" Website: www.eia.gov/tools/faqs/faq.cfm?id=23&t=10 (accessed July 20, 2020).

consumed in California.[32] The United States has seen lower gasoline prices and a high demand in the last few years, though forecasted growth in demand is expected to slow as retail prices begin to increase.[33]

The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.0 mpg in 2015.[34] Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. The Act, which originally mandated a national fuel economy standard of 35 mpg by the year 2020, applies to cars and light trucks of Model Years 2011 through 2020.[35] In 2012, the federal government raised the fuel economy standard to 54.5 mpg for cars and light-duty trucks by Model Year 2025.[36]

Energy Use of Existing Development. As previously noted, the Project site is currently undeveloped, and therefore does not generate demand for energy.

5.6.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in 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?	☐	☐	☒	☐

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation?

32 California Department of Tax and Fee Administration. *Net Taxable Gasoline Gallons*. Available online at: www.cdtfa.ca.gov/taxes-and-fees/MVF-10-Year-Report.pdf (accessed July 20, 2020).

33 U.S. Energy Information Administration. 2020. Short-Term Energy Outlook, U.S. Liquid Fuels. Website: www.eia.gov/forecasts/steo/report/us_oil.cfm (accessed July 20, 2020).

34 U.S. Department of Transportation. 2017. Bureau of Transportation Statistics. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Available online at: www.bts.gov/archive/publications/national_transportation_statistics/table_04_23 (accessed July 20, 2020).

35 U.S. Department of Energy. 2007. Alternative Fuels Data Center, Laws & Incentives. "Energy Independence and Security Act of 2007." Available online at: www.afdc.energy.gov/laws/eisa (accessed July 20, 2020). Enacted December 19.

36 The White House, Office of the Press Secretary. 2012. "Obama Administration Finalizes Historic 54.5 MPG Fuel Efficiency Standards." Website: obamawhitehouse.archives.gov/the-press-office/2012/08/28/obama-administration-finalizes-historic-545-MPG-fuel-efficiency-standard (accessed July 20, 2020).

Construction. The anticipated construction schedule assumes that the proposed Project would be constructed over three months. Construction would require grading and site preparation. In total, the proposed Project would require up to five cubic yards of soil import.

Energy would be consumed during construction and operation of the proposed Project. Construction would require energy for the manufacture and transportation of building materials, preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Operation of the Project would consume energy in the form of electricity associated with building heating and cooling, lighting, and water heating. In order to increase energy efficiency on the site during Project construction, the Project would be required to implement best management practices such as idling times to 5 minutes or less and would require construction workers to shut off idle equipment (refer to the Standard Permit Conditions in Section 5.3, Air Quality). Energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operation. As previously noted, the proposed Project would consist of the construction of one single-family residence that would be approximately 4,646 square feet in size. Typically, energy consumption is associated with fuel used for vehicle trips and electricity and natural gas use. Energy use consumed during operation of the proposed Project would be associated with increased electricity and natural gas demand and fuel used for vehicle trips associated with the proposed Project.

As described above, the proposed Project would be required to comply with the City's Private Sector Green Building Policy. Compliance with this policy would ensure that the proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources. In addition, the house is designed to be a net-zero home by utilizing solar energy for electricity use and propane gas to power the septic system. Impacts would be less than significant, and no mitigation would be required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. As previously stated, the Project would be required to comply with the City's Private Sector Green Building Policy. Because California's energy conservation planning actions are conducted at a regional level, and because the Project's total impact to regional energy supplies would be minor, the proposed Project would not conflict with California's energy conservation plans as described in the CEC's 2019 Integrated Energy Policy Report. Thus, as shown above, the Project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and not result in any irreversible or irretrievable commitments of energy. Impacts would be less than significant.

5.6.3 Conclusion

Less Than Significant Impact. Implementation of the proposed Project would not result in a substantial increase in demand upon energy resources in relation to Project supplies. No mitigation would be required.

5.7 GEOLOGY AND SOILS

The discussion and analysis provided in this section is based on the *Updated Geologic and Geotechnical Study, Proposed Residential Development, Gschwend Property, APNS 708-21-004 and -005, Santa Teresa Boulevard, San Jose California* prepared by UPP Geotechnology (included as Appendix C).[37]

5.7.1 Environmental Setting

5.7.1.1 Regulatory Framework

Federal and State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

Following the 1971 San Fernando earthquake, the State legislature passed the Alquist-Priolo Earthquake Fault Zoning (AP) Act, which regulates developments near known active faults due to hazards associated with surface ruptures. As per the AP Act, development areas in or near the Alquist-Priolo Earthquake Fault Zone require evaluation for potential surface ruptures in order to ensure public safety.

Seismic Hazards Mapping Act

The State legislature passed the Seismic Hazards Mapping Act (SHMA) to ensure public safety in regards to the effects of strong ground shaking, liquefaction, landslides, and other seismic hazards. Per the SHMA, the California Geological Survey (CGS) has established a statewide mapping program for cities and counties to aid in identifying areas subject to these seismic hazards, which include the central San Francisco Bay Area and Los Angeles Basin.

California Building Code

The State of California provides a minimum standard for building design and construction standards through Title 24 of the California Code of Regulations (CCR), known as the California Building Code (CBC). The CBC is updated every three years, and the current 2016 CBC went into effect in January 2017. Generally, the CBC is adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. The CBC defines the requirements for seismic safety, excavation, and construction activities relating to foundations, retaining walls, and site demolition. It also regulates grading activities such as drainage and erosion control.

California Public Resources Code Section 5097.5

Section 5097.5 of the California Public Resources Code prohibits the excavation, removal, destruction, or tampering with any paleontological resources situated on public lands, except with the express permission of a public agency with jurisdiction over the lands.

[37] UPP Geotechnology, 2016. *Updated Geologic and Geotechnical Study, Proposed Residential Development, Gschwend Property, APNS 708-21-004 and -005, Santa Teresa Boulevard, San Jose California*. January 8.

Local Regulations

Envision San José 2040 General Plan

The Environmental Resources (ER) and Environmental Considerations/Hazards (EC) sections of the City General Plan include the following goals and policies related to cultural resources that are applicable to the proposed Project:

Goal ER-10 **Archaeology and Paleontology:** Preserve and conserve archaeologically significant structures, sites, districts and artifacts in order to promote a greater sense of historic awareness and community identity.

Policy ER-10.1 For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological information may be affected by the Project and then require, if needed, that appropriate mitigation measures be incorporated into the Project design.

Policy ER-10.3 Ensure that City, State, and Federal historic preservation laws, regulations, and codes are enforced, including laws related to archaeological and paleontological resources, to ensure the adequate protection of historic and pre-historic resources.

Goal EC-3 **Seismic Hazards:** Minimize the risk of injury, loss of life, property damage, and community disruption from seismic shaking, fault rupture, ground failure (liquefaction and lateral spreading), earthquake-induced landslides, and other earthquake-induced ground deformation.

Policy EC-3.1 Design all new or remodeled habitable structures in accordance with the most recent California Building Code and California Fire Code as amended locally and adopted by the City of San José, including provisions regarding lateral forces.

Goal EC-4 **Geologic and Soil Hazards:** Minimize the risk of injury, loss of life, and property damage from soil and slope instability, including landslides, differential settlement, and accelerated erosion.

Policy EC-4.1 Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and Municipal Code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-4.2	Approve development in areas subject to soils and geologic hazards, including unengineered fill and weak soils and landslide-prone areas, only when the severity of hazards have been evaluated and if shown to be required, appropriate mitigation measures are provided. New development proposed within areas of geologic hazards shall not be endangered by, nor contribute to, the hazardous conditions on the site or on adjoining properties. The City of San José Geologist will review and approve geotechnical and geological investigation reports for projects within these areas as part of the Project approval process.
Policy EC-4.4	Require all new development to conform to the City of San José's Geologic Hazard Ordinance.
Policy EC-4.5	Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have a soil disturbance of 1 acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion Control Plans are also required for any grading occurring between October 1 and April 30.
Policy EC-4.7	Consistent with the San José Geologic Hazard Ordinance, prepare geotechnical and geological investigation reports for projects in areas of known concern to address the implications of irrigated landscaping to slope stability and to determine if hazards can be adequately mitigated.
Action EC-4.11	Require the preparation of geotechnical and geological investigation reports for projects within areas subject to soils and geologic hazards, and require review and implementation of mitigation measures as part of the Project approval process.
Action EC-4.12	Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of a grading permit by the Director of Public Works.
Policy ES-4.9	Permit development only in those areas where potential danger to health, safety, and welfare of the persons in that area can be mitigated to an acceptable level.

Policy LU-17.3 Minimize grading on hillsides and design any necessary grading or recontouring to preserve the natural character of the hills and to minimize the removal of significant vegetation, especially native trees such as Valley Oaks.

Goal MS-13 **Construction Air Emissions:** Minimize air pollutant emissions during demolition and construction activities.

Policy MS-13.3 Require subdivision designs and site planning to minimize grading and use landform grading in hillside areas.

Municipal Code

Title 24 of the City's Municipal Code includes the 2013 California Building, Plumbing, Mechanical, Electrical, Existing Building, and Historical Building Codes. Both Chapter 17.40, Dangerous Buildings, and Chapter 17.10, Geologic Hazards Regulations, mandate the requirements for building safety and reducing earthquake-related hazards. Chapter 17.10, Building Code: Part 6 Excavation and Grading, states the requirements for managing erosion, grading, and excavation.

As per the Municipal Code, a Certificate of Geologic Hazard Clearance must be issued by The Director of Public Works before issuing grading and building permits within defined geologic hazard zones, including State Seismic Hazard Zones for Liquefaction. The City issued a Certificate of Geologic Hazard Clearance for the proposed Project in January 2020.[38]

5.7.1.2 Existing Conditions

Regional Geology. The City is located within the Santa Clara Valley, a large structural basin containing alluvial deposits derived from the Diablo Range to the east and the Santa Cruz Mountains to the west. The valley sediments were deposited as a series of coalescing alluvial fans by streams that drain the adjacent mountains.

On-Site Geological Conditions

Topography and Soils. The Project site ranges in elevation from approximately 260 feet to 380 feet above msl. Soils on the Project site generally consist of silty colluvium and older colluvium underlain by sandstone bedrock. The silty colluvium consists of silt and the older colluvium consists of layers of silt, clayey silt and clayey sand. No free groundwater was encountered in any of the exploration pits.

Liquefaction. Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Liquefaction commonly occurs when three conditions are present simultaneously: (1) shallow groundwater; (2) relatively loose, cohesionless (granular) soil; and (3) earthquake-generated seismic waves. The presence of these conditions may cause a loss of shear strength and, in many cases, ground

[38] Shimamoto, Michael K. Engineering Geologist, Development Services Division, City of San José. Certificate of Geologic Hazard Clearance, January 28, 2020.

settlement. The factors known to influence liquefaction potential include soil type, relative density, grain size, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking.

According to the Geotechnical Investigation, the Project site is not located in a designated Liquefaction Hazard Zone.

Seismicity and Seismic-Related Hazards. As noted in the Geologic and Geotechnical Study (Appendix C), the Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. In addition, the existing Project site does not contain any known active or potentially active faults or fault traces. The closest mapped active faults to the Project site are the Coyote/Piercy, Shannon, and Hayward Faults, which are located approximately 1.25 miles, 1.5 miles, and 4.5 miles from the site, respectively.

Lateral Spreading. Lateral spreading refers to ground displacement that occurs on gentle sloping ground as a result of liquefaction during an earthquake. According to the Geotechnical Investigation, the potential for lateral spreading on the Project site is considered to be low.

Landslides. According to the Geotechnical Investigation, the Project site is located within a designated Landslide Hazard Zone. Additionally, the Geotechnical Investigation revealed evidence of an ancient landslide located east of the site of the proposed building. However, this landslide likely occurred thousands of years ago and has likely not experienced any additional movement since the original event. The Geotechnical Investigation determined that there is a low risk that landslide reactivation could affect the proposed Project, and that the risk of landsliding on the Project site would be no greater than the risk to the average hillside residential property within Santa Clara County.

Subsidence. Subsidence is the sinking of the land surface due to oil, gas, and water production, which results in the loss of pore pressure as the weight of the overburden compacts the underlying sediments. Subsidence began to occur in the City in the 1910s due to activities related to groundwater withdrawal. Subsidence has stopped or greatly slowed in the region because of improved groundwater management. Regional subsidence is not expected to be a problem in the City unless groundwater pumping increases above the rate of recharge.[39]

Expansive Soils. Expansive soils contain types of clay materials that occupy considerably more volume when they are wet or hydrated than when they are dry or dehydrated. Volume changes associated with changes in the moisture content of near-surface expansive soils can cause uplift or heave of the ground when they become wet or, less commonly, cause settlement when they dry out. The Geotechnical Investigation did not identify potential impacts related to expansive soils.

Paleontological Resources. Paleontological resources are fossils, or the remains or traces of prehistoric life preserved in the geological record. Paleontological resources include the casts or

[39] San José, City of. 2011. *Envision San José 2040 General Plan Final Environmental Impact Report*.

impressions of ancient animals and plants, their trace remains, microfossils, and unmineralized remains.

The Project site is underlain by Franciscan Complex sandstone bedrock covered by approximately 1 foot of accumulated colluvium. Franciscan Complex rocks do have the potential for significant paleontological resources. Franciscan Complex rocks are known to contain microscopic single-celled organism known as radiolarian, but these are primarily found in the red and green radiolarian chert found in this formation. Vertebrate marine fossils have been found in other rocks throughout Franciscan Complex geology, however this is less common. A search for known fossil localities was also conducted through the online collections database of the University of California Museum of Paleontology (UCMP) at the University of California, Berkeley returned no of fossil localities from deposits within or adjacent to the Project site.

5.7.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☒	☐

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.

Less Than Significant Impact. As previously stated, there are no known faults on the Project site nor in the Project site located within a currently designated Alquist-Priolo Earthquake Fault Zone. As the Project site is not located in an Alquist-Priolo Earthquake Fault Zone and there is no evidence of active faulting on or around the immediate Project site, the potential for ground rupture to affect the Project is considered to be less than significant, and no mitigation is necessary.

a. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

ii. Strong seismic ground shaking?

Less Than Significant Impact. As with all of Northern California, the Project site is subject to strong ground motion resulting from earthquakes on nearby faults. As discussed in Response 4.7.3(a)(i), the Coyote/Piercy, Shannon, and Hayward are located approximately 1.25, 1.5, and 4.5 miles from the site. These faults are capable of producing strong ground motion. During an earthquake along these faults or others, seismically induced ground shaking would be expected to occur. The severity of the shaking would be influenced by the distance of the site to the seismic source, the soil conditions, and the depth to groundwater.

Ground shaking generated by fault movement is considered a potentially significant impact that may affect the proposed Project. The following Standard Permit Condition requires that the Project Applicant comply with the recommendations of the Geotechnical Investigation prepared for the Project, the most current California Building Code (CBC), and the City of San José Building Code, which stipulates appropriate seismic design provisions that shall be implemented with Project design and construction. With the implementation of the Standard Permit Condition, potential Project impacts related to seismic ground shaking would be reduced to a less than significant level. No mitigation would be required.

Standard Permit Conditions: To avoid or minimize potential damage from seismic shaking, the Project shall be constructed using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of an approved geotechnical investigation. The report shall be reviewed and approved by the City of San José Department of Public Works as part of the building permit review and issuance process. The buildings shall meet the requirements of applicable Building and Fire Codes as adopted or updated by the City. The Project shall be designed to withstand soil hazards identified on the site and the

Project shall be designed to reduce the risk to life or property on site and off site to the extent feasible and in compliance with the Building Code.

a. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. As previously stated, the Project site is not located within a liquefaction hazard zone. As the projects site is not located within a liquefaction hazard zone, and there is no evidence that the Project site is susceptible to liquefaction, this impact would be less than significant.

a. Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

iv. Landslides?

Less Than Significant Impact with Mitigation Incorporated. As previously noted, the Project site is located within a landslide hazard zone and is known to contain traces of an ancient landslide. The site of the proposed building is located atop the crest of a bedrock ridge, in an area that would not be affected by a reactivation of the ancient landslides. However, a portion of the proposed driveway is planned across the eastern edge of the ancient landslide. A quantitative slope stability analysis yielded a Factor of Safety greater than 1.0 under seismic loading conditions, indicating that there is a low risk of landslide reactivation that could affect the proposed Project. The following Standard Permit Condition would be incorporated as part of the project to address the potential for landslides on the Project site. Therefore, potential Project impacts related to landslides would be considered less-than-significant.

Standard Permit Conditions: Geohazard Clearance-Landslides. Prior to the issuance of any building permits, the Project shall conform to the recommendations of the Project-specific geotechnical report, including soil improvements and foundation and design considerations for the proposed foundations, unless otherwise determined by the City Engineering Geologist.

b. Would the Project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. During the construction activities of the proposed Project, bare soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts as identified in Section 5.10, Hydrology and Water Quality. During construction, the Project Applicant would be required to adhere to the requirements of the Construction General Permit and implement Erosion Control and Sediment Control Best Management Practices (BMPs), which are intended to minimize erosion and

retain sediment on site. The Project would also be required to prepare an Erosion Control Plan to further minimize erosion and the loss of topsoil. The proposed Project would permanently increase impervious surface area on the Project site by 13,059 square feet or 0.3 acre compared to existing conditions and would potentially increase runoff peak flow during a storm event. In the proposed condition, erosion and siltation would be minimized in the landscaped pervious areas, where soil would be stabilized by vegetation and stormwater would continue to percolate. Therefore, operation of the proposed Project would not increase on-site erosion or loss of topsoil. For these reasons, with implementation of the following Standard Permit Conditions, impacts related to erosion and loss of topsoil would be less than significant, and no mitigation would be required.

Standard Permit Conditions:

- All excavation and grading work shall be scheduled in dry weather months or construction sites shall be weatherized.
- Stockpiles and excavated soils shall be covered with secured tarps or plastic sheeting.
- Ditches shall be installed to divert runoff around excavations and graded areas if necessary.

c. Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact with Mitigation Incorporated. As previously discussed in Response 4.7.3(a)(iv), potential impacts related to landslides would be addressed through incorporation of the Standard Permit Condition related to landslides.

The residence site would be graded to create a flat pad at an elevation of approximately 330 feet, requiring a maximum excavation depth of approximately 17 feet. Grading for the proposed Project would result in approximately 2,574 cubic yards of cut and 2,569 cubic yards of fill, requiring an import of approximately 5 cubic yards. Grading activities during construction would produce temporary construction slopes in some areas. Unstable cut-and-fill slopes could create short-term hazards. Standard Permit Conditions require the Project to conform to the recommendations of the Geologic and Geotechnical Study (Appendix C), which contains specific recommendations for addressing potential slope instability. According to the Geotechnical Investigation, all excavations shall be performed in accordance with California Occupational Safety and Health Administration (CAL-OSHA) requirements to minimize impacts associated with temporary excavation slopes. The Geotechnical Investigation also recommends that all shallow slope excavations be adequately sloped for bank stability and all deeper slope excavations utilize sheeting or shoring to stabilize banks. With implementation of the geotechnical recommendations, potential impacts related to slope instability would be reduced below a level of significance.

Lateral spreading refers to ground displacement that occurs on gentle sloping ground as a result of liquefaction during an earthquake. According to the Geotechnical Investigation, the potential for lateral spreading on the Project site is considered to be low. With implementation of the Standard

Permit Conditions, potential lateral spreading impacts would be reduced to a less than significant level.

As previously stated, there has been no significant land surface subsidence in the City since the City began its efforts to cease groundwater withdrawal in the late 1960s. Therefore, construction and implementation of the proposed Project would not result in subsidence-related impacts, and no mitigation would be required.

d. Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. As previously stated, the Geotechnical Investigation did not identify any potential impacts related to expansive soils. Additionally, compliance with the Standard Permit Conditions would reduce potential impacts related to expansive soils. Therefore, this impact would be less than significant and no mitigation would be required.

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?

No Impact. The proposed Project would include the use of a leachfield to treat wastewater. As described in the Geotechnical Investigation, the leachfield would be located in a gentle to moderately sloping area north-northwest of the proposed residence. Although not designed, the proposed leachfield would require excavation of up to a depth of approximately three feet. Competent sandstone bedrock was encountered at shallow depths within the exploration pit and soil profile pits observed in the area of the proposed leachfield. The Geotechnical Investigation determined that construction of the proposed leachfield in this area should not impact the stability of the slopes and should not degrade the quality of the local groundwater. In addition, percolation testing yielded favorable rates, and the fractured nature of the sandstone should promote the downward migration of septic effluent. Therefore, this impact would be less than significant and no mitigation would be required.

f. Would the Project, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact

Construction. As described above, the Project site is underlain by Franciscan Complex sandstone bedrock covered by approximately 1 foot of accumulated colluvium. Franciscan Complex rocks are known to contain microscopic single-celled organism known as radiolarian, but these are primarily found in the red and green radiolarian chert found in this formation. Vertebrate marine fossils have been found in other rocks throughout Franciscan Complex geology, however this is less common. In the unlikely event that fossil remains are encountered on the site, the Standard Permit Conditions below requires that a paleontologist be contacted to assess the discovery for scientific significance and to make recommendations regarding the necessity to develop paleontological mitigation (including paleontological monitoring, collection,

stabilization, and identification of observed resources; curation of resources into a museum repository; and preparation of a monitoring report of findings). With implementation of the Standard Permit Conditions below, impacts to paleontological resources would be reduced to a less than significant level. No mitigation would be required.

Standard Permit Conditions:

- Consistent with General Plan Policy ER-10.3, the following Standard Permit Conditions shall be implemented by the Project to reduce or avoid impacts to paleontological resources to a less than significant level:

    - If vertebrate fossils are discovered during construction, all work on the site shall stop immediately, the Director of Planning, or the Director's designee, of the Department of Planning, Building and Code Enforcement (PBCE) shall be notified, and a qualified professional paleontologist shall assess the nature and importance of the find and recommend appropriate treatment. Treatment may include, but is not limited to, preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds. The Project Applicant shall be responsible for implementing the recommendations of the qualified paleontologist. A report of all findings shall be submitted to the Director of Planning, or the Director's designee, of the PBCE.

5.7.3 Conclusion

Less Than Significant Impact. Implementation of the proposed Project would result in less than significant impacts with respect to geology and soils with the implementation of Standard Permit Conditions. No mitigation would be required.

5.8 GREENHOUSE GAS EMISSIONS

5.8.1 Environmental Setting

Federal and State Regulations

Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for implementing the Federal Clean Air Act (FCAA), which was enacted in 1963. The FCAA was amended in 1970, 1977, and 1990. Under the FCAA, the EPA has the authority to regulate GHG emissions and prescribe actions to potentially reduce those emissions.

California Global Warming Solutions Act

The California Global Warming Solutions Act (also referred to as Assembly Bill [AB] 32) established a statewide GHG emissions cap for 2020, adopted reporting rules for significant sources of GHG, and adopted the Climate Change Scoping Plan, which itself identifies how GHG emissions reductions will be achieved.

In 2016, Senate Bill (SB) 32 was enacted, which amended the California Global Warming Solutions Act. SB 32 required the California Air Resources Board to ensure that GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB subsequently updated its Climate Change Scoping Plan in 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMT of CO_2e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMT of CO_2e.

Senate Bill 375-Redesigning Communities to Reduce Greenhouse Gases

Senate Bill 375, also known as the Sustainable Communities Strategy and Climate Protection Act, was enacted in September 2008. SB 375 builds on the foundation of AB 32 by requiring CARB to develop regional GHG emissions reduction targets for passenger vehicle and light-truck sectors for 2020 and 2035 as compared to 2005 levels. The per-capita GHG emissions reduction target for passenger vehicles in the San Francisco Bay area includes a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission worked with the Association of Bay Area Governments, BAAQMD, and the Bay Conservation and Development Commission to prepare a regional Sustainable Communities Strategy, which is known as Plan Bay Area. This plan outlines a pathway to reduce per-capita GHG emissions through the promotion of compact mixed-use development near transit, particularly in established Priority Development Areas. The Project site is located within a Priority Development Area as identified in the Plan Bay Area.

Plan Bay Area 2040 was adopted in July 2017. Target areas in this plan include reducing GHG emissions, improving access to various modes of transportation, maintaining regional infrastructure, and enhancing resiliency to climate change.

Bay Area Air Quality Management District Regulations

The BAAQMD is the regional, government agency that regulates sources of air pollution within the nine San Francisco Bay Area counties. Several key activities of the BAAQMD related to GHG emissions are described below.

Bay Area Clean Air Plan

The Clean Air Plan[40] guides the region's air quality planning efforts to attain the CAAQS. The BAAQMD 2017 Clean Air Plan (CAP), which was adopted on April 19, 2017, by the BAAQMD Board of Directors, is the current Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter, and greenhouse gas (GHG) emissions. The Bay Area 2017 Clean Air Plan:

- Describes the BAAQMD's plan towards attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities;
- Defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050;
- Provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve GHG reduction targets;
- Includes a wide range of control measures designed to decrease emissions of air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants; to reduce emissions of methane and other "Super-GHGs" that are potent climate pollutants in the near term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion; and
- Consistent with the GHG reduction targets adopted by the State of California, the 2017 CAP lays the groundwork for BAAQMD's long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

BAAQMD CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines (2017) were prepared to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. Among other things, the guidelines provide recommended assessment methodologies for air toxics, odors, and GHG emissions. Jurisdictions within the San Francisco Bay Area Air Basin utilize these thresholds, rules, plans, and methodologies when evaluating GHG emissions impacts.

The BAAQMD thresholds were developed specifically for the Bay Area in response to the effects of the AB 32 scoping plan measures aimed at reducing regional GHG emissions. The BAAQMD intends

[40] Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Available online at: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed February 2021).

to achieve GHG emissions reductions from new development projects to close the gap between projected regional emissions with AB 32 scoping plan measures and AB 32 targets.

Plan Bay Area 2040

Plan Bay Area 2040 is a State-mandated, integrated long-range transportation and land use plan. As required by SB 375, all metropolitan regions in California must complete a Sustainable Communities Strategy (SCS) as part of a Regional Transportation Plan. In the Bay Area, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing to meet GHG reduction targets set by CARB.

Local Regulations

Envision San José 2040 General Plan

The following General Plan policies are related to GHG emissions and are applicable to the proposed Project.

Policy MS-10.1 Assess projected air emissions from new development in conformance with the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines and relative to State and federal standards. Identify and implement feasible air emission reduction measures.

Policy MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

Policy MS-10.4 Encourage effective regulation of mobile and stationary sources of air pollution, both inside and outside of San José. In particular, support federal and State regulations to improve automobile emission controls.

Policy MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

In addition, the General Plan includes strategies, policies, and action items that are incorporated in the City's GHG Reduction Strategy to help reduce GHG emissions. Multiple policies and actions in the General Plan have GHG implications, including land use, housing, transportation, water usage, solid waste generation and recycling, and reuse of historic buildings. The GHG Reduction Strategy is intended to meet the mandates as outlined in the CEQA Guidelines and standards for "qualified plans" as set forth by BAAQMD.

On December 15, 2015, the San José City Council certified a Supplemental Program Environmental Impact Report to the Envision San José 2040 Final Program Environmental Impact Report and re-adopted the City's GHG Reduction Strategy in the General Plan. The GHG Reduction Strategy identifies GHG emissions reduction measures to be implemented by development projects in three categories: built environment and energy, land use and transportation, and recycling and waste

reduction. Some measures are mandatory for all proposed development projects and others are voluntary. Voluntary measures could be incorporated as mitigation measures for proposed projects, at the City's discretion. Projects that conform to the General Plan Land Use/Transportation Diagram and supporting policies are considered consistent with the City's GHG Reduction Strategy through 2020. Beyond 2020, the emission reductions in the GHG Reduction Strategy are not large enough to meet the City's identified 3.04 metric tons (MT) of CO_2e per service population efficiency metric for 2035. The City of San José recognizes that additional strategies, policies, and programs, to supplement those currently identified, would ultimately be required to meet the mid-term 2030 reduction target of 40 percent below 1990 levels in the GHG Reduction Strategy and the target of 80 percent below 1990 emission levels by 2050.

City of San José Greenhouse Gas Reduction Strategy

In 2020, the City adopted the 2030 Greenhouse Gas Reduction Strategy (2030 GHGRS), which is a comprehensive update to the city's original GHGRS and reflects the plans, policies, and codes as approved by the City Council. The strategy builds on the City's General Plan and Climate Smart San José. The 2030 GHGRS provides a set of strategies and additional actions for achieving the mid-term 2030 reduction target.

The 2030 GHGRS serves as a Qualified Climate Action Plan for purposes of tiering and streamlining under CEQA. The Development Compliance Checklist serves to apply the relevant General Plan and 2030 GHGRS policies through a streamlined review process for proposed new development projects that are subject to discretionary review and that trigger environmental review under CEQA.

City of San José Municipal Code

The City's Municipal Code includes the following regulations that would reduce GHG emissions from future development:

- ***Green Building Regulations for Private Development*** **(Chapter 17.84).** Refer to Section 5.3, Air Quality, of this Initial Study for further discussion.

- ***Water Efficient Landscape Standards for New and Rehabilitated Landscaping*** **(Chapter 15.10).** The City's Water Efficient Landscape Standards outline key provisions aimed at regulating water waste through the repair and replacement of plumbing and irrigation systems, the adoption of water shortage measures, and the implementation of water to ensure compliance with water regulations for landscaped areas.

- ***Construction and Demolition Diversion Deposit Program*** **(Chapter 9.10).** The City of San José Construction and Demolition Diversion Deposit Program requires applicants for new development projects to apply for a construction and demolition debris clearing document prior to the issuance of a building permit. As outlined in this program, applicants must demonstrate how construction waste will be diverted from landfill disposal through the use of more efficient construction measures, the re-use of materials, the recycling of materials, or the use of other permitted methods.

Climate Smart San José

Climate Smart San José is a plan to reduce air pollution, save water, and create a stronger and healthier community and builds upon the City's legacy of innovation and sustainability leadership. The plan makes San José one of the first major U.S. cities to chart a course in meeting the greenhouse gas emission reduction targets of the international Paris Agreement. Climate Smart San José focuses on three pillars and nine key strategies:

- Pillar 1: A Sustainable and Climate Smart City
    - 1.1: Transition to a renewable energy future
    - 1.2: Embrace our Californian climate
- Pillar 2: A Vibrant City of Connected and Focused Growth
    - 2.1: Densify our City to accommodate our future neighbors
    - 2.2: Make homes efficient and affordable for our families
    - 2.3: Create clean, personalized mobility choices
    - 2.4: Develop integrated, accessible public transport infrastructure
- Pillar 3: An Economically Inclusive City of Opportunity
    - 3.1: Create local jobs in our City to reduce vehicle miles traveled (VMT)
    - 3.2: Improve our commercial building stock
    - 3.3: Make commercial goods movement clean and efficient

Impact Thresholds

As described previously, BAAQMD adopted GHG emissions thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD has determined that GHG emissions would cause significant environmental impacts. The GHG emissions thresholds identified by BAAQMD are 1,100 metric tons (MT) of CO_2e per year or 4.6 MT of CO_2e per service population per year. A Project that is in compliance with the City's Climate Action Plan (a qualified GHG Reduction Strategy) is considered to have a less than significant GHG impact regardless of its emissions.

The numeric thresholds set by the BAAQMD and included within the City's Climate Action Plan (i.e., Greenhouse Gas Reduction Strategy) were calculated to achieve the State's 2020 target for GHG emissions levels (and not the SB 32 specified target of 40 percent below the 1990 GHG emissions level). Construction is estimated to begin in spring of 2021 and occur over a period of three months. The Project, therefore, would not be fully constructed and occupied until the fall of 2021. Because the Project would begin operations in the post-2020 timeframe, the Project would not be covered under the City's Greenhouse Gas Reduction Strategy.

CARB has completed a Scoping Plan, which will be utilized by the BAAQMD to establish the 2030 GHG efficiency threshold. BAAQMD has yet to publish a quantified GHG efficiency threshold for 2030. The City of San José has developed updated GHG thresholds reflecting statewide goals beyond 2020. GHG emissions resulting from operation of the Project at maximum build out have been

compared to a bright-line threshold consistent with State goals detailed in SB 32, Executive Order (EO) B-30-15, and EO S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, respectively.

5.8.1.1 Existing Conditions

Global climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans in recent decades. The Earth's average near-surface atmospheric temperature rose 0.6 ±0.2° Celsius (°C) or 1.1 ±0.4° Fahrenheit (°F) in the 20th century. The increased amounts of carbon dioxide (CO_2) and other GHGs are the primary causes of the human-induced component of warming. GHGs are released by the burning of fossil fuels, land clearing, agriculture, and other activities that lead to an increase in the greenhouse effect.[41]

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere, and enhancing the natural greenhouse effect, which is believed to be causing global warming. While manmade GHGs include naturally occurring GHGs such as CO_2, CH_4, and N_2O, some gases, like HFCs, PFCs, and SF_6, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation. For the purposes of this air quality analysis, the term "GHGs" will refer collectively to the six gases listed above only.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

The Project site is currently undeveloped, and therefore GHG emissions are not currently generated.

[41] The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Just as the glass in a greenhouse lets heat from sunlight in and reduces the heat escaping, greenhouse gases like carbon dioxide, methane, and nitrous oxide in the atmosphere keep the Earth at a relatively even temperature. Without the greenhouse effect, the Earth would be a frozen globe; thus, although an excess of greenhouse gas results in global warming, the naturally occurring greenhouse effect is necessary to keep our planet at a comfortable temperature.

5.8.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Construction and operation of the proposed Project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the Project's operations. Overall, the following activities associated with the proposed Project could directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** GHGs would be emitted through the operation of construction equipment and from worker and supply vendor vehicles, each of which typically uses fossil based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O.

- **Gas, Electricity and Water Use:** Natural gas use during construction of the Project would result in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use during construction and operation of the Project could result in GHG production if the electricity is generated by combusting fossil fuel. Additionally, water use would result in an increased energy demand because California's water conveyance system is energy-intensive and uses a significant amount of natural gas and electricity to deliver water to jurisdictions throughout the state.

- **Solid Waste Disposal:** Solid waste (e.g., green waste, trash from receptacles, and construction waste) generated by the Project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2. However, landfill methane (CH_4) can also be a source of energy. In addition, many materials in landfills do not decompose fully, and the carbon that remains is sequestered in the landfill and not released into the atmosphere.

- **Motor Vehicle Use:** Transportation associated with the Project would result in GHG emissions from the combustion of fossil fuels in daily automobile trips.

Construction GHG Emissions. During construction, GHGs would be emitted through the operation of construction equipment and from worker and supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO2, CH4, and N2O. Furthermore, CH4 is emitted during the fueling of construction equipment.

Construction of the proposed Project would include a total of approximately 2,574 cubic yards of cut and 2,569 cubic yards of fill, requiring an import of approximately 5 cubic yards for all construction activities, including to create a flat pad at an elevation of approximately 330 feet, underground trenching for utility connections, and construction of the driveway. Because soils on the site would be balanced and would only require a single truck trip to import soil, construction GHG emissions would be minimal. The BAAQMD does not have an adopted threshold of significance for construction-related GHG emissions; however, implementation of Standard Permit Conditions would reduce construction GHG emissions by limiting construction idling emissions. Therefore, construction emissions would be considered less than significant.

Operational Emissions. As described in Section 5.3.3.b, Table 3-1 of the BAAQMD 2017 CEQA Guidelines includes screening levels for operational-period GHG emissions. If a Project meets the screening criteria in Table 3-1, the Project would not result in the generation of operational-related GHG emissions that would exceed the BAAQMD's thresholds of significance. The operational screening level for single-family residences is 56 dwelling units. As noted above, the proposed Project would consist of one single-family residence. Therefore, the proposed Project would meet the screening criteria, and impacts related to operational GHG emissions would be less than significant.

b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. Due to the cumulative nature of climate change, the assessment of Project–generated GHG emissions and the effects of global climate change impacts can only be analyzed from a cumulative context. Therefore, the analysis focuses on the Project's incremental contribution of GHG emission to cumulative climate change impacts. The GHG threshold used in this analysis is based upon a Project's cumulative contribution to global climate change impacts within the context of State legislation to reduce GHG emissions. In turn, the GHG emission reduction targets within State legislations (i.e., AB 32 and SB 32) are based upon international efforts and commitments to reduce GHG emissions.

As previously described, the proposed Project would comply with the 2016 California Building Standards Code (California Code of Regulations [CCR], Title 24) and the San José Green Building Ordinance (Policy 6-32). The Project would also be consistent with the City's GHG Reduction Strategy (GHGRS) and the goals of Plan Bay Area 2040. The Project's Compliance Checklist for the GHGRS is included as Appendix D of this Initial Study. As included in Table B of the Compliance Checklist, the Project conforms to several strategies and consistency options that support the seven strategies of the GHGRS. As detailed, the Project includes measures that support strategies #1, #2, #3, #5 and #7 of the GHGRS. The Project supports these strategies because it is designed achieve net-zero energy usage and meet LEED Green Building Standards. Strategies #4 and #6 are not applicable to the Project given the size and location of the project.

As such, the Project would be consistent with State goals detailed in SB 32, EO B-30-15, and EO S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, respectively. Therefore, the proposed Project would conserve energy, and would serve to further GHG reduction targets and goals and initiatives established in AB 32 and SB 32. Therefore, no significant impacts related to the emissions of greenhouse gases would result from the proposed Project, and no mitigation is required.

5.8.3 Conclusion

Less Than Significant Impact. Compliance with applicable regulations and implementation of Standard Permit Conditions would ensure that the proposed Project would result in a less than significant GHG impact. No mitigation would be required.

5.9 HAZARDS AND HAZARDOUS MATERIALS

5.9.1 Environmental Setting

5.9.1.1 Regulatory Framework

Federal and State Regulations

Federal Aviation Administration Notification

Federal Regulations, Part 77, requires that the Federal Aviation Administration (FAA) be notified of certain proposed structures located within an extended zone defined by an imaginary slope radiating outward from an airport's runways, or which would otherwise stand at least 200 feet above ground. If such notification is required, the FAA would conduct an airspace safety review and issue a determination as to whether the proposed project would constitute an airspace hazard.

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was formed in 1991 to preserve and protect the environment and to ensure public health and safety in relation to environmental laws and regulations. The CalEPA manages the state's natural resources in a cohesive, cabinet-based system. Additionally, the CalEPA implements the Unified Program, which ensures consistency in regards to the administrative and enforcement actions in regards to hazardous waste and materials.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 authorized the USEPA to control hazardous waste from "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. Additionally, RCRA established regulations for managing non-hazardous solid wastes. In 1986, amendments to RCRA provided authority to the USEPA to manage environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Comprehensive Environmental Response, Compensation, and Liability Act

Commonly known as Superfund, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 established regulations concerning closed and abandoned hazardous waste sites. Additionally, it provided regulations regarding liability for closed and abandoned hazardous waste sites and established a trust fund for cleanup when no liability is found.

California Department of Toxic Substances and Control

The California Department of Toxic Substances and Control (DTSC) is a sub-department under the CalEPA and manages the federal hazardous waste program within the state. The department regulates the lifecycle of hazardous waste and sets goals for reducing hazardous waste production. The program follows federal and state law to ensure hazardous waste managers correctly handle, store, transport, dispose, reduce, and clean waste, and are equipped in the event of an emergency.

Government Code §65962.5 (Cortese List)

The CalEPA is required by Section 65962.5 of the Government Code to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The SWRCB and DTSC identify hazardous substance release sites included on the Cortese List, which is used by state and local agencies to ensure CEQA compliance.

California Building Code

The State of California provides a minimum standard for building design construction standards through Title 24 of the California Code of Regulations (CCR) through the California Building Code (CBC), which is located in Part 2 of Title 24. The CBC is updated every three years, and the current 2016 CBC went into effect in January 2017. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. City building officials monitor commercial and residential building plans to ensure compliance with fire safety standards within the California Building Code.

California Fire Code

The California Fire Code includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas. Chapter 17.12 of the City's Municipal Code adopts the California Fire Code by reference, which is updated every three years.

California Emergency Management Agency

The California Emergency Management Agency (CalEMA) was consolidated as part of the Governor's Office on January 1, 2009, merging the former Governor's Office of Emergency Services with the existing Governor's Office of Homeland Security. CalEMA coordinates all State agency response to major disasters so to provide support and hazard mitigation efforts for local governments. The agency also ensures the State has the appropriate resources and plans in order to respond in the event of all natural and human-induced emergencies and disasters.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) maps the predicted threat of fire within all of California. CAL FIRE categorizes this threat based on factors including fuel availability, topography, fire history, and climate. These threats are ranked on a threshold from no fire threat, moderate, high, and very high fire threat. The 2012 Strategic Fire Plan for California was generated by CAL FIRE to provide guidelines and objectives in order to account for associated fire impacts.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond property boundaries. Facilities that are required to participate in the CalARP Program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. A Risk Management Plan (RMP) is required for such facilities. The intents of the RMP are to provide basic information that may be used by first responders in order to prevent or mitigate damage to the public health and safety and to the environment from a release or threatened release of a hazardous material, and to satisfy federal and state Community Right-to-Know laws. The County of Santa Clara Department of Environmental Health reviews CalARP risk management plans as the Certified Unified Program Agency (CUPA).

San Francisco Bay Regional Water Quality Control Board

The Porter-Cologne Water Quality Control Act established the State Water Resources Control Board (SWRCB) and nine regional water boards including the San Francisco Bay Regional Water Quality Control Board (RWQCB). The San Francisco Bay RWQCB oversees the regulation of waterways within San José, and can order groundwater investigations and remediation actions in the event that either groundwater or state surface waters are susceptible to threat.

Bay Area Air Quality Management District

The BAAQMD regulates and monitors air pollution resulting from utilities and items other than motor vehicles and consumer products. BAAQMD develops both attainment and non-attainment plans for criteria pollutants and control of stationary air pollutant sources, as well as conducts permitting for asbestos related construction activities.

County of Santa Clara County Department of Environmental Health

The County of Santa Clara Department of Environmental Health (SCCDEH) conducts monitoring activities and investigations in order to protect the current and future health and safety of the public and local environment. The Hazardous Materials Compliance Division (HMCD) and Hazardous Materials Storage Ordinance (HMSO) regulate the storage of hazardous materials. Through the HMSO, the HMCD administers the County's Toxic Gas Ordinance and Non-Point Source (Urban Runoff) Ordinance.

Hazardous Materials Release Response Plan and Inventory Law of 1985

Businesses that use, handle, or store hazardous materials are required under State law to prepare an inventory of hazardous materials on their premises in order to protect public health and safety. These plans must address the proper storage, handling, and disposal of hazardous materials, as well as dictate spill response and notification requirements in the event of a hazardous materials spill.

Local Regulations

Envision San José 2040 General Plan

The Environmental Considerations/Hazards (EC) and Parks, Open Space, and Recreation (PR) sections of the City's General Plan include the following goals and policies related to hazards and hazardous materials that are applicable to the proposed Project.

Goal EC-6 **Hazardous Materials:** Protect the community from the risks inherent in the transport, distribution, use, storage, and disposal of hazardous materials.

Policy EC-6.1 Require all users and producers of hazardous materials and wastes to clearly identify and inventory the hazardous materials that they store, use or transport in conformance with local, State and federal laws, regulations and guidelines.

Policy EC-6.2 Require proper storage and use of hazardous materials and wastes to prevent leakage, potential explosions, fires, or the escape of harmful gases, and to prevent individually innocuous materials from combining to form hazardous substances, especially at the time of disposal by businesses and residences. Require proper disposal of hazardous materials and wastes at licensed facilities.

Policy EC-6.6 Address through environmental review for all proposals for new residential, park and recreation, school, day care, hospital, church or other uses that would place a sensitive population in close proximity to sites on which hazardous materials are or are likely to be located, the likelihood of an accidental release, the risks posed to human health and for sensitive populations, and mitigation measures, if needed, to protect human health.

Policy EC-6.7 Do not approve land uses and development that use hazardous materials that could impact existing residences, schools, day care facilities, community or recreation centers, senior residences, or other sensitive receptors if accidentally released without the incorporation of adequate mitigation or separation buffers between uses.

Goal EC-7 **Environmental Contamination:** Protect the community and environment from exposure to hazardous soil, soil vapor, groundwater, and indoor air contamination and hazardous building materials in existing and proposed structures and developments and on public properties, such as parks and trails.

Policy EC-7.1 For development and redevelopment projects, require evaluation of the proposed site's historical and present uses to determine if any potential environmental conditions exist that could adversely impact the community or environment.

Policy EC-7.2 Identify existing soil, soil vapor, groundwater and indoor air contamination and mitigation for identified human health and environmental hazards to future users and provide as part of the environmental review process for all development and redevelopment projects. Mitigation measures for soil, soil vapor and groundwater contamination shall be designed to avoid adverse human health or environmental risk, in conformance with regional, State and federal laws, regulations, guidelines and standards.

Policy EC-7.4 On redevelopment sites, determine the presence of hazardous building materials during the environmental review process or prior to Project approval. Mitigation and remediation of hazardous building materials, such as lead-paint and asbestos-containing materials, shall be implemented in accordance with state and federal laws and regulations.

Policy EC-7.5 In development and redevelopment sites, require all sources of imported fill to have adequate documentation that it is clean and free of contamination and/or acceptable for the proposed land use considering appropriate environmental screening levels for contaminants. Disposal of groundwater from excavations on construction sites shall comply with local, regional, and State requirements.

Policy EC-7.7 Determine for any development or redevelopment site that is within 1,000 feet of a known, suspected, or likely geographic ultramafic rock unit (as identified in maps developed by the Department of Conservation – Division of Mines and Geology) or any other known or suspected locations of serpentine or naturally occurring asbestos, if naturally occurring asbestos exists and, if so, comply with the Bay Area Air Quality Management District's Asbestos Air Toxic Control Measure requirements.

Policy EC-7.8 Where an environmental review process identifies the presence of hazardous materials on a proposed development site, the City will ensure that feasible mitigation measures that will satisfactorily reduce impacts to human health and safety and to the environment are required of or incorporated into the projects. This applies to hazardous materials found in the soil, groundwater, soil vapor, or in existing structures.

Policy EC-7.9 Ensure coordination with the County of Santa Clara Department of Environmental Health, Regional Water Quality Control Board, Department of Toxic Substances Control, or other applicable regulatory agencies, as appropriate, on projects with contaminated soil and/or groundwater or where historical or active regulatory oversight exists.

Policy EC-7.10 Require review and approval of grading, erosion control and dust control plans prior to issuance of a grading permit by the Director of Public Works on sites with known soil contamination. Construction operations shall be conducted to limit the creation and dispersion of dust and sediment runoff.

Policy EC-7.11 Require sampling for residual agricultural chemicals, based on the history of land use, on sites to be used for any new development or redevelopment to account for worker and community safety during construction. Mitigation to meet appropriate end use such as residential or commercial/ industrial shall be provided.

San José Emergency Operations Plan

Under State law, California requires that local governments create and administer an Emergency Operations Plan (EOP) under the guidelines provided by the Federal Emergency Management Agency (FEMA). The State Office of Emergency Services (OES) adopts these emergency management guidelines for business activities in the Emergency Operations Center (EOC). The *City of San José Emergency Operations Plan* was adopted in 2004 and was updated most recently on May 15, 2016.

5.9.1.2 Existing Conditions

On- or Off-Site Contamination. Hazardous materials are chemicals that could potentially cause harm during an accidental release or mishap, and are defined as being toxic, corrosive, flammable, reactive, and irritant, or strong sensitizer.[42] Hazardous substances include all chemicals regulated

[42] A "sensitizer" is a chemical that can cause a substantial proportion of people or animals to develop an allergic reaction in normal tissue after repeated exposure to a chemical (U.S. Department of Labor 2017).

under the United States Department of Transportation "hazardous materials" regulations and the United States Environmental Protection Agency (USEPA) "hazardous waste" regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. The probable frequency and severity of consequences from the routine transport, use, or disposal of hazardous materials is affected by the type of substance, the quantity used or managed, and the nature of the activities and operations. Potential sources of contamination are discussed below.

Review of Historical Sources. Based on a review of historical resources, the Project site the Project site has previously been used for grazing and does not have a history of past uses that would indicate the potential for hazardous materials (i.e., pesticide use, material storage).

Review of Regulatory Database Report and Agency Records. The Project site is not listed on either the Department of Toxic Substances Control's (DTSC) EnviroStor[43] of the San Francisco Regional Water Quality Control Board's (Water Board) GeoTracker.[44]

Other Hazards

Airports. The nearest airport to the Project site is the Norman Y. Mineta San José International Airport, which is located approximately 12.7 miles north of the Project site. No portions of the Project site are located within an airport land use compatibility zone as established by the Norman Y. Mineta San José International Airport CLUP.[45]

Wildland Fires. Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed campfires, cigarettes, sparks from automobiles, and other ignition sources. According to the California Department of Forestry and Fire Protection (CAL FIRE), the portion of the Project site within the City's jurisdiction is not located in a Fire Hazard Severity Zone for the City,[46] but is located within a High Fire Hazard Severity Zone for the land within the County's jurisdiction.[47]

Naturally-Occurring Asbestos. Naturally-occurring asbestos is often found in serpentine rock formations, and when released, can create a potential health hazard. The California Department

43 Department of Toxic Substances Control. 2020. EnviroStor. Website: www.envirostor.dtsc.ca.gov/public (accessed July 20, 2020).

44 San Francisco Regional Water Quality Control Board. 2020. GeoTracker. Website: geotracker.waterboards.ca.gov/ (accessed July 20, 2020).

45 Santa Clara County Airport Land Use Commission. 2011. *San José International Airport Comprehensive Land Use Plan, Figure 8, Airport Influence Area*. Available online at: www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_SJC_CLUP.pdf (accessed July 20, 2020). May 25; Amended November 16, 2016.

46 California Department of Forestry and Fire Protection. 2008. Fire and Resource Assessment Program, Santa Clara County. *Very High Fire Hazard Severity Zones in the LRA*. October 8. Available online at: osfm.fire.ca.gov/media/6536/fhszl_map43.jpg (accessed July 20, 2020).

47 California Department of Forestry and Fire Protection. 2007. Fire and Resource Assessment Program, Santa Clara County. *Fire Hazard Severity Zones in the SRA.* November 6. Available online at: osfm.fire.ca.gov/media/6528/fhszs_map43.jpg (accessed July 20, 2020).

of Conservation's Geologic Map indicates ultramafic rocks, mostly consisting of serpentine soil, may underlay the Project site.[48] However, the Geotechnical Investigation indicated that the project site is underlain by sandstone. Additionally, naturally-occurring asbestos was not detected in soil samples collected from the Project site.

5.9.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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 reasonable 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?	☐	☐	☐	☒

a. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact

Construction. Construction activities associated with the proposed Project would use a limited amount of hazardous and flammable substances (e.g., fuels and oils) typical during heavy equipment operation for site grading and construction. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing government regulations. The potential for the release of hazardous materials during Project construction is low, and even if a

[48] California Department of Conservation. 2015. Geologic Map of California. Website: https://maps.conservation.ca.gov/cgs/gmc/ (accessed December 2020).

release would occur, it would not result in a significant hazard to the public, surrounding land uses, or environment, due to the small quantities of these materials associated with construction vehicles. After completion of construction activities associated with the proposed Project, no routine transport or disposal of hazardous materials would occur. Therefore, potential impacts from the routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation would be required.

b. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant. As previously stated, based on the previous uses of the Project site and a review of regulatory databases, the Project site is not anticipated to contain any hazardous materials. Construction of the proposed Project would include the removal of some landscaped areas and installation of new landscaping and the construction of one single-family residence with an associated driveway and septic leach field system. Construction of the proposed Project could expose construction workers to hazardous materials or products typically utilized in the construction process. However, compliance with accepted best management practices for the use, handling, and disposal of such materials would avoid any significant environmental effects from hazardous materials. Operation of the proposed Project would not involve the use, handling, or disposal of hazardous materials or waste, other than traditional household waste. Therefore, the proposed Project would not create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment. No mitigation would be required.

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?

Less Than Significant Impact. The closest school to the Project site is the Martin Murphy Middle School which is located 1 mile north of the Project site. Therefore, the proposed Project would not emit hazardous emissions or involve handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school and impacts are considered less than significant. No mitigation would be required.

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?

No Impact. The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.[49] Therefore, construction and implementation of the proposed Project would not create a significant hazard to the public or the environment because the site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no mitigation would be required.

[49] California Environmental Protection Agency. 2020. Cortese List Data Resources. Website: calepa.ca.gov/sitecleanup/corteselist (accessed July 20, 2020).

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?

No Impact. As discussed previously, the nearest airports to the Project site are the Norman Y. Mineta San José International Airport, which is located approximately 12.7 miles north of the Project site and the Reid-Hillview Airport of Santa Clara County approximately 8.4 miles northwest of the Project site. Due to the distance from the nearest airports and the proposed project height, the project does not require notification to the FAA for airspace safety review. Therefore, the proposed Project would not result in a change to air traffic patterns, or a change in location that results in substantial safety risk, and no mitigation would be required.

f. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact

Construction. During short-term construction activities, the proposed Project is not anticipated to result in any substantial traffic queuing along Santa Teresa Boulevard and all construction equipment would be staged on site. All large construction vehicles entering and exiting the site would be guided by the use of personnel using signs and flags to direct traffic.

The Project does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise interfere with emergency response or evacuation in the Project vicinity; however, the proposed Project may require temporary lane closures on Santa Teresa Boulevard to allow for utility connections. Temporary lane closures would be implemented consistent with applicable provisions in the City's Municipal Code (e.g., Section 11.14.060, Limitation on Hours of Construction on City Street) and recommendations outlined in the California Joint Utility Traffic Control Manual (Caltrans 2014). Among other things, the manual recommends early coordination with affected agencies to ensure that emergency vehicle access is maintained. In this manner, officials could plan and respond appropriately to direct the public away from Santa Teresa Boulevard in the event of an emergency requiring evacuation. The Project applicant would be required to obtain the necessary approvals from the City's Public Works Department prior to any work within a public right-of-way, including Santa Teresa Boulevard. Therefore, potential impacts related to SJFD's ability to implement an emergency response plan or emergency evacuation access during construction would be less than significant.

g. Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury of death involving wildland fires?

No Impact. As previously noted, the Project site is located in a High Fire Hazard Severity Zone. As required by General Plan Policies EC-8.3 and EC-8.4, the proposed Project would be required to use building materials that provide a reasonable level of exterior wildfire exposure protection and maintain defensible space vegetation best management practices to protect structures. Additionally, the proposed Project would be required to adhere to the California Building Code, which includes

minimum standards for fire resistance and protection in building materials. Therefore, compliance with applicable regulations would ensure that this impact would result in no impacts.

5.9.3 Conclusion

Less Than Significant. Compliance with applicable regulations would ensure that the proposed Project would result in a less than significant impact on hazards and hazardous materials. No mitigation would be required.

5.10 HYDROLOGY AND WATER QUALITY

5.10.1 Environmental Setting

5.10.1.1 Regulatory Framework

Federal and State Regulations

Clean Water Act

The USEPA adopted the Clean Water Act (CWA) in 1977 to set a framework for establishing regulations to protect the chemical, physical, and biological integrity of the nation's waters. The CWA under section 402(p) of the CWA aims to reduce the direct discharge of pollutants into waterways and manage additional pollution runoff. The San Francisco Bay Regional Water Quality Control Board (RWQCB) has the authority to administer permits within its jurisdiction including the City of San José. Section 303(d) of the CWA requires that each state identify "impaired" water bodies or segments of water bodies that do not meet at least one of the listed state water-quality standards. When the water body or segment is listed as impaired, the state institutes a Total Maximum Daily Load (TMDL) for the pollutant found to be creating the impairment. The TMDL is the maximum amount of a pollutant that a water body can receive and still meet water-quality standards, and is usually calculated based on the total amount of allowable loads generated by a single pollutant deriving from all of its originating point and non-point sources. The 303(d) list identifies water bodies that will need to establish a TMDL in the future in order to abide by water-quality standards. As per 303(d), the RWQCB has identified impaired water bodies within its authority as well as the associated pollutants causing the impairment.

National Pollutant Discharge Elimination System

As described above, the National Pollutant Discharge Elimination System (NPDES) was established under the CWA so to regulate municipal, industrial and stormwater discharges to the surface waters of the United States, including discharges from municipal separate storm sewer systems (MS4s). All entities that discharge pollutants into an identified waterbody of the United States are required to obtain a NPDES permit.

The proposed Project is subject to Waste Discharge Requirements (WDR) of the Municipal Regional Permit (MRP) (Order No. R4-2015-00249 NPDES Permit No. CAS004003). The MS4 permit covers the City of San José, Santa Clara County, and the Santa Clara Valley Water District (SCVWD). The C.3 Stormwater Handbook developed in June 2016 as per the Santa Clara Valley Urban Runoff Pollution Prevention Program, outlines low impact development provisions that the MS4 permit holders can use during planning of development activities so to manage and reduce occurrences of stormwater runoff pollutant discharges. These low impact development methods aim to preserve existing natural landscapes to minimize imperviousness and water quality impacts.

National Flood Insurance Program

The National Flood Insurance Program exists under the Federal Emergency Management Agency (FEMA) so to distinguish and evaluate flood hazards. FEMA generated Flood Insurance Rate Maps (FIRMs) identify the location of these potential flooding hazards and help plan for the correct land use and floodplain development within those locations. Information for FIRMs is generated by Flood

Insurance Studies (FISs). Special Flood Hazard Areas (SFHAs) are distinguished via FIRMs. The current FIRM Map No. 06085C0263H (May 18, 2009), and Map No. 06085C0264H (May 18, 2009), shows that the Project site is located in Zone D, Area of Undetermined Flood Hazard, which is not considered a special flood hazard area.

Porter-Cologne Water Quality Control Act

California adopted the Porter-Cologne Water Quality Act in 1969, giving the SWRCB and regional water quality control boards the authority over State water rights and policies in relation to managing and enforcing water quality. The regional boards adopt Water Quality Control Plans (Basin Plans) that outline their region's water quality conditions and standards as well as beneficial uses of the region's ground and surface water. The City of San José lies within the boundaries of the Santa Clara Basin and Region 2 governed by the San Francisco Bay RWQCB. The most recent Basin Plan for the San Francisco Bay Watershed was updated by the RWQCB in 2015 and is revised periodically so to reflect relevant ecological, technological, and political changes. The Basin also includes water quality standards for groundwater.

Statewide Construction General Permit

Construction projects or activities that are 1 acre or more must obtain a General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, or a Construction General Permit from the SWRCB. Prior to construction, the Project Applicant must submit online Permit Registration Document (PRDs) to the Stormwater Multiple Application and Report Tracking System (SMARTS) website. The PRDs include a Notice of Intent (NOI), Risk Assessment, Post-Construction Calculations, a Site Map, the SWPPP, a signed certification by the Project Applicant, and the first annual fee. Applicants are also required develop Best Management Practices (BMPs) in accordance with the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP maps the boundaries of the Project site, identifying the existing and proposed structures and roads within the vicinity of the site, as well as stormwater collection and discharge points and drainage patterns. These BMPs should address strategies to prevent soil erosion and the proper treatment and discharge of other pollutants generated by construction, which could contaminate waterways on or nearby the site. A SWPPP must also include a visual chemical monitoring program of nonvisible pollutants and a sediment-monitoring program. As the Project site is larger than 1 acre, it is subject to these listed requirements.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA) is a comprehensive three-bill package that was signed into California state law by Governor Jerry Brown in September 2014. The SGMA that provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary, to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come.

The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally based management plans. The act requires that GSAs implement plans and achieve long-term groundwater sustainability within 20 years of implementation of the SGMA.

GSAs responsible for high- and medium-priority basins must adopt groundwater sustainability plans or an alternative to a groundwater sustainability plan within five to seven years of implementation of the SGMA, depending on whether the basin is in critical overdraft. Agencies may adopt a single plan covering an entire basin or combine a number of plans created by multiple agencies. Plans must include a physical description of the basin, including groundwater levels, groundwater quality, subsidence, information on groundwater-surface water interaction, data on historical and projected water demands and supplies, monitoring and management provisions, and a description of how the plan will affect other plans, including city and county general plans.

The Santa Clara Valley Water District's (SCVWD) has managed groundwater in the Santa Clara subbasin since 1929. On May 24, 2016, the SCVWD's Board of Directors adopted a resolution to become the GSA for the Santa Clara subbasin. The Board of Directors adopted the 2016 *Groundwater Management Plan for the Santa Clara and Llagas Subbasins* on November 22, 2016. The Groundwater Management Plan was submitted to DWR as an alternative to a groundwater sustainability plan on December 21, 2016.

Local Regulations

Santa Clara Valley Urban Runoff Pollution Prevention Program

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) is an association in Santa Clara Valley that includes the County of Santa Clara, SCVWD, and 13 regional cities. Under the authority of RWQCB, the SCVURPPP regulates stormwater and conducts public outreach so to reduce pollution generated by urban runoff and improve regional water quality supplies. The SCVURPPP addresses stormwater pollution prevention within the context of the MS4 Permit, and aims to ensure that both new development and redevelopment projects mitigate water quality impacts to stormwater runoff. A Hydromodification Management Plan (HMP) is also required to manage stormwater, and regulates increased peak runoff flows and volumes (hydromodification). An HMP aims to monitor and reduce the impacts of development projects that are located within a region subject to hydromodification, and plans to limit stream channel erosion as well as mitigate water quality degradation resulting from development activities.

Post-Construction Urban Runoff Management Policy

The City's Post-Construction Urban Runoff Management Policy 6-29 mandates the adoption of post-construction best management practices and treatment control measures (TCMs) during development projects. The policy sets design standards for post-construction TCMs for projects that create, add, or replace 10,000 sf or more of impervious surfaces. This policy is updated periodically in association with MRP changes. Infiltration treatment measures are also limited under this policy in order to protect groundwater from contaminants. Additionally, a Stormwater Control Plan (SCP) should be prepared for development projects which create and/or replace 10,000 sf or more of impervious surface. The SCP should be submitted and approved by the City before issuing grading permits. As the proposed Project will create or replace more than 10,000 sf of impervious surface, it is subject to this policy.

Post-Construction Hydromodification Policy

All new development and redevelopment projects that create or replace 1 acre or more of impervious surface are subject to the City's Post-Construction Hydromodification Policy 8-14.

Projects subject to this policy are required to manage development related increases in peak runoff flow, volume, and duration where hydromodification has caused adverse impacts on local waterways. The policy requires these projects to be designed to control Project-related hydromodification through an HMP. New development and redevelopment projects that create and/or replace 1 acre or more of impervious surface and are located in subwatersheds or catchment areas that are less than 65 percent impervious are subject to these requirements. Policy 8-14 is updated periodically to reflect the latest MRP requirements. As the total disturbed area is less than 1 acre, the proposed Project is not classified as a Hydromodification Management Project. Therefore, the Project is not subject to Policy 8-14.

Riparian Corridor Policy

The City has adopted a Riparian Corridor Policy that addresses how development of all types should be designed to protect and preserve riparian corridors through guidelines that promote water quality and flood protection.

Envision San José 2040 General Plan

The Measurable Environmental Sustainability (MS), Environmental Resources (ER), Environmental Considerations/Hazards (EC), and Infrastructure (IN) sections of the City's General Plan include the following goals and policies related to hydrology and water quality that are applicable to the proposed Project.

Goal MS-18 **Water Conservation:** Continuously improve water conservation efforts in order to achieve best in class performance. Double the City's annual water conservation savings by 2040 and achieve half of the Water District's goal for Santa Clara County on an annual basis.

Policy MS-18.12 Encourage stormwater capture and encourage, when feasible and cost-effective, on-site rainwater catchment for new and existing development.

Policy MS-18.13 Encourage graywater use whenever appropriate and in areas that do not impact groundwater quality as determined through coordination with local agencies.

Goal MS-20 **Water Quality:** Ensure that all water in San José is of the highest quality appropriate for its intended use.

Policy MS-20.2 Avoid locating new development or authorizing activities with the potential to negatively impact groundwater quality in areas that have been identified as having a high degree of

aquifer vulnerability by the Santa Clara Valley Water District or other authoritative public agency.

Policy MS-20.3 Protect groundwater as a water supply source through flood protection measures and the use of stormwater infiltration practices that protect groundwater quality. In the event percolation facilities are modified for infrastructure projects, replacement percolation capacity will be provided.

Goal ER-8 **Stormwater:** Minimize the adverse effects on ground and surface water quality and protect property and natural resources from stormwater generated in the City of San José.

Policy ER-8.1 Manage stormwater runoff in compliance with the City's Post-Construction Urban Runoff (6-29) and Hydromodification Management (8-14) Policies.

Policy ER-8.5 Ensure that all development projects in San José maximize opportunities to filter, infiltrate, store and reuse or evaporate stormwater runoff on-site.

Goal ER-9 **Water Resources:** Protect water resources because they are vital to the ecological and economic health of the region and its residents.

Policy ER-9.3 Utilize water resources in a manner that does not deplete the supply of surface or groundwater or cause overdrafting of the underground water basin.

Goal EC-4 **Water Resources:** Minimize the risk of injury, loss of life, and property damage from soil and slope instability including landslides, differential settlement, and accelerated erosion.

Policy EC-4.1 Design and build all new or remodeled habitable structures in accordance with the most recent California Building Code and Municipal Code requirements as amended and adopted by the City of San José, including provisions for expansive soil, and grading and storm water controls.

Policy EC-4.5 Ensure that any development activity that requires grading does not impact adjacent properties, local creeks and storm drainage systems by designing and building the site to drain properly and minimize erosion. An Erosion Control Plan is required for all private development projects that have a soil disturbance of 1 acre or more, are adjacent to a creek/river, and/or are located in hillside areas. Erosion

Control Plans are also required for any grading occurring between October 1 and April 30.

Action EC-4.12 Require review and approval of grading plans and erosion control plans (if applicable) prior to issuance of a grading permit by the Director of Public Works.

Goal EC-5 **Flooding Hazards:** Protect the community from flooding and inundation and preserve the natural attributes of local floodplains and floodways.

Policy EC-5.2 Allow development only when adequate mitigation measures are incorporated into the Project design to prevent or minimize siltation of streams, flood protection ponds, and reservoirs.

Policy EC-5.7 Allow new urban development only when mitigation measures are incorporated into the Project design to ensure that new urban runoff does not increase flood risks elsewhere.

Policy EC-5.11 Where possible, reduce the amount of impervious surfaces as a part of redevelopment or roadway improvements through the selection of materials, site planning, and street design.

Goal IN-3 **Water Supply, Sanitary Sewer and Storm Drainage:** Provide water supply, sanitary sewer, and storm drainage infrastructure facilities to meet future growth planned within the City, to assure high-quality service to existing and future residents, and to fulfill all applicable local, State and Federal regulatory requirements.

Policy IN-3.7 Design new projects to minimize potential damage due to storm waters and flooding to the site and other properties.

Policy IN-3.9 Require developers to prepare drainage plans that define needed drainage improvements for proposed developments per City standards.

Policy IN-3.10 Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's NPDES permit.

City of San José Municipal Code

Chapter 15.11, Water Efficient Landscape Standards for New and Rehabilitated Landscaping. This chapter of the municipal code establishes water conservation and efficiency measures during the design, implementation, and maintenance of city landscaping in accordance with the Water Conservation in Landscaping Act. New construction projects with a total landscaping area of 500 sf or more that require a building permit or rehabilitated landscape projects with a total landscape area of 2,500 sf or more that require a building permit, are required to validate that the Project meets the water efficiency guidelines as required by this chapter. Some of these guidelines include restrictions on turf area, irrigation sensors that use evapotranspiration or soil moisture sensor data, water budget calculations and recycled water options. A landscape documentation package must be submitted to the City as part of the development permit application, and should include Project information, water efficient landscape worksheet, soil management report, landscape design plan, irrigation design plan, and grading design plan.

Chapter 15.16, Sewer Connection and Storm Drainage. This chapter outlines storm drainage fees that Project developers must pay to the City. These fees pay for the overall maintenance of the City's storm drainage system. Every city property owner must also pay separate storm drainage service charges for storm drain maintenance as well.

Chapter 17.08, Special Flood Hazard Area Regulations. This chapter establishes flood damage prevention measures for special flood hazard zones such as the 100-year floodplain. This chapter aims to restrict monetary damages, flood related hazards, and injury to the tax base and governmental services. It also requires building and redevelopment Projects that are vulnerable to floods to be protected against flood damage at the time of construction by implementing construction standards that must be applied within the 100-year floodplain.

Chapter 20.95, Storm Water Management. This chapter outlines stormwater management procedures and enforcement rules for siting stormwater runoff in order to mitigate negative impacts on nearby areas. This chapter is based on requirements under the NPDES permit that are consistent with the City Council Policy 6-29, Post-Construction Urban Runoff Management. It applies to new development or redevelopment projects that create and/or replace 10,000 sf of impervious surfaces, or special land use category projects, create and/or replace 5,000 sf of impervious surfaces.

5.10.1.2 Existing Conditions

Groundwater. The Project site lies within the Santa Clara Plain Recharge Area of the Santa Clara subbasin of the larger Santa Clara Valley Groundwater Basin (DWR Basin 2-9.02). SCVWD manages groundwater recharge to the Santa Clara Valley Groundwater Basin. Groundwater quality within this basin is generally considered to be of good quality, meeting 95 percent of water quality objectives without additional treatment in water supply wells throughout the County.[50] As discussed in the Geologic and Geotechnical Study (Appendix C) prepared for the Project, free standing groundwater was not encountered at the Project site.

[50] Great Oaks Water Company. 2015. *2015 Urban Water Management Plan*.

Storm Drainage. The City of San José Public Works Department operates and maintains the City's storm drain system, which has over 1,150 miles of storm drains and drainage channels as well as 29 stormwater pump stations. City infrastructure such as catch basins and storm drainpipes collect stormwater runoff, which is eventually discharged into the San Francisco Bay. The U.S. Army Corps of Engineers (USACE) and SCVWD jointly oversee and operate the region's flood control facilities and stream channels.

The Project site is located outside of the City's Urban Growth Boundary and Urban Service Area, and therefore would include privately-maintained stormwater infrastructure, including storm drains, catch basins, and level spreaders. There is no existing stormwater infrastructure on the Project site.

Flooding. According to the County of Santa Clara General Plan Safety and Noise Element (2010), and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Map No. 06085C0409H (May 18, 2009), the Project site is located in Zone D, Area of Undetermined Flood Hazard, which is not considered a special flood hazard area.

Seiches and Tsunamis. Seiching occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). The resulting waves can cause failure of retention structures and potential flooding of downstream properties. The Project site is not located within close proximity to any substantial bodies of water.

Tsunamis are generated ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic islands. The proposed Project is located approximately 30 miles from the ocean shoreline and 20 miles from the San Francisco Bay. The Project site is not in a tsunami inundation area (California Emergency Management Agency, California Geological Survey, and University of Southern California, Tsunami Inundation Map for Emergency Planning).

5.10.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater 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 storm water 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?	☐	☐	☒	☐

a. Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact

Construction. During construction, the total disturbed soil area would be approximately 0.81 acres. The proposed Project would result in more than 10,000 square feet of impervious surface area, and therefore would be required to implement Site Design and Source Control measures consistent with Section C.3 of the City's National Pollutant Discharge Elimination System (NPDES) permit. Therefore, this impact would be less than significant and no mitigation would be required.

b. Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. Construction of the proposed Project would not require groundwater extraction. However, a private well used for groundwater extraction would be included as a part of

the proposed Project. As previously noted, the Project site is located within the Santa Clara groundwater subbasin, which according to the 2016 Groundwater Management Plan, has been in a sustainable condition for many decades. The Santa Clara groundwater subbasin has a volume of approximately 350,000 acre-feet (AF). As noted in the SCVWD's 2016 Groundwater Management Plan, nearly all groundwater used in the Santa Clara Subbasin is for municipal and industrial uses, with only 1 percent for agricultural and domestic uses. Therefore, because the proposed Project would consist of one single-family residential use, water demand associated with the proposed Project would be minimal compared to existing uses within the Santa Clara Subbasin.

Following Project implementation, there would be an increase in impervious surface area of 13,059 square feet or 0.3 acre. An increase in impervious surface area decreases infiltration, which can decrease the amount of water that is able to recharge the aquifer/groundwater. However, compared to the volume of the groundwater basin (350,000 AF), any reduction in on-site infiltration would not be substantial. Therefore, the Project would not impede the SCVWD's ability to manage groundwater in the Santa Clara groundwater subbasin, which according to the 2016 Groundwater Management Plan, has been in a sustainable condition for many decades. Thus, this Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable management of the Santa Clara groundwater subbasin. Impacts would be less than significant, and no mitigation is required.

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 a substantial erosion or siltation on- or off-site?

Less Than Significant Impact. During construction activities, excavated soil would be exposed and disturbed, drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and the transport of sediment downstream compared with existing conditions. As required as a condition of approval, the proposed Project would include the implementation of construction BMPs to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation. These BMPs would include a stabilized construction entrance, a tire wash area, and inlet construction, as described below.

The proposed Project would increase impervious surface area on the Project site by approximately 13,059 square feet or 0.3 acre compared to existing conditions and could potentially increase on-site stormwater runoff during a storm event. In the proposed condition, the impervious surface areas would not be prone to erosion or siltation. Erosion and siltation would be minimized in the landscaped areas, where soil would be stabilized by vegetation. Therefore, the proposed Project would not increase on-site erosion or siltation.

An increase in impervious surface area can potentially increase stormwater runoff generated from a Project and increase erosion and sedimentation in receiving waters. However, as discussed previously, the proposed Project would increase impervious surfaces on the site by 0.11 acres.

For the reasons detailed above, impacts related to on- or off-site erosion and siltation from alterations of drainage patterns would be less than significant. No mitigation would be required.

Standard Permit Conditions:

- Burlap bags filled with drain rock shall be installed around storm drains to route sediment and other debris away from the drains.
- Earthmoving or other dust-producing activities shall be suspended during periods of high winds.
- All exposed or disturbed soil surfaces shall be watered at least twice daily to control dust as necessary.
- Stockpiles of soil or other materials that can be blown by the wind shall be watered or covered.
- All trucks hauling soil, sand, and other loose materials shall be covered and all trucks shall maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas, and residential streets adjacent to the construction sites shall be swept daily (with water sweepers).
- Vegetation in disturbed areas shall be replanted as quickly as possible.
- All unpaved entrances to the site shall be filled with rock to remove mud from tires prior to entering City streets. A tire wash system shall be installed if requested by the City.
- The Project Applicant shall comply with the City of San José Grading Ordinance, including implementing erosion and dust control during site preparation and with the City of San José Zoning Ordinance requirements for keeping adjacent streets free of dirt and mud during construction.

For the reasons detailed above, with implementation of the Standard Permit Conditions, impacts related to on- or off-site erosion and siltation from alterations of drainage patterns would be less than significant. No mitigation would be required.

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:

ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact. Construction activities would alter the on-site drainage pattern, potentially compact on-site soils, and increase the potential for flooding compared to existing conditions. As discussed in Response 5.10.3(c)(i) the proposed Project would comply with the City's Municipal Code, which requires implementation of construction BMPs as part of the proposed

Project to manage stormwater during construction. Proper management of storm water during construction would reduce impacts associated with flooding.

The proposed Project would increase impervious surfaces on the site by 13,059 square feet or 0.3 acre, which would potentially increase runoff peak flow during a storm event. The Project includes drainage systems to ensure that on-site runoff is adequately conveyed and on-site flooding does not occur. In addition, the Project would include LID BMPs to reduce stormwater runoff from the Project site by aiding in infiltration. With implementation of the LID and BMPs, designed in accordance with the appropriate standards set forth in the City's stormwater policies, post-development runoff would not exceed existing conditions and off-site flooding would not occur. With the implementation of the City's Standard Permit Conditions, potential impacts related to on- or off-site flooding resulting from the alteration of existing drainage patterns on the site would be less than significant. No mitigation would be required.

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:

iii. Create or contribute runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. As noted in Section 5.10.3.a, the proposed Project would include the construction of privately-maintained stormwater infrastructure on the Project site, and would not connect to any existing stormwater infrastructure. The proposed Project would increase impervious surfaces on the site by 13,059 square feet or 0.3 acre, but all stormwater would be captured on-site. Aside from the proposed building and driveway, the proposed Project would not include any other alterations to the Project site, and therefore would not substantially alter the existing drainage in the area. Therefore, this impact would be less than significant and no mitigation would be required.

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:

iv. Impede or redirect flood flows?

Less Than Significant Impact. As previously discussed, according to the County of Santa Clara General Plan Safety and Noise Element (2010), FEMA FlRM Map No. 06085C0263H (May 18, 2009), and Map No. 06085C0264H (May 18, 2009), the Project site is located in Zone D, an Area of Undetermined Flood Hazard, which is not considered a special flood hazard area. Although, the Project would increase the impervious surface area on the Project site by 13,059 square feet or 0.3 acre compared to existing conditions, the Project would maintain the existing on-site drainage patterns. Stormwater runoff would be captured and treated on-site. In addition, the Project would not alter the course of a stream or river. For these reasons, the Project would not alter the existing drainage pattern in a manner that would impede or redirect flood flows. Impacts would be less than significant, and no mitigation would be required.

d. In a flood hazard, tsunami, or seiche zones, would there be a release of pollutants due to Project inundation?

No Impact. As discussed further under Response 5.10.3(d)(iv), the Project site is located in Flood Zone D, an Area of Undetermined Flood Hazard, which is not considered a special flood hazard area. In addition, the Project is located approximately 30 miles from the ocean shoreline and 20 miles from the San Francisco Bay and is not located in a tsunami inundation area. Finally, the Project site is not in close proximity to any large bodies of water and is, therefore, not at risk of inundation due to seiche. Therefore, the Project would not result in a release of pollutants due to inundation as a result of on-site flooding, tsunami, or seiche. No impacts would occur, and no mitigation would be required.

e. Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As discussed in Response 4.10.3(a), the proposed Project would retain stormwater runoff on-site and would not connect to any existing stormwater infrastructure, and therefore would not discharge any water into surface waters. As required as a condition of approval, the proposed Project would include the implementation of construction BMPs to reduce impacts to water quality during construction, including those impacts associated with soil erosion and siltation.

As discussed in Response 4.10.3(b), construction and operation of the proposed Project would require the use of groundwater. However, water demand associated with the proposed Project would be minimal compared to existing water demand within the Santa Clara Subbasin. In addition, compared to the volume of the groundwater basin (350,000 acre-feet [AF]), any reduction in on-site infiltration would not be substantial. For these reasons, the Project would not conflict with the SCVWD's 2016 Groundwater Management Plan.

5.10.3 Conclusion

Less Than Significant Impact. Compliance with applicable regulations and implementation of the City's Standard Permit Conditions would result in a less than significant water quality and hydrology impact. No mitigation would be required.

5.11 LAND USE AND PLANNING

5.11.1 Environmental Setting

5.11.1.1 Regulatory Framework

Federal and State Regulations

There are no federal and/or State regulations applicable to the proposed Project.

Local Regulations

Envision San José 2040 General PlanThe City of San José's (City) General Plan is a policy document guiding future development within the City and is a comprehensive plan intended to guide growth and development. The Land Use Element is considered the framework for the General Plan because it establishes development and land use patterns that enhance the City's character. Chapter 6 of the Land Use Element outlines goals and policies that are carried out through specific implementation programs. The Land Use and Transportation (LU) section of the City's General Plan includes the following goals and policies related to land use that are applicable to the proposed Project.

Policy LU-9.4 Prohibit residential development in areas with identified hazards to human habitation unless these hazards are adequately mitigated.

Policy LU-9.5 Require that new residential development be designed to protect residents from potential conflicts with adjacent land uses.

Policy LU-9.15 New single-family flag lots may be appropriate on hillside properties but are discouraged within other parts of the City. Flag lot development in non-hillside areas should have a clear and visible relationship to the neighborhood and the street and should be consistent with the applicable Zoning district which can assure that relationship. To strengthen neighborhood preservation policies and objectives of this plan, the City Council has adopted a policy establishing criteria for the use of flag lots.

Policy LU-17.1 Allow development in hillside and rural residential areas consistent with or below existing or planned densities in these areas to maximize resource conservation. Support development only when it is compatible with the character and pattern of the surrounding area, even if below the maximum potential residential density as designated on the Land Use/Transportation Diagram.

Policy LU-17.2 Apply strong architectural, site, and grading design controls through a discretionary development review process to all types of hillside and rural residential development that require significant grading activities in order to protect the hillsides and to minimize potential adverse visual and environmental impacts.

Policy LU-17.3 Minimize grading on hillsides and design any necessary grading or recontouring to preserve the natural character of the hills and to minimize the removal of significant vegetation, especially native trees such as Valley Oaks.

Policy LU-17.4 Apply the following guidelines for development in hillside and rural residential areas in order to preserve and enhance the scenic and aesthetic qualities of the natural terrain:

(1) Design development in a sensitive manner to highlight and complement the natural environment.

(2) Use large lot sizes and varying setbacks in order to respect and preserve natural features of the land.

(3) Adapt construction techniques and housing types to variable terrains. Use split pads and stepped foundations where appropriate, especially to minimize required grading, and discourage conventional, single flat-pad housing designs.

(4) Consider privacy, livability, solar orientation and wind conditions when siting residential dwellings. Dwelling unit sites should take advantage of scenic views but should be located below hilltops to protect the aesthetics and ridgeline silhouette viewed from below, from public places, and from the valley floor.

(5) Encourage preservation of existing trees, rock outcroppings and other significant features.

(6) When grading or recontouring of the terrain is proposed, preserve the natural character of the hills and blend the alterations into the natural terrain.

(7) Design streets to provide access and connectivity for area residents, and consider potential viewshed opportunities in siting development. Provide adequate access to safely accommodate potential traffic without significantly impacting local transportation routes. Consistent with accessibility requirements for emergency vehicles, consider and encourage reduced width and modified street sections to design streets for utility and to minimize grading.

(8) Limit new structures or use of non-native vegetation in all new development projects to prevent adverse biological impacts and adverse visual impacts as viewed from the Valley floor or from adjacent public recreational areas. Design new structures to blend harmoniously with the natural setting. Agricultural crop production may be visible.

Policy LU-17.7 Consider habitat conservation objectives as part of hillside development proposals.

Policy LU-17.8 Encourage the preservation of hillside vegetation and require appropriate revegetation and planting of non-invasive plant materials that do not require routine irrigation for projects in hillside areas, if existing vegetation must be removed or substantially disturbed.

City of San José Municipal Code

Chapter 20.10 under Title 20 of the City's Municipal Code establishes the San José Zoning Ordinance,[51] which sets cohesive zoning rules for the City and designates land use types. The City's Zoning Ordinance[52] is the primary implementation tool for the goals and policies contained in the Land Use Element. For this reason, the Zoning Map must be consistent with the General Plan Land Use Map. The City's Land Use Map indicates the general location and extent of future development in the City. The City's Zoning Ordinance contains more specific information related to permitted land uses, building intensities, and development standards.

5.11.1.2 Existing Conditions

Existing and Surrounding Land Uses. The Project site has generally been undeveloped since at least 1919. Development in the vicinity of the Project site was limited to unpaved roads, agricultural uses, electrical transmission lines, and sparse development until approximately 1980, by which time the surrounding residential subdivisions and Santa Teresa Boulevard had both been constructed. The Project site is partially bound by the Coyote-Alamitos Canal as it traverses the northern edge of the Project site within a 60-foot easement. Open space and residential uses are located to the north, Santa Teresa Boulevard is located to the east, and open space, including the Santa Teresa County Park, is to the west of the Project site. The Project site is primarily surrounded by residential and open space uses, with some recreational uses present to the northwest.

Existing Land Use Designation. The Project site is designated Open Hillside in the City's General Plan. This designation is applied to areas which are located outside of the Urban Growth Boundary (UGB) with the intent of preserving a permanent greenbelt of open space and natural habitat along the City's eastern and southern edges. Within this designation, the supported uses vary slightly for lands owned publicly or privately. Privately-owned lands within the Open Hillside designation may allow a limited amount of development, including single-family dwellings and, on large sites, private recreation, and low-intensity institutional or commercial uses with the majority of the site preserved as open space, very-low intensity agricultural uses such as grazing or tree farming, or privately owned open space/habitat preserves. The portion of the Project site within the County is designated as Hillsides in the Santa Clara County General Plan. The Hillsides designation is intended to preserve mountainous lands that may not be suited for urban development primarily in open space to enhance a rural character

[51] San José, City of. Code of Ordinances. Title 20 – Zoning, Chapter 20.60 – PD – Planned Development District. Available online at: library.municode.com/ca/san_jose/codes/code_of_ordinances?nodeId =TIT20ZO_CH20.60PLADEDI (accessed July 20, 2020).

[52] Ibid.

Existing Zoning Classification. 11.69 acres of the Project site is classified as Agricultural on the City's Zoning Map. The purpose of the Agricultural district is to provide for areas where agricultural uses are desirable. Single-family residential uses are conditionally permitted within the Agricultural district. The remaining 5.18-acre portion of the Project site is classified as Hillside-Scenic Road Combining District (HS-sr) on the County's Zoning Map. This zoning classification is intended to preserve mountainous lands that may not be suited for urban development primarily in open space to enhance a rural character. This zoning classification allows for single-family residential development within the County parcel by right with setback restrictions required by the Scenic Road Combining District.

5.11.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a. Would the Project physically divide an established community?

No Impact. The Project site is located on an undeveloped hillside that would be accessed via Santa Teresa Boulevard. The proposed Project would include the construction of one single-family residence on the Project site and an associated driveway, but would not include any alterations to any existing roadways. Additionally, the proposed Project would not include the installation of any infrastructure that would prohibit access to an established community, such as a freeway or railroad tracks. Therefore, the proposed Project would have no impact, and no mitigation measures would be required.

b. Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The main documents regulating land use on the Project site are the Envision San José 2040 General Plan, the City's Zoning Code, and applicable City Council Policies. The portion of the Project site in the city (11.69 acres) is designated Open Hillside in the General Plan and is classified as Agricultural on the City's Zoning Map. As noted above, single-family residences are permitted with an approved Conditional Use Permit within the Agricultural district, and the Open Hillside land use designation allows for single-family residences within large, privately-owned parcels. The 5.18-acre parcel of the Project site in the County is zoned HS-sr which allows for single-family development by right with restrictions related to setbacks and density of units related to slope. While the proposed residential unit is not proposed to be constructed on the County parcel, the proposed driveway connecting the new home to the road would be.

According to CEQA, policy conflicts do not, in and of themselves, constitute a significant environmental impact. Policy conflicts are considered to be environmental impacts only when they would result in direct physical impacts or where those conflicts relate to avoiding or mitigating environmental impacts. As such, associated physical environmental impacts are discussed in this Initial Study under specific topical sections.

As discussed in Section 5.1.3.c, the proposed Project would be required to comply with Municipal Code standards for the Agricultural zone. The proposed Project would be compatible with these zoning regulations and the General Plan goals and policies listed in Section 5.1.1 and 5.11.1 and would be consistent with the existing style of the surrounding neighborhoods.

As described in Section 5.4.3.f, the Project site is located within the SCHVP Study Area and Permit Area. The proposed Project would be required to comply with the SCHVP requirements, including payment of the required mitigation fees, and therefore would not conflict with the SCVHP.

The proposed Project would not result in any direct physical impacts that cannot be mitigated to a less-than-significant level.

5.11.3 Conclusion

Less Than Significant Impact. Implementation of the Project would result in a less than significant land use impact. No mitigation would be required.

5.12 MINERAL RESOURCES

5.12.1 Environmental Setting

5.12.1.1 Regulatory Framework

Federal and State Regulations

Surface Mining and Reclamation Act of 1974

The California Department of Conservation, Geological Survey (CGS) and the California State Mining and Geology Board are required by the Surface Mining and Reclamation Act of 1974 (SMARA) to categorize lands into four Aggregate and Mineral Resource Zones (MRZs), described below. These MRZs classify lands that contain significant regional or statewide mineral deposits. Lead Agencies are mandated by the State to include MRZs into their General Plans.

Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZ):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance because such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State Mining and Geology Board as being "regionally significant." Such designations require that a Lead Agency make land use decisions involving designated areas in accordance with its mineral resource management policies and that it consider the importance of the mineral resource to the region or the State as a whole, not just to the Lead Agency's jurisdiction.

Local Regulations

Envision San José 2040 General Plan

The ER section of the City's General Plan includes the following goals and policies related to mineral resources that are applicable to the proposed Project.

Goal ER-11 **Extractive Resources:** Conserve and make prudent use of commercially usable extractive resources.

Policy ER-11.2 Encourage the conservation and development of SMARA-designated mineral deposits wherever economically feasible.

5.12.1.2 Existing Conditions

The California Department of Mines and Geology (CDMG) under SMARA has designated the Communications Hill area, located centrally in the City, as containing mineral deposits of regional significance for aggregate (Sector EE).[53] Neither the State Geologist nor the CDMG have classified any other areas in the City as containing mineral deposits that are either of statewide significance or the significance of which requires further evaluation. The Project site is located approximately 7 miles southeast of the Communications Hill area.

The Project site has been classified by the CDMG as being located in MRZ-1, indicating that the Project site is located in an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.[54] In addition, the Project site is not designated or zoned for the extraction of mineral deposits.

5.12.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☐	☒

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?

No Impact. As previously stated, the Project site has been classified by the CDMG as being located in MRZ-1, indicating that the Project site is located in an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.[55] In addition, the Project site is not designated or zoned for the extraction of mineral deposits.

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53 Santa Clara Valley Habitat Agency. 2012. *Final Santa Clara Valley Habitat Plan. Chapter 6. Conditions on Covered Activities and Application Process*. Website: scv-habitatagency.org/178/Santa-Clara-Valley-Habitat-Plan (accessed July 20, 2020). August.

54 State of California, Division of Mines and Geology. 1982. Mineral Land Classification Map. South San Francisco Bay P-C Region. Special Report 146, Plate 1. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_99-01/OFR_99-01_Plate-1.pdf.

55 Ibid.

The proposed Project would not result in the loss of a known commercially valuable or locally important mineral resource. No impacts to known mineral resources would occur as a result of the proposed Project, and therefore, no mitigation would be required.

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?

No Impact. As stated in Response 4.12.3(a), the Project site is classified as MRZ-1, indicating the site is located where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence. The Project site is currently undeveloped. No mineral extraction activities occur on the Project site, and it is not located within an area known to contain locally important mineral resources. Moreover, the Communications Hill area (located centrally in the City) is the only designated area in the City known to contain mineral deposits of regional significance for aggregate. Therefore, the Project would not result in the loss of availability of a locally important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan as a result of Project implementation. No mitigation would be required.

5.12.3 Conclusion

No Impact. Implementation of the Project would not result in impacts to mineral resources. No mitigation would be required.

5.13 NOISE AND VIBRATION

5.13.1 Environmental Setting

5.13.1.1 Regulatory Framework

Federal and State Regulations

There are no federal and/or State regulations applicable to the proposed Project.

Local Regulations

Envision San José 2040 General Plan

The Environmental Considerations/Hazards (EC) section of the City's General Plan includes the following goals and policies related to noise and vibration that are applicable to the proposed Project.

Goal EC-1 **Community Noise Levels and Land Use Compatibility:** Minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies.

Policy EC-1.1 Locate new development in areas where noise levels are appropriate for the proposed uses. Consider federal, state and City noise standards and guidelines as a part of new development review. Applicable standards and guidelines for land uses in San José include:

- **Interior Noise Levels:** The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. Include appropriate site and building design, building construction and noise attenuation techniques in new development to meet this standard. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that development projects can meet this standard. The acoustical analysis shall base required noise attenuation techniques on expected Envision General Plan traffic volumes to ensure land use compatibility and General Plan consistency over the life of this plan.

- Exterior Noise Levels: The City's acceptable exterior noise level objective is 60 dBA DNL or less for residential and most institutional land uses (Table EC-1 in the General Plan; Table 5.D below). The acceptable exterior

Table 5.D: Land Use Compatibility for Community Noise Environments

Land Use Category	Exterior Noise Exposure (DNL, dBA)						
	55	60	65	70	75	80	
1. Residential, Hotels and Motels, Hospitals and Residential Care[1]							
2. Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds							
3. Schools, Libraries, Museums, Meeting Halls, Churches							
4. Office Buildings, Business Commercial, and Professional Offices							
5. Sports Arena, Outdoor Spectator Sports							
6. Public and Quasi-Public Auditoriums, Concert Halls, Amphitheaters							

Source: San Jose, City of (2010).

[1] Noise mitigation to reduce interior noise levels pursuant to Policy EC-1.1 is required.

Normally Acceptable
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in design.

Unacceptable
New Construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

dBA = A-weighted decibel(s)
DNL = day-night average level

noise level objective is established for the City, except in the environs of the San José International Airport and the Downtown, as described below:

- For new multi-family residential projects and for the residential component of mixed-use development, use a standard of 60 dBA DNL in usable outdoor activity areas, excluding balconies and residential stoops and porches facing existing roadways. Some common use areas that meet the 60 dBA DNL exterior standard will be available to all residents. Use noise attenuation techniques such as shielding by buildings and structures for outdoor common use areas. On sites subject to aircraft overflights or adjacent to elevated roadways, use noise attenuation techniques to achieve the 60 dBA DNL standard for noise from sources other than aircraft and elevated roadway segments.

- For single family residential uses, use a standard of 60 dBA DNL for exterior noise in private usable outdoor activity areas, such as backyards.

Policy EC-1.2 Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3, and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a Project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain "Normally Acceptable"; or
- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

Policy EC-1.3 Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.

Policy EC-1.6 Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City's Municipal Code.

Policy EC-1.7 Require construction operations within San José to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City's Municipal Code. The City considers significant construction noise impacts to occur if a Project located within 500 feet of residential uses or 200 feet of commercial or office uses would:

- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.

For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.

Goal EC-2 **Vibration:** Minimize vibration impacts on people, residences, and business operations.

Policy EC-2.3 Require new development to minimize continuous vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, including ruins and ancient monuments or buildings that are documented to be structurally weakened, a continuous vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A continuous vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction. Equipment or activities typical of generating continuous vibration include but are not limited to excavation equipment; static compaction equipment; vibratory pile drivers; pile-extraction equipment; and vibratory compaction equipment. Avoid use of impact pile drivers within 125 feet of any buildings, and within 300 feet of historical buildings, or buildings in poor condition. On a Project-specific basis, this distance of 300 feet may be reduced where warranted with a technical study by a qualified professional who verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction. Transient vibration impacts may exceed a vibration limit of 0.08 in/sec PPV only when and where warranted with a technical study by a qualified professional who verifies that there will be virtually no risk of cosmetic damage to sensitive buildings from the new development during demolition and construction.

The City's standard for interior noise levels in residences, hotels, motels, residential care facilities, and hospitals is 45 dBA DNL. For sites with exterior noise levels of 60 dBA DNL or more, an acoustical analysis following protocols in the City-adopted California Building Code is required to demonstrate that developments can meet this standard. The City's acceptable DNL exterior noise level is 60 dBA or less for residential and most institutional land uses. Refer to Table 5.D, above, shows land use compatibility guidelines for community noise in San José.

Section EC-1.2 of the City's Noise Element provide guidelines to minimize noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3, and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a Project would:

- Cause the DNL at noise-sensitive receptors to increase by 5 dBA DNL or more where the noise level would remain "Normally Acceptable", or

- Cause the DNL at nose sensitive receptors to increase by 3 dBA DNL or more where noise levels would equal or exceed the "Normally Acceptable" level.

As stated in EC-2.3, above, the General Plan requires new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 inch-per-second (in/sec) peak particle velocity (PPV) is used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV is used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

City of San José Municipal Code

As stated in Policy EC-1.3, above, the General Plan specifies noise generation of new nonresidential land uses to a 55 dBA maximum noise level at the property line when located adjacent to existing or planned noise-sensitive residential and public/quasi-public land uses. This standard of new nonresidential noise generation is codified in Title 20, Section 20.50.300, Performance Standards. Table 5.E shows the Municipal Code Noise Standards for industrial land uses adjacent to residential and commercial zoned land uses.

Table 5.E: Noise Performance Standards

Land Use	Maximum Noise Level at Property Line (dBA)
Industrial use adjacent to a property used or zoned for residential purposes	55
Industrial use adjacent to a property used or zoned for commercial purposes	60
Industrial use adjacent to a property used or zoned for industrial or use other than commercial or residential purposes	70

Source: San Jose, City of (2010).
dBA = A-weighted decibel(s)

For temporary construction-related noise to be considered significant, construction noise levels would have to exceed ambient noise levels by five dBA L_{eq} or more and exceed the normally acceptable levels of 55 dBA L_{eq} at the nearest noise-sensitive land uses or 60 dBA L_{eq} at office or commercial land uses for a period of more than 12 months (refer to General Plan Policy EC-1.7, above).

Title 20, Part 3, Section 20.100.450 specifies hours of construction within 500 feet of a residential unit as follows:

a. Unless otherwise expressly allowed in a development permit or other planning approval, no applicant or agent of an applicant shall suffer or allow any construction activity on a site located within 500 feet of a residential unit before 7:00 a.m. or after 7:00 p.m., Monday through Friday, or at any time on weekends.

b. Without limiting the scope of Section 20.100.310, no applicant or agent of an applicant shall suffer or allow any construction activity on a site subject to a development permit or other planning approval located within 500 feet of a residential unit at any time when that activity is not allowed under the development permit or planning approval.

c. This section is applicable whenever a development permit or other planning approval is required for construction activity.

Title 20, Part 5, Section 20.50.300 specifies there shall be no activity that causes ground vibration which is perceptible without instruments at the property line of the site.

5.13.1.2 Technical Background

Characteristics of Sound. Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Unlike linear units, such as inches or pounds, decibels are measured on a logarithmic scale representing points on a sharply rising curve. For example, 10 decibels (dB) are 10 times more intense than 1 dB, 20 dB are 100 times more intense, and 30 dB are 1,000 times more intense. Thirty dB represents 1,000 times as much acoustic energy as one decibel. A sound as soft as human breathing is about 10 times greater than 0 dB. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 dB (very quiet) to 100 dB (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source, noise in a relatively flat environment with absorptive vegetation, decreases 4.5 dB for each doubling of distance.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (DNL or L_{dn}) based on A-weighted decibels (dBA). CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m.–7:00 a.m. (defined as sleeping hours). DNL is similar to the CNEL scale but without the adjustment for

events occurring during the evening hours. CNEL and DNL are within 1 dBA of each other and are normally exchangeable. The City uses the CNEL noise scale for long-term noise impact assessment.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak operating conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Noise impacts can be described in three categories. The first is audible impacts that refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3.0 dB or greater because this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise levels of less than 1.0 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise. Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160–165 dBA will result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying less developed areas.

Fundamentals of Vibration. Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be indiscernible. Typically, there is more adverse reaction to effects associated with the shaking of a building. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by 10 dB or less.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 feet from the vibration source.

Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for typical construction activities to cause even cosmetic building damage, it is not uncommon for construction processes such as blasting and pile driving to cause vibration of sufficient amplitudes to damage nearby buildings. Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage.

5.13.1.3 Existing Conditions

The Project site is located west of Santa Teresa Boulevard. Roadway traffic is the predominant noise source in the vicinity of the Project site. The Project site is approximately 12.7 miles south of Norman Y. Mineta San José International Airport (SJC) and approximately 8.4 miles southeast of Reid-Hillview Airport of Santa Clara County. The Project is outside of both airport's 60 dBA Community Noise Exposure Level (CNEL) contours. The Project vicinity is in SJC's approach and departure flight paths and SJC operated aircrafts are visible from the Project vicinity.

Existing Sensitive Land Uses. Certain land uses are considered more sensitive to noise than others are. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The sensitive receptors in the vicinity of the Project site include the residential units approximately 550 feet north of the Project site.

5.13.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive ground-borne vibration or ground-borne 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?	☐	☐	☐	☒

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant

Land Use Compatibility. The proposed Project involves the construction of a single-family residence on the Project site. The proposed Project conforms to the City's General Plan designation of Open

Hillside and zoning classification of Agricultural, both of which allow for single-family residential uses. Therefore, the proposed Project is a noise-sensitive use as specified in City of San José Land Use Categories 1 (refer to Table 5.D, above).

The proposed Project would include residential uses and therefore shall implement the following Condition of Approval to ensure interior noise levels would comply with State Building Codes and the City's noise standards.

Standard Permit Conditions: Interior Noise Standard for Residential Development. The project applicant shall prepare final design plans that incorporate building design and acoustical treatments to ensure compliance with State Building Codes and City noise standards. A project-specific acoustical analysis shall be prepared to ensure that the design incorporates controls to reduce interior noise levels to 45 dBA DNL or lower within the residential unit. The project applicant shall conform with any special building construction techniques requested by the City's Building Department, which may include sound-rated windows and doors, sound-rated wall constructions, and acoustical caulking.

Construction. Construction activities associated with the proposed Project would result in substantial temporary exceedances in the ambient noise levels in the Project site vicinity.

Project construction would result in short-term noise impacts on nearby sensitive receptors (i.e., residential uses west and north of the site). Maximum construction noise would be short-term, generally intermittent depending on the construction phase, and variable depending on receiver distance from the active construction zone. Each construction phase would occur over the course of three months.

Short-term noise impacts would occur during grading and site preparation activities. Table 5.F lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the Project area but would no longer occur once construction of the Project is completed.

Table 5.F: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 ft[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" Project.
FHWA = Federal Highway Administration
ft = foot/feet
L_{max} = maximum instantaneous sound level

Two types of short-term noise impacts would occur during construction of the proposed Project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table 5.F, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} at a distance of 50 feet from the trucks passing by.

The second type of short-term noise impact is related to noise generated during grading and construction on the Project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 5.F lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical maximum noise levels range up to 85 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, including excavation and grading of the site, tends

to generate the highest noise levels because earthmoving machinery is the noisiest construction equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Table 5.F is utilized to calculate the hourly noise level impact for each piece of equipment. While each piece of construction equipment operates as an individual point source, a composite noise level can be calculated when multiple sources of noise operate simultaneously. Utilizing this methodology, the composite noise level of the two loudest pieces of equipment, typically the grader and tractor, during construction would be 85 dBA L_{max} at a distance of 50 feet from the construction area.

As noted above, the closest sensitive receptors include the residential uses located approximately 550 feet to the north of the Project site. At 550 feet, there would be a decrease of approximately 21 dBA from the increase distance compared to the noise level measured at 50 feet from the active construction area. Therefore, the closest sensitive receptor may be subject to short-term construction noise reaching 64 dBA L_{max} during construction.

As such, the Project shall implement the following Condition of Approval, which incorporates applicable provisions outlined in the City's General Plan Policy EC-1.7 and Title 20, Part 3, Section 20.100.450 of the City's Municipal Code. Incorporation of the following Standard Permit Condition would reduce potential construction noise impacts to a less than significant level.

Standard Permit Conditions: Construction-Related Noise. Noise minimization measures include, but are not limited to, the following:

1. Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Friday, unless permission is granted with a development permit or other planning approval. No construction activities are permitted on the weekends at sites within 500 feet of a residence.

2. Construct solid plywood fences around ground level construction sites adjacent to operational businesses, residences, or other noise-sensitive land uses.

3. Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

4. Prohibit unnecessary idling of internal combustion engines.

5. Locate stationary noise-generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. Construct temporary noise barriers to

screen stationary noise-generating equipment when located near adjoining sensitive land uses.

6. Utilize "quiet" air compressors and other stationary noise sources where technology exists.

7. Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.

8. Notify all adjacent business, residences, and other noise-sensitive land uses of the construction schedule, in writing, and provide a written schedule of "noisy" construction activities to the adjacent land uses and nearby residences.

9. If complaints are received or excessive noise levels cannot be reduced using the measures above, erect a temporary noise control blanket barrier along surrounding building facades that face the construction sites.

10. Designate a "disturbance coordinator" who shall be responsible for responding to any complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., bad muffler, etc.) and shall require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.

11. Limit construction to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. Construction outside of these hours may be approved through a development permit based on a site-specific "construction noise mitigation plan" and a finding by the Director of Planning, Building and Code Enforcement that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.

12. Prohibit the use of pile driving.

Operation. Implementation of the proposed Project would result in one single-family residence on the Project site. While this would be a new use on the Project site, one new residential use on the Project site is not anticipated to generate a substantial amount of noise during operation. In addition, the proposed Project would not include any stationary noise sources, such as a continuously-operating generator, and the distance from the Project site to the closest sensitive

receptor would ensure any increase in noise would be barely perceptible. Therefore, this impact would be less than significant, and no mitigation would be required.

b. Generation of excessive ground-borne vibration or ground-borne noise levels?

Less Than Significant Impact. Construction of the proposed Project could result in the generation of ground-borne vibration. The residential uses located north of the Project site are considered construction vibration-sensitive locations. In general, groundborne vibration from standard construction practices is only a potential issue when within 25 feet of sensitive uses. Table 5.G shows anticipated vibration levels at 25 feet from a construction vibration source. As shown in Table 5.G, construction activities would need to occur within 25 feet of a sensitive use to exceed the FTA threshold of 94 VdB (0.2 in/sec PPV) for building damage.

Table 5.G: Vibration Source Amplitudes for Construction Equipment

Equipment	Reference PPV/LV at 25 ft	
	PPV (in/sec)	LV (VdB)[1]
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Sources: *Transit Noise and Vibration Impact Assessment* (FTA 20018).
[1] RMS vibration velocity in decibels (VdB) is 1 µin/sec.
µin/sec = micro-inches per second
ft = foot/feet
FTA = Federal Transit Administration
in/sec = inches per second
LV = velocity in decibels
PPV = peak particle velocity
RMS = root-mean-square
VdB = vibration velocity decibels

Groundborne vibration levels from construction activities very rarely reach levels that can damage structures; however, these levels are perceptible near the active construction site. As noted above, the closest sensitive receptors to the Project site are located approximately 550 to the north. Additionally, once constructed, the proposed Project would not contain uses that would generate groundborne vibration. This impact would be less than significant. Therefore, this impact would be less than significant, and no mitigation would be required.

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?

No Impact. As previously stated, the site is approximately 12.7 miles south of Norman Y. Mineta SJC and approximately 8.4 miles southeast of Reid-Hillview Airport of Santa Clara County. While the Project site is in SJC's approach and departure flight paths and operated aircrafts are visible and audible, the Project site is outside of both airports 60 dBA CNEL contours. Therefore, the proposed Project would not result in the exposure of on-site workers and customers to excessive aircraft noise levels. No mitigation would be required.

5.13.3 Conclusion

Less Than Significant Impact. Incorporation of Standard Permit Conditions would ensure that the proposed Project would result in less than significant noise impacts. No mitigation would be required.

5.14 POPULATION AND HOUSING

5.14.1 Environmental Setting

5.14.1.1 Regulatory Framework

Federal and State Regulations

There are no applicable regional or local regulations related to population and housing that are applicable to the proposed Project.

Regional and Local Regulations

Association of Bay Area Governments Projections 2013

The Association of Bay Area Governments (ABAG) is the regional planning agency for the San Francisco Bay Area. ABAG Projections 2013 is a growth forecast, which informs agencies such as the Metropolitan Transportation Commission (MTC) and the Bay Area Air Quality Management District (BAAQMD) for the purpose of Project funding and regulatory decisions. Data for this forecast are provided from collective regional General Plans, zoning codes, and growth management programs. This growth forecast is produced every four years with the 2013 report being the most recent projection. These periodic updates include developing impacts of "smart growth" policies and incentives so to improve future development trends in the region, such as a more balanced ratio of the number of jobs to houses.

Plan Bay Area 2040

Plan Bay Area 2040 is the Bay Area's Regional Transportation Plan and Sustainable Communities Strategy as mandated by Senate Bill 375, the Sustainable Communities and Climate Protection Act. Plan Bay Area 2040 is a limited and focused update to the 2013 Plan Bay Area and includes key economic, demographic, and financial trends from the last several years. Plan Bay Area 2040 was adopted by the ABAG and the MTC in 2017. Plan Bay Area aims to concentrate new population and employment growth in the region to areas with pre-existing transportation infrastructure to ensure greenhouse gas reductions are met.

5.14.1.2 Existing Conditions

In 2017, The United States Census Bureau estimated that the City of San José had approximately 1,035,317 people and 319,558 households.[56] No residential uses exist on the Project site.

[56] U.S. Census Bureau. QuickFacts, San Jose city, California, United States. Website: www.census.gov/quickfacts/fact/table/sanjosecitycalifornia,US/LFE041216#viewtop (accessed July 20, 2020).

5.14.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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?	☐	☐	☐	☒

a. Would the Project induce unplanned substantial 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)?

Less Than Significant Impact. The proposed Project would consist of the construction of one single-family residential unit. A typical household population for a single-family residence within the City is 3.58 persons.[57] Therefore, population growth associated with the proposed Project would be minimal, and this impact would be less than significant. No mitigation would be required.

b. Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently undeveloped and does not contain any residential uses. Therefore, the proposed Project would have no impact related to the displacement of substantial numbers of existing people or housing. No mitigation would be required.

5.14.3 Conclusion

Less Than Significant Impact. Implementation of the proposed Project would result in less than significant population and housing impacts. No mitigation would be required.

[57] U.S. Census Bureau. 2020. Explore Census Data. Website: https://data.census.gov/cedsci/ (accessed December 2020).

5.15 PUBLIC SERVICES

5.15.1 Environmental Setting

5.15.1.1 Regulatory Framework

Federal and State Regulations

California Fire Code

The California Fire Code exists within Part 9 of the California Building Code, and includes measures for emergency planning preparation and safety. Examples of fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Government Code Sections 65995 to 65998 (School Facilities)

California Government Code Section 65996 exists to offset a Project's impact on school facilities by paying a fee to the associated school district prior to receiving a building permit. The school district is therefore responsible for implementing specific methods for mitigating school impacts under the Government Code. Pursuant to California Government Code Section 65995, payment of school impact fees is considered to be full mitigation for reducing impacts on school facilities that would result from implementation of a Project.

Local Regulations

Envision San José 2040 General Plan

The Education and Services (ES) section of the City's General Plan includes the following goals and policies related to public services that are applicable to the proposed Project.

Goal ES-2 **Libraries:** Maintain and expand Library Information Services within the City to:

1. Enrich lives by fostering lifelong learning and providing every member of the San José community access to a vast array of ideas and information
2. Give all members of the community opportunities for educational and personal growth throughout their lives
3. Develop partnerships to further the educational, cultural and community missions of organizations in San José
4. Support San José State University Library's educational mission in expanding the base of knowledge through research and scholarship.
5. Locate branch libraries in central commercial areas of neighborhoods for essential public access to library resources, events, and community meeting spaces, and to stimulate economic development.

6. Maximize branch library hours of operation to facilitate daily patronage.

Policy 2.2 Construct and maintain architecturally attractive, durable, resource-efficient, and environmentally healthful library facilities to minimize operating costs, foster learning, and express in built form the significant civic functions and spaces that libraries provide for the San José community. Library design should anticipate and build in flexibility to accommodate evolving community needs and evolving methods for providing the community with access to information sources. Provide at least 0.59 square feet of space per capita in library facilities.

Goal ES-3 **Law Enforcement and Fire Protection:** Provide high-quality law enforcement and fire protection services to the San José community to protect life, property and the environment through fire and crime prevention and response. Utilize land use planning, urban design and site development measures and partnerships with the community and other public agencies to support long-term community health, safety and well-being.

Policy ES-3.1 Provide rapid and timely Level of Service response time to all emergencies:

1. For police protection, use as a goal a response time of six minutes or less for 60 percent of all Priority 1 calls, and of eleven minutes or less for 60 percent of all Priority 2 calls.

2. For fire protection, use as a goal a total response time (reflex) of eight minutes and a total travel time of four minutes for 80 percent of emergency incidents.

3. Enhance service delivery through the adoption and effective use of innovative, emerging techniques, technologies and operating models.

4. Measure service delivery to identify the degree to which services are meeting the needs of San José's community.

5. Ensure that development of police and fire service facilities and delivery of services keeps pace with development and growth in the city.

Policy ES-3.2 Strive to ensure that equipment and facilities are provided and maintained to meet reasonable standards of safety, dependability, and compatibility with law enforcement and fire service operations.

Policy ES-3.3 Locate police and fire service facilities so that essential services can most efficiently be provided and level of service goals met. Ensure that the development of police and fire facilities and delivery of services keeps pace with development and growth of the city.

Policy CD-5.3 Promote crime prevention through site and building designs that facilitate surveillance of communities by putting "eyes on the street." Design sites and buildings to promote visual and physical access to parks and open space areas. Support safe, accessible, and well-used public open spaces by orienting active use areas and building facades towards them.

Municipal Code

Title 17 of the San José Municipal Code, Buildings and Construction, includes codes applicable to public services when constructing a Project. Chapter 17.12 in this section adopts the California Fire Code, as addressed previously. Project applications for development in San José are plan-checked by SJFD for mandatory compliance with the California Fire Code.

5.15.1.2 Existing Setting

Fire Protection Services. Fire protection services would be provided to the proposed Project by the San José Fire Department (SJFD). The SJFD provides fire suppression and prevention, emergency medical and rescue services, hazardous materials response, and public education activities to the City's residents and has a total of 34 active stations within the City limits.[58] The SJFD's total emergency activity includes approximately 19 percent fire protection and 81 percent emergency medical services.[59] Currently, SJFD employs 583 full-time sworn firefighters.[60] The SJFD is divided into four bureaus: Administrative Services, Field Operations, Fire Prevention & Permits, and Fire Dispatch. The Administrative Services bureau is responsible for budget development, grant management, accounts payable and payroll processing, human resources, records management, data analysis, and mapping/information technology enhancements. The Field Operations bureau is comprised of 33 fire stations that are responsible for actively protecting approximately 206 square miles and one million citizens. The Fire Prevention & Permits bureau is responsible for providing

58 San José, City of. Fire Department Stations. Website: www.sanjoseca.gov/your-government/departments/fire-department/stations (accessed July 20, 2020).

59 Total of 45,144 incidents: 8,219 for Fire Protection and 36,925 for Medical; Percent Fire Protection = 8,219/45,144 = 13 percent; Percent Medical = 36,925/45,144 = 81 percent. Based on City-Wide Response Metrics for the Year 2018.

60 San José, City of. 2019. FY 2019–2020 Adopted Operating Budget. Website: https://www.sanjoseca.gov/home/showdocument?id=44794 (accessed June 20, 2020).

public education and outreach services, investigation of fires to determine cause and origin, and code compliance. The Fire Communications is responsible for handling emergency calls related to fire and/or medical assistance.[61]

Fire Station No. 27, located at 6027 San Ignacio Avenue, is the closest fire station to the Project site (approximately 1.7 miles southwest). Fire Station No. 27 would be the first to arrive at the Project site in the event of an emergency and would thus be designated as the "first-in" station. Fire Station No. 35, located at 135 Poughkeepsie Road, would be designated as the "second-call" station to support Fire Station No. 18.

During 2017 (the last of complete data made available by the SJFD), the SJFD responded to 93,892 calls for service; 76,269 (approximately 81 percent) of calls were related to medical emergencies.[62]

Police Protection Services. Police protection and law enforcement services are provided to the City by the San José Police Department (SJPD). The SJPD is currently divided into four bureaus: Administration, Field Operations, Investigations, and Technical Services.[63] The Administration Bureau is responsible for budget development, grant management, accounts payable and payroll processing, human resources, records management, data analysis, and mapping/information technology enhancements. The Field Operations Bureau is responsible for providing police services for the residents of San José by deploying personnel to emergency and non-emergency calls. The Investigations Bureau is divided into two divisions responsible for investigating various crimes throughout the City. The Technical Services Bureau is responsible for managing the department's use of technology to provide competitive advantages in the process of delivering police services to the residents of the City.

The SJPD headquarters is located at 201 W. Mission Street, San José, CA 95110, approximately 15 miles northwest of the Project site. The Project site falls within the SJPD's Southern Division, which is one of four patrol divisions within the City. The Southern Division encompasses approximately 123 square miles and is the largest of the four patrol divisions. The Southern Division is comprised of four patrol districts: Tom, Adam, X-ray, and Yellow. The Project site is located within Yellow patrol district.

According to the City of San José FY 2017-2018 Budget, the SJPD employs approximately 1,156 full-time sworn officers.[64] With a current City population of 1,035,317,[65] the service ratio of officers to residents is approximately 1.07 to 1,000.[66] As per the City's General Plan, the SJPD's current response time goal is no more than 6 minutes for 60 percent of all Priority 1 calls (emergency calls)

61 San José, City of. Fire Department. Bureaus. Website: https://www.sanjoseca.gov/your-government/departments/fire-department/bureaus/fire-communications (accessed June 30, 2020).
62 San José, City of. Fire Department. 2018. City-Wide Response Metrics. May 18, 2018. Website: https://www.sanjoseca.gov/home/showdocument?id=9053 (accessed June 30, 2020).
63 San José, City of. Police Department Website: http://www.sjpd.org/ (accessed June 30, 2020).
64 San José, City of. FY 2019-2020 Adopted Operating Budget. Police Department. Department Position Detail Website: https://www.sanjoseca.gov/home/showdocument?id=44812 (accessed June 30, 2020).
65 U.S. Census Bureau. QuickFacts, San Jose city, California, United States, op. cit.
66 Calculation: 1,035,317 residents / 1,000 = 1035.3; 1107 / 1035.3 = 1.07.

and 11 minutes or less for 60 percent of all Priority 2 (non-emergency) calls. As such, the SJPD is not currently meeting its response time goals. In Fiscal Year 2017–2018, the SJPD responded to 598,433 calls for service with an average response time of 9.22 minutes for Priority 1 calls and 22.68 minutes for Priority 2 calls.[67]

School Services. The Project site is located within the Morgan Hill Unified School District (MHUSD). The FMSD includes six elementary schools, two elementary/middle schools, one dual immersion magnet program (K-8), two middle schools, two comprehensive high schools, one continuation high school, and a community adult school, with a total enrollment of approximately 8,500 students.[68] The closest school to the Project site is the Martin Murphy Middle School, located approximately 0.9 miles to the north.

Parks. The City's Parks, Recreation & Neighborhood Services Department oversees the operation and maintenance of parks and recreational facilities throughout the City. According to the Parks, Recreation, and Open Space section of the City's Quality of Life General Plan Element, the City currently maintains 3,520 acres of parkland through joint-use agreements with the City and other public land agencies such as the MHUSD. The Parks, Open Space, and Recreation section of the General Plan Quality of Life Element requires the provision of 3 acres of parkland per 1,000 residents through a combination of 1.5 acres of public park and 2.0 acres of recreational school grounds, as well as 7.5 acres of citywide/regional park and open space lands per 1,000 residents through a combination of facilities provided by the City and other public land agencies.[69] Los Paseos Park is the closest park to the Project site, located approximately 1 mile north of the property.

Library Services. The San José Public Library (SJPL) system provides library services within the jurisdictions of the City.[70] There are 24 library locations currently serving the City. The three closest libraries to the Project site are: Santa Teresa Branch Library (approximately 3 miles north of the Project site); Edenvale Branch Library (approximately 5.8 miles north of the Project site); and Almadena Branch Library (approximately 9 miles west of the Project site). Due to its proximity, the Santa Teresa Branch would serve the Project site. Amenities include library materials, computer access, meeting room space, and study areas.

67 San José, City of. FY 2019-2020 Adopted Operating Budget, op. cit.
68 Morgan Hill Unified School District. About. Website: www.mhusd.org/about (accessed July 20, 2020).
69 San José, City of. 2011. *Envision San José 2040 General Plan*, *Parks, Open Space, and Recreation Element*.
70 San José Public Library. Mission & Vision. Website: www.sjpl.org/mission (accessed July 20, 2020).

5.15.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Result in substantial adverse physical impacts associated with the provision of or 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:				
i. Fire protection?	☐	☐	☒	☐
ii. Police protection?	☐	☐	☒	☐
iii. Schools?	☐	☐	☒	
iv. Parks?	☐	☐	☒	
v. Other public facilities?	☐	☐	☒	

a. Would the Project result in substantial adverse physical impacts associated with the provision of or 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:

i. Fire protection?

Less Than Significant Impact

Construction. Construction activities associated with the proposed Project have the potential to affect emergency services related to fire protection by potentially requiring partial lane closures during utility installation. Project construction may also necessitate stopping of traffic to accommodate trucks entering or exiting the Project site during construction (e.g., for the movement of construction equipment). Therefore, construction activities could temporarily increase response times for emergency vehicles in the vicinity of the Project site. As discussed further in Section 5.9, Hazards and Hazardous Materials, the proposed Project would comply with all applicable City requirements and recommendations outlined in the California Traffic Control Manual (Caltrans 2014) to ensure that emergency vehicles would be able to navigate through streets adjacent to the Project site during construction. Therefore, potential impacts related to emergency fire access during construction would be less than significant.

Operation. The proposed Project is not anticipated to result in an excessive increase in calls for fire protection services due to the nature of the Project as a residential use. Furthermore, as discussed in Section 5.14, Population and Housing, increase in population on the Project site would be minimal. Therefore, the proposed Project would not necessitate new or expanded fire protection facilities due to an increase in the number of employees on the site.

Utility improvements proposed as part of the Project would be required to comply with all applicable building code requirements requiring fire protection devices such as sprinklers, alarms per the California Fire Code (CFC), adequately spaced fire hydrants, and fire access lanes.

Project compliance with requirements set forth in the CFC and the City's Municipal Code would provide fire protection for people and structures, as well as emergency medical services on site. Adherence to applicable codes would decrease the demand for fire services and ensure that there is adequate emergency access on site. Further, as discussed in Section 5.17, Transportation, the proposed Project would not result in a significant traffic impact to any study area intersections. Therefore, the proposed Project would not impair emergency response vehicles.

As stated above, the proposed Project would be designed to comply with all SJFD and CFC requirements, would not impair emergency response vehicles or increase response times, and would not substantially increase calls for service, thereby causing the need for new or expanded facilities. Furthermore, as described in Section 5.9.3.e, the proposed Project would be required to include fire resistant building materials and maintain defensible space vegetation. Operation of the proposed Project would not result in substantial adverse physical impacts associated with the provision of or need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection. Therefore, operational impacts to fire protection would be less than significant, and no mitigation would be required.

a. Would the Project result in substantial adverse physical impacts associated with the provision of or 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:

ii. Police protection?

Less Than Significant Impact

Construction. Refer to Response 4.15.3(a)(i), above, for discussion on the potential for construction activities to affect emergency services. The Project would comply with all applicable City requirements and recommendations outlined in the *California Traffic Control Manual* (Caltrans 2014), which would ensure that emergency vehicle access is maintained during construction activities. Additionally, construction of the proposed Project would not result in substantial adverse physical impacts associated with the provision of or 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 police protection. Therefore, construction-related impacts to police services would be less than significant, and no mitigation would be required

Operation. As previously stated, the proposed Project would not result in substantial population growth. As such, the Project would have no impact on the SJPD's ratio of police officers per 1,000 residents and would not contribute to delayed response times for police services in the City. Therefore, Project implementation would not trigger the need for new or physically altered police

facilities. Operation of the proposed Project would not result in substantial adverse physical impacts associated with the provision of or 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 police protection. Therefore, operational impacts to police services would be less than significant, and no mitigation would be required.

a. Would the Project result in substantial adverse physical impacts associated with the provision of or 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:

iii. Schools?

Less Than Significant Impact. The proposed Project includes one single-family residence, and therefore is not anticipated to result in the need for new of physically altered school facilities.

Pursuant to California Education Code Section 17620(a)(1), the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district for the purpose of funding the construction or reconstruction of school facilities. The Applicant would be required to pay such fees established by the MHUSD to reduce any impacts of non-residential development on school services as provided in Section 65995 of the California Government Code. Pursuant to the provisions of Government Code Section 65996, a Project's impact on school facilities is fully mitigated through payment of the requisite school facility development fees current at the time a building permit is issued.

Therefore, the Project would not impact school services and facilities, and no mitigation would be required.

a. Would the Project result in substantial adverse physical impacts associated with the provision of or 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:

iv. Parks?

Less Than Significant Impact. As discussed in Section 5.14, Population and Housing, the proposed Project would not result in substantial population growth. As such, implementation of the proposed Project would not result in the increased the use of existing parks or other recreation uses and would not require the expansion of parks within the City. Therefore, no impacts to parks would occur, and no mitigation would be required.

a. Would the Project result in substantial adverse physical impacts associated with the provision of or 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:

v. Other public facilities?

Less Than Significant Impact. As discussed previously, development of the proposed Project would not result in substantial population growth. Therefore, no impacts to library facilities would occur, and no mitigation would be required.

5.15.3 Conclusion

Less Than Significant. Implementation of the proposed Project would not result in significant impacts to existing public services in the City of San José or require the construction of new facilities. No mitigation would be required.

5.16 RECREATION

5.16.1 Environmental Setting

5.16.1.1 Regulatory Framework

Federal and State Regulations

There are no applicable federal or State regulations related to recreational resources.

Local Regulations

Envision San José 2040 General Plan

The Parks, Open Space, and Recreation (PR) section of the City's General Plan includes the following goals and policies related to recreation that are applicable to the proposed Project.

Goal PR-1 **High Quality Facilities and Programs:** Provide park lands, trails, open space, recreation amenities, and programs, nationally recognized for their excellence, which enhance the livability of the urban and suburban environments; preserve significant natural, historic, scenic and other open space resources; and meet the parks and recreation services needs of San José's residents, workers, and visitors.

Policy PR-1.1 Provide 3.5 acres per 1,000 population of neighborhood/ community serving parkland through a combination of 1.5 acres of public park and 2.0 acres of recreational school grounds open to the public per 1,000 San José residents.

Policy PR-1.8 Enhance existing parks and recreation facilities in built-out areas through new amenities and other improvements to ensure that residents' needs are being met.

Goal PR-3 **Provide an Equitable Park System:** Create a balanced park system that provides all residents access to parks, trails, open space, community centers, dog parks, skate parks, aquatics facilities, sports fields, community gardens, and other amenities.

Policy PR-3.2 Provide access to an existing or future neighborhood park, a community park, recreational school grounds, a regional park, open space lands, and/or a major City trail within a ⅓-mile radius of all San José residents by either acquiring lands within ⅓-mile or providing safe connections to existing recreation facilities outside of the ⅓-mile radius. This is consistent with the United Nation's Urban Environmental Accords, as adopted by the City for recreation open space.

Goal VN-1 **Vibrant, Attractive, and Complete Neighborhoods**: Develop new and preserve and enhance existing neighborhoods to be vibrant, attractive, and complete.

Policy VN-1.1 Include services and facilities within each neighborhood to meet the daily needs of neighborhood residents with the goal that all San José residents be provided with the opportunity to live within a ½-mile walking distance of schools, parks, and retail services.

City of San José Municipal Code

Chapter 19.38 Parkland Dedication Ordinance and Park Impact Ordinance. Chapter 19.38 of the San José Municipal Code (SJMC) includes the Parkland Dedication Ordinance (PDO) and Park Impact Ordinance (PIO), which both require residential developers to dedicate public parkland, pay in-lieu fees, or both, to account for the demand of neighborhood parkland when developing a Project. Section 19.38.310 of the SJMC states that the amount of dedicated land is determined by the number of dwelling units and the average number of persons per dwelling unit.

Greenprint 2009 Update Plan for Parks, Recreation Facilities, and Trails. The Greenprint 2009 Update is a long-term plan that provides guidelines for the improvement of San José's parks, trails, community centers, and facilities within the next 20 years. This plan sets goals and objectives for the City to make San José residents healthier and happier when utilizing the local park system.

5.16.1.2 Existing Conditions

As previously stated, the City's Parks, Recreation & Neighborhood Services Department oversees the operation and maintenance of parks and recreational facilities throughout the City. According to the Parks, Recreation, and Open Space section of the City's Quality of Life General Plan Element, the City currently maintains 3,520 acres of parkland through joint-use agreements with the City and other public land agencies, such as the MHUSD. The Parks, Open Space, and Recreation section of the General Plan Quality of Life Element requires the provision of 3.5 acres of parkland per 1,000 residents through a combination of 1.5 acres of public park and 2.0 acres of recreational school grounds, as well as 7.5 acres of citywide/regional park and open space lands per 1,000 residents through a combination of facilities provided by the City and other public land agencies.[71] As stated above, the closest park to the Project site is the Los Paseos Park, located approximately 1 mile to the north.

[71] San José, City of. 2011, op. cit.

5.16.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

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?

No Impact. As discussed in Section 5.14, Population and Housing, the proposed Project would not result in substantial population growth. Therefore, the proposed Project would not result in impacts related to the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No mitigation would be required.

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?

No Impact. As noted above the proposed Project would not result in substantial population growth. The proposed Project does not propose any recreational uses, which might have an adverse physical effect on the environment. Therefore, there would be no impacts related to the construction or expansion of recreational facilities, and no mitigation would be required.

5.16.3 Conclusion

No Impact. Implementation of the proposed Project would not result in impacts to recreational facilities in San José. No mitigation would be required.

5.17 TRANSPORTATION

5.17.1 Environmental Setting

5.17.1.1 Regulatory Framework

Federal and State Regulations

Senate Bill 743

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law and started a process that changes the methodology of a transportation impact analysis as part of CEQA requirements. SB 743 directed the California Office of Planning and Research (OPR) to establish new CEQA guidance for jurisdictions that removes the LOS method, which focuses on automobile vehicle delay and other similar measures of vehicular capacity or traffic congestion, from CEQA transportation analysis. Rather, vehicle miles travelled (VMT), or other measures that promote "the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses," are now be used as the basis for determining significant transportation impacts in the State.

State CEQA Guidelines Section 15064.3, Subdivision (b)

In January 2018, the State of California OPR submitted a proposal for comprehensive updates to the State CEQA Guidelines to the California Natural Resources Agency. The submittal included proposed updates related to the analysis of GHG emissions, energy, transportation impacts pursuant to SB 743, and wildfires, as well as revisions to Section 15126.2(a) in response to the California Supreme Court's decision in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369. On December 28, 2018, the updated State CEQA Guidelines went into effect.

As part of the update to the State CEQA Guidelines, Section 15064.3 was added and codifies that Project-related transportation impacts are typically best measured by evaluating the Project's VMT. Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 miles of transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every Project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a Project's VMT.

Regional and Local Regulations

Metropolitan Transportation Commission

The MTC conducts transportation planning, financing, and coordinating for the San Francisco Bay Area, including Santa Clara County. MTC periodically updates the Regional Transportation Plan, which plans for the development of mass transit, highway, airport, seaport, railroad, bike, and pedestrian facilities. The most current Regional Transportation Plan, *Transportation 2035*, budgets funding for transportation related projects in Santa Clara County, such as local street pavement maintenance and countywide shuttle service programs. In addition, MTC and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2040 in 2017, which is a State-mandated transportation and land use plan. The Sustainable Communities Strategy outlines a Sustainable Communities Strategy for the region, which aims to integrate transportation, land use, and housing to meet GHG reduction targets established by the California Air Resources Board.

Santa Clara Valley County Congestion Management Plan

Santa Clara Valley Transportation Authority (VTA) is an independent special district that aims to provide sustainable, accessible, and community-focused transportation opportunities. VTA is the county's congestion management agency, providing countywide transportation planning, design and construction of specific highway, pedestrian, and bicycle improvement projects, as well as the promotion of transit oriented development. In accordance with California Statute, Government code 65088, (VTA) prepares the Santa Clara County Congestion Management Plan (CMP) which addresses strategies for combating congestion and monitoring compliance.

The Santa Clara CMP contains the following five mandatory elements: (1) a system definition and traffic level of service standard element; (2) a transit service and standards element; (3) a trip reduction and transportation demand management element; (4) a land use impact analysis program element; and (5) a capital improvement element. The Santa Clara CMP also includes three optional elements, which include a county-wide transportation model and database element, an annual monitoring and conformance element, and a deficiency element. The VTA is responsible for reviewing new development projects that are expected to affect CMP designated intersections in the County.

City Council Policy 5-1, Transportation Analysis Policy

On February 27, 2018, the City adopted City Council Policy 5-1, Transportation Analysis Policy, which establishes VMT as the City's metric for CEQA transportation analysis. City Council Policy 5-1 replaces City Council Policy 5-3, in which the City would use the LOS method for assessing transportation impacts under CEQA. Consistent with SB 743; the City's *Transportation Analysis Handbook* (2018); and the major strategies, goals, and policies of the City's General Plan; City Council Policy 5-1 establishes a new threshold for transportation impacts under CEQA by replacing LOS with VMT. The City has developed a VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects by assessing a Project's potential VMT based on the Project's description, location, and attributes. This tool is used to determine the existing VMT and a Project's VMT impacts, and suggests potential mitigation measures (if necessary).

The policy also requires development projects to conduct a Local Transportation Analysis (LTA) to analyze conformance with the multimodal transportation strategies, goals, and policies in the General Plan and address adverse impacts to the transportation system. The primary goal of an LTA is to establish a local transportation system that is reflective of both land use context and multimodal functions. An LTA will ensure that the type, character, and intensity of land uses along a street are appropriate to the primary function of the street, and that all people travel safely on city streets. City Council Policy 5-1 supports implementation of the City's General Plan by promoting mixed-use, infill projects in Planned Growth Areas. Further, the policy focuses resources on the development of multimodal transportation networks envisioned in the General Plan.

Envision San José 2040 General Plan

The Community Design (CD) and Land Use/Transportation (TR) sections of the City's General Plan include the following goals and policies related to transportation that are applicable to the proposed Project.

Goal CD-2 **Function:** Create integrated public and private areas and uses that work together to support businesses and to promote pedestrian activity and multi-modal transportation.

Policy CD-2.1 Promote the Circulation Goals and Policies in this Plan. Create streets that promote pedestrian and bicycle transportation by following applicable goals and policies in the Circulation section of this Plan.

1. Design the street network for its safe shared use by pedestrians, bicyclists, and vehicles. Include elements that increase driver awareness.

2. Create a comfortable and safe pedestrian environment by implementing wider sidewalks, shade structures, attractive street furniture, street trees, reduced traffic speeds, pedestrian-oriented lighting, mid-block pedestrian crossings, pedestrian-activated crossing lights, bulb- outs and curb extensions at intersections, and on-street parking that buffers pedestrians from vehicles.

3. Consider support for reduced parking requirements, alternative parking arrangements, and Transportation Demand Management strategies to reduce area dedicated to parking and increase area dedicated to employment, housing, parks, public art, or other amenities. Encourage de-coupled parking to ensure that the value and cost of parking are considered in real estate and business transactions.

Policy CD-2.2 Consider the street type (e.g., expressway, arterial, Main Street) in the development review process to ensure that the design of the site, buildings, and public way respond to the transportation mode priorities (i.e., pedestrian, bicycle, or vehicular traffic) for the area. (Refer to the Transportation section of this Plan for street types and mode priorities for each type.)

Goal TR-1 **Balanced Transportation System:** Complete and maintain a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks.

Policy TR-1.1 Accommodate and encourage use of non-automobile transportation modes to achieve San José's mobility goals and reduce vehicle trip generation and vehicle miles traveled (VMT).

Policy TR-1.2 Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects.

Policy TR-1.4 Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes giving first consideration to improvement of bicycling, walking and transit facilities and services that encourage reduced vehicle travel demand.

- Development proposals shall be reviewed for their impacts on all transportation modes through the study of Vehicle Miles Traveled (VMT), Envision San José 2040 General Plan policies, and other measures enumerated in the City Council Transportation Analysis Policy and its Local Transportation Analysis. Projects shall fund or construct proportional fair share mitigations and improvements to address their impacts on the transportation systems.

Goal TR-3 **Maximize use of Public Transit:** Maximize use of existing and future public transportation services to increase ridership and decrease the use of private automobiles.

Policy TR-3.3 As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute toward transit ridership. In addition, require that new development is designed to

accommodate and to provide direct access to transit facilities.

Goal TR-5 **Vehicular Circulation:** Maintain the City's street network to promote the safe and efficient movement of automobile and truck traffic while also providing for the safe and efficient movement of bicyclists, pedestrian, and transit vehicles.

Vision Zero San José Two-Year Action Plan: 2017/2018

In 2015, the City adopted a Vision Zero Two-Year Action Plan (2017), which is a transportation safety initiative aimed at prioritizing street safety for all road users, including those who walk, bike, drive, or ride transit. The Two-Year Action Plan includes strategies aimed at eliminating all traffic fatalities and significantly reducing severe injuries related to transportation-related accidents.

West Capitol Expressway, which is directly south of the Project site, has been identified as a Vision Zero Priority Safety Corridor. For each Priority Safety Corridor, safety assessments have been developed and include recommendations focused on engineering features that would help reduce vehicle speeds, minimize traffic conflicts, and create safer and more accessible facilities for all roadway users. The recommendations range in cost, including actions such as trimming trees that may obstruct visibility, enhancing crosswalks with flashing beacons, and installing new traffic signals. The safety assessments also include targeted recommendations for law enforcement and traffic safety education for the public.

Transportation Analysis Handbook

The City's *Transportation Analysis Handbook* (April 2018) sets forth objectives and methodologies related to the preparation of Project-related transportation analyses. The *Transportation Analysis Handbook* outlines significance criteria, screening criteria, and thresholds of significance for environmental clearance for development projects, transportation projects, and General Plan Amendments. The Transportation Analysis Handbook aligns with SB 743; City Council Policy 5-1, and the major strategies, goals, and policies of the City's General Plan. According to the *Transportation Analysis Handbook*, a detailed CEQA transportation analysis would not be required if a Project meets certain screening criteria. Small infill projects and other projects of sufficiently small size (i.e., 30,000 sf or less of industrial use) would meet the City's screening criteria, in which case the Project would not be required to prepare a detailed CEQA transportation analysis.

San José Bike Plan 2020

The San José Bike Plan 2020 (November 2009) includes policies for developing and maintaining bike trails and associated facilities within the City. The following five goals are listed within the plan in order to improve bike accessibility and connectivity: (1) Complete 500 miles of bikeways; (2) Achieve a 5 percent bike mode share; (3) Reduce bike collision rates by 50 percent; (4) Add 5,000 bicycle parking spaces; and (5) Achieve Gold-Level Bicycle Friendly Community status.

San José Emergency Operations Plan

Under State law, California requires that local governments create and administer an Emergency Operations Plan (EOP) under the guidelines provided by the Federal Emergency Management

Agency (FEMA). The State Office of Emergency Services (OES) adopts these emergency management guidelines for business activities in the Emergency Operations Center (EOC). The City of San José Emergency Operations Plan was adopted in 2004 and was updated most recently on May 15, 2016.

5.17.1.2 Existing Conditions

Vehicle Miles Traveled of Existing Onsite Uses. The Project site is currently undeveloped, and therefore there are no vehicle miles traveled (VMT) associated with the Project site.

Roadway Network and Facilities. The Project site is currently undeveloped. Key roadways within the vicinity of the Project site include Santa Teresa Boulevard. Santa Teresa Boulevard is a two-lane roadway with one lane in each direction in the vicinity of the Project site. Vehicular access to the Project site is provided via a single driveway along the southbound direction of Santa Teresa Boulevard. There are no pedestrian facilities along Santa Teresa Boulevard in the vicinity of the Project site. Class II bicycle lanes are present along Santa Teresa Boulevard north of the Project site, ending just south of the Project site. Transit stop are located along Santa Teresa Boulevard north of the Project site, providing access to VTA route 68.

5.17.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

a. Conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact. As described further in Section 2.0, Project Description, construction equipment and vehicles will be staged on site. Although the Project does not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would physically impair or otherwise interfere with transit, roadways, bicycle facilities, and/or pedestrian facilities in the Project vicinity, the Project may require temporary lane closures on Santa Teresa Boulevard to allow for utility connections.In order to reduce potential impacts on the local circulation system during Project construction, the Project would be required to adhere to all applicable City requirements and would implement recommendations outlined in the California Traffic Control Manual (Caltrans 2014). Among other things, this manual recommends early coordination with affected agencies to ensure that emergency vehicle access is maintained.

Therefore, construction of the proposed Project would result in less than significant traffic impacts related to potential conflicts with plans, programs, ordinances or policies addressing the local circulation system, and no mitigation would be required.

b. Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Less Than Significant Impact. As previously stated, the City of San José has established a new threshold for transportation impacts (City Council Policy 5-1) that is consistent with Senate Bill 743. Under this new threshold, transportation impacts are evaluated under vehicle miles traveled (VMT), which looks at Project-related effects on the number of VMT per capita or per employee in the City.

According to the City's Transportation Analysis Handbook, a detailed CEQA transportation analysis is not required if a Project meets certain screening criteria. Small infill projects and other projects of sufficiently small size (i.e., all single-family detached residential projects of 15 or fewer dwelling units) would meet the City's screening criteria for a detailed CEQA transportation analysis. The proposed Project would consist of the construction of one single-family residential unit, and therefore would meet the City's screening criteria. Therefore, pursuant to Appendix B of City Council Policy 5-1, the proposed Project would not result in significant transportation impacts and would advance other City goals and policies. No mitigation would be required.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed Project includes the construction of one single-family residential use. Vehicular access to the Project site would be provided via an existing driveway along Santa Teresa Boulevard. The proposed Project would rely on, and can be accommodated by, the existing roadway system in the vicinity of the Project site. The proposed Project would include a private driveway approximately 1,400 feet in length. The design of this driveway would be subject to review by the City's Public Works Department. Therefore, the Project would result in less than significant impacts resulted to design hazards and incompatible uses. No mitigation would be required.

d. Result in inadequate emergency access?

Construction activities proposed as part of the Project do not include any characteristics (e.g., permanent road closure or long-term blocking of road access) that would result in inadequate emergency access; however, the proposed Project may require temporary lane closures along Santa Teresa Boulevard to allow for utility connections. Temporary lane closures would be implemented consistent with the recommendations of the California Joint Utility Traffic Control Manual (Caltrans 2014). Among other things, this manual recommends early coordination with affected agencies to ensure that emergency vehicle access is maintained. In this manner, officials could plan and respond appropriately to direct the public away from West Capitol Expressway and Snell Avenue in the event of an emergency requiring evacuation.

The proposed Project would be developed in accordance with the City's emergency access standards and would be required to comply with all applicable codes and ordinances for emergency vehicle

access, which would ensure adequate access to, from, and on site for emergency vehicles. Therefore, operation of the proposed Project would result in less than significant impacts related to inadequate emergency access to the site. No mitigation would be required.

5.17.3 Conclusion

Less Than Significant Impact. Conformance with City Council Policy 5.1 would ensure that the proposed Project would not result in significant adverse transportation impacts. No mitigation would be required.

5.18 TRIBAL CULTURAL RESOURCES

5.18.1 Environmental Setting

5.18.1.1 Regulatory Framework

Federal and State Regulations

Native American Heritage Commission (NAHC)

In 1976, the California State Government passed AB 4239, creating the Native American Heritage Commission (NAHC). The NAHC is responsible for identifying and categorizing Native American cultural resources as well as preventing damages to designated sacred sites and associated artifacts and remains. Legislation passed in 1982 authorized the NAHC to identify a Most Likely Descendant (MLD) when Native American remains are found outside of any place other than a designated cemetery. A MLD has the authority to make recommendations in regards to the treatment and disposition of the discovered remains.

The Native American Historic Resource Protection Act. The Native American Historic Resource Protection Act, or Assembly Bill (AB 52) defines guidelines for reducing conflicts between Native Americans and development projects and activities. Projects are subject to AB 52 if a notice of preparation for an EIR is filed or a notice of intent to adopt a Negative or Mitigated Negative Declaration is filed on or after July 1, 2016. "Tribal cultural resources" (TCR) are protected under CEQA and are defined as a site, feature, place, cultural landscape (must include the size and scope of landscape), sacred place, and object with a cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. At the lead agency's discretion, a resource can be treated as a TCR if a Native American Tribe provides substantial evidence. Additionally, AB 52 allows tribes to engage in consultation with lead agencies and sets guidelines for such consultation.

Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code protects Native American burials, remains, and associated grave artifacts in the event that they are discovered in any location other than a designated cemetery. The Code mandates the immediate stop of excavation in the site as well as any adjacent or overlying area where the remains or associated item is found, and provides for the sensitive disposition of those remains. Should remains be discovered, the County Coroner must determine that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or designee, in the manner provided in Section 5097.98 of the Public Resources Code. The County Coroner shall make the determination within two working days from the time the person responsible for the excavation, or designee, notifies the County Coroner of the discovery or recognition of the human remains. If the County Coroner identifies the remains to be of Native American origin, or has reason to believe that the remains are those of Native American origin, the County Coroner must contact the California NAHC within 24 hours. The NAHC representative will then alert a Native American MLD to conduct an inspection of the site and to determine the following course of treatment and action.

Additionally, State CEQA Guidelines Section 15064.5 sets forth a procedure if human remains are found on land outside of federal jurisdiction.

Local Regulations

Envision San José 2040 General Plan

The Environmental Resources (ER) and Land Use/Transportation (LU) sections of the City of San José's (City) General Plan include the following goals and policies related to recreation that are applicable to the proposed Project.

Goal ER-10 **Archaeology and Paleontology:** Preserve and conserve archaeologically significant structures, sites, districts, and artifacts in order to promote a greater sense of historic awareness and community identity.

Policy ER-10.1 For proposed development sites that have been identified as archaeologically or paleontologically sensitive, require investigation during the planning process in order to determine whether potentially significant archeological or paleontological information may be affected by the Project and then require, if needed, that appropriate mitigation measures be incorporated into the Project design.

Policy ER-10.2 Recognizing that Native American human remains may be encountered at unexpected locations, impose a requirement on all development permits and tentative subdivision maps that upon discovery during construction, development activity will cease until professional archaeological examination confirms whether the burial is human. If the remains are determined to be Native American, applicable state laws shall be enforced.

5.18.1.2 Existing Conditions

Tribal cultural resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe." Additionally, a lead agency can, at its discretion and supported by substantial evidence, choose to treat a resource as a tribal resource. Assembly Bill (AB) 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a Project. At the time of preparation of this Initial Study, no Native American tribes that are or have been traditionally culturally affiliated with the Project vicinity have requested notification from the City under AB 52 regarding projects in the area and their effects on a tribal cultural resource. No known tribal resources occur on the site.

5.18.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

a. Would the Project be listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

OR

b. Would the Project be a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact. The following responses address the thresholds in Questions 4.18.2(a) and 4.18.2(b), above.

Chapter 532, Statutes of 2014 (i.e., AB 52), requires that Lead Agencies evaluate a Project's potential to impact "tribal cultural resources." Such resources include "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources (California Register) or included in a local register of historical resources." AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a "tribal cultural resource."

In addition, per AB 52 (specifically Public Resources Code [PRC] 21080.3.1), Native American consultation is required upon request by any California Native American tribe that has previously requested that the City provide it with notice of projects that the City is undertaking.

Assembly Bill (AB) 52 requires lead agencies to complete formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts by a Project. Where a Project may have a significant impact on a tribal cultural

resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. In 2017, the City had sent a letter to tribal representatives in the area to welcome participation in consultation process for all ongoing, proposed, or future projects within the City's Sphere of Influence or specific areas of the City. In July 2018, the Ohlone tribe requested notification for projects in the City that involve ground-disturbing activities that require a Negative Declaration, Mitigated Declaration, or Environmental Impact Report. The Ohlone tribal representative was notified of this Project on November 18, 2020. At the time of preparation of this Initial Study, the City of San José had yet to receive any requests for consultation from tribes. As discussed in Section 5.5, Cultural Resources, and Response 4.5.3(a), the property does not meet any of the California Register criteria and the existing buildings on the Project site do not qualify as "historical resources" as defined by CEQA. Therefore, the proposed Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines or PRC 5020.1(k).

Also discussed in Section 5.5, Cultural Resources, and Response 4.5.3(b), there is little potential for the proposed Project to impact prehistoric resources due to significant prior disturbance from past grading and development activities. In the unlikely event archaeological resources are discovered at any time during construction, those activities would be halted in the vicinity of the find until they can be assessed for significance by a qualified archaeologist (Cultural Resources Standard Permit Conditions). Implementation of Cultural Resources Standard Permit Conditions would reduce any potential impacts to previously undiscovered archaeological and/or tribal cultural resources to a less than significant level.

5.18.3 Conclusion

No Impact. Tribal representatives were notified of the proposed Project in March 2019 and did not request consultation or provide evidence indicating that tribal cultural resources were present on the Project Site. Moreover, there is no evidence to suggest that cultural or historic resources are present on the site. Therefore, the proposed Project would not result in impacts to tribal cultural resources. No mitigation would be required.

5.19 UTILITIES AND SERVICE SYSTEMS

5.19.1 Environmental Setting

5.19.1.1 Regulatory Framework

Federal and State Regulations

California Urban Water Management Planning Act

Under the California Water Code and Urban Water Management Planning Act of 1983, all California urban water suppliers are required to prepare and adopt an Urban Water Management Plan (UWMP) every five years, which promotes water conservation and efficiency measures. Urban water suppliers that serve more than 3,000 customers or are supplying more than 3,000 acre-feet of water annually are subject to this Act. This Act requires that the total Project water use be compared to water supply sources over the next 20 years in five-year increments. Planning must occur for all drought years and must include a water recycling analysis that incorporates a description of the wastewater collection and treatment system, outlining existing and potential recycled water uses. In September 2014, the Act was amended by SB 1420, which now requires urban water suppliers to provide descriptions of their water demand management measures and similar information.

State Updated Model Landscape Ordinance

The State Updated Model Landscape Ordinance requires the adoption of landscape water conservation ordinances or the adoption of a different ordinance that is at least as stringent as the updated Model Ordinance (MO). The City adopted Water Efficient Landscaping Standards for new and Rehabilitated Landscaping in 2013, as well as the revised SJMC Chapter 15.11.

Water Conservation Act of 2009

The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase water use efficiency by reducing per capita urban water use by 20 percent by December 31, 2020. This bill also set a goal for the state of reducing per capita water use by at least 10 percent by December 31, 2015.

California Integrated Waste Management Act (AB 939)

AB 939 established the California Integrated Waste Management Board under CalRecycle, which required all counties within California to prepare integrated waste management plans. Additionally, it changed the focus of solid waste management from landfill to diversion strategies (e.g., source reduction, recycling, and composting), and required all municipalities to divert 25 percent of their solid waste from landfill disposal by January 1, 1995 and fifty percent by the year 2000. The City of San José currently generates 1.7 million tons of solid waste annually, and diverts 60 percent of its waste streams by utilizing curbside recycling, yard waste collection, and composting programs.

CALGreen Building Code

CALGreen requires mandatory green standards that all buildings in California must abide by, including: reducing indoor water use, reducing wastewater, recycling and/or salvaging nonhazardous construction and demolition debris, and providing readily accessible areas for

recycling by the occupant. The code includes different categories such as energy, water, material, and resource efficiency. These standards include a mandatory set of minimum guidelines, as well as more stringent voluntary measures for new construction projects that local communities can opt into.

Local Regulations

Envision San José 2040 General Plan

The Infrastructure (IC) and the Measurable Environmental Sustainability (MS) sections of the City's General Plan includes the following goals and policies related to recreation that are applicable to the proposed Project:

Goal MS-3 **Water Conservation and Quality:** Maximize the use of green building practices in new and existing development to minimize the use of potable water and to reduce water pollution.

Policy MS-3.1 Require water-efficient landscaping, which conforms to the State's Model Water Efficient Landscape Ordinance, for all new commercial, institutional, industrial, and developer-installed residential development unless for recreational needs or other area functions.

Policy MS-3.2 Promote use of green building technology or techniques that can help reduce the depletion of the City's potable water supply, as building codes permit. For example, promote the use of captured rainwater, graywater, or recycled water as the preferred source for non-potable water needs such as irrigation and building cooling, consistent with Building Codes or other regulations.

Policy MS-3.3 Promote the use of drought tolerant plants and landscaping materials for non- residential and residential uses.

Policy MS-3.4 Promote the use of green roofs (i.e., roofs with vegetated cover), landscape-based treatment measures, pervious materials for hardscape, and other stormwater management practices to reduce water pollution.

Policy IN-3.10 Incorporate appropriate stormwater treatment measures in development projects to achieve stormwater quality and quantity standards and objectives in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit.

Goal MS-6 **Waste Reduction:** Reduce generation of solid and hazardous waste.

Policy MS-6.3 Encourage the use of locally extracted, manufactured or recycled and reused materials, including construction materials and compost.

Policy MS-6.5 Reduce the amount of waste disposed in landfills through waste prevention, reuse, and recycling of materials at venues, facilities, and special events.

Policy MS-6.12 Promote use of recycled materials, including reuse of existing building shells/ elements, as part of new construction or renovations.

Goal MS-14 **Reduce Consumption and Increase Efficiency:** Reduce per capita energy consumption by at least 50% compared to 2008 levels by 2022 and maintain or reduce net aggregate energy consumption levels equivalent to the 2022 (Green Vision) level through 2040.

Policy MS-14.4 Implement the City's Green Building Policies (see Green Building Section) so that new construction and rehabilitation of existing buildings fully implements industry best practices, including the use of optimized energy systems, selection of materials and resources, water efficiency, sustainable site selection, passive solar building design, and planting of trees and other landscape materials to reduce energy consumption.

Goal MS-18 **Water Conservation**: Continuously improve water conservation efforts in order to achieve best in class performance. Double the City's annual water conservation savings by 2040 and achieve half of the Water District's goal for Santa Clara County on an annual basis.

Policy MS-18.4 Retrofit existing development to improve water conservation.

Goal MS-19 **Water Recycling:** Recycle or beneficially reuse 100% of the City's wastewater supply, including the indirect use of recycled water as part of the potable water supply.

Policy MS-19.4 Require the use of recycled water wherever feasible and cost-effective to serve existing and new development.

Zero Waste Resolution

In 2007, the City of San José adopted a Zero Waste Resolution (No. 74077). This resolution set a goal of shifting consumption patterns to achieve 75 percent waste diversion by 2013 and a goal of zero waste by 2022 for the City. Key zero waste objectives that the City included are:

- Improving "downstream" reuse and recycling of end-of-life products and materials to ensure their highest and best use;
- Pursuing "upstream" redesign strategies to reduce the volume and toxicity of discarded products and materials while promoting less wasteful lifestyles;
- Supporting the reuse of discarded products and materials to stimulate and drive local economic workforce development; and
- Preserving land for sustainable development and green industry infrastructure.

Zero Waste Strategic Plan

The Integrated Waste Management Zero Waste Strategic Plan was adopted by the City of San José Environmental Services Department in November 2008. This plan has adopted three phases focusing on education, advocacy, and regulations in order to achieve its goal of diverting 75 percent of waste from landfills. Some aspects that the plan focuses on in the long-term include implementing mixed waste recycling in single-family residential garbage, promoting new energy conversion technologies to convert residual wastes into energy, and strengthening the market for reusable materials.

Private Sector Green Building Policy

The City of San José's Green Building Policy for new private sector construction encourages building owners, architects, developers, and contractors to incorporate meaningful sustainable building goals early in the design process. This policy establishes baseline green building standards for private sector construction and provides a framework for the implementation of these standards. It is also intended to enhance the public health, safety, and welfare of San José residents, workers, and visitors by fostering practices in the design, construction, and maintenance of buildings that will minimize the use and waste of energy, water, and other resources.

2015 Urban Water Management Plan

Water is provided to the Project site by San José Water Company (SJWC). San José Water adopted an UWMP in 2011 as per SB X7-7 and the Urban Water Management Planning Act (Section 10610 of Division 6 of the California Water Code). These plans are prepared every five years and must address the reliability of water sources within the following 20 years as well as other demand management measures and water shortage contingency plans. Additionally, the UWMP identifies strategies to meet requirements under SB X7-7 by reporting on progress towards meeting a 20 percent reduction for per-capita urban water use by the year 2020. The UWMP also plans for emergencies and times of water shortage.

5.19.1.2 Existing Setting

The Project site is located outside of the City's Urban Growth Boundary and Urban Service area, meaning that the City would not extend sewer or water service to the Project site; however, a well and septic system would be allowed.

5.19.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the Project:				
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 or the construction of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple 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. Comply with federal, State, and local management and reduction statutes and regulations related to solid wastes?	☐	☐	☒	☐

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 of which could cause significant environmental effects?

Less Than Significant Impact. As noted above, the Project site is located outside of the City's Urban Growth Boundary and Urban Service Area. Therefore, the proposed Project would include the installation of an on-site water well, water storage tank, septic system and leach field, and stormwater infrastructure. The potential effects of these utilities are evaluated throughout this Initial Study and reduced to less-than-significant levels with implementation of mitigation measures, where necessary.

Electric Power. Pacific Gas & Electric (PG&E) provides electric power service to the areas surrounding the Project site. The proposed Project would include connections to the existing electrical lines within Santa Teresa Boulevard. The project would include solar panels and would be designed as a net-zero home. Therefore, the proposed Project would not require any new electrical infrastructure beyond connections to the existing lines, and this impact would be less than significant.

Natural Gas. PG&E provides natural service to the areas surrounding the Project site. The proposed Project would include connections to the existing natural gas lines within Santa Teresa Boulevard. The project would include the use of a refillable propane tank for heating and cooking. Therefore, the proposed Project would not require any new natural gas infrastructure beyond connections to the existing lines, and this impact would be less than significant.

Telecommunications. Telecommunications is provided by Comcast and AT&T in the vicinity of the Project site. The proposed Project would include connections to the existing telecommunications lines within the Santa Teresa Boulevard right-of-way. Therefore, the proposed Project would not require any new telecommunications infrastructure beyond connections to the existing lines, and this impact 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 years?

Less Than Significant Impact. Refer to Responses 5.10.3(b) and 5.10.3(e). The proposed Project would include the installation of a well and utilizing groundwater beneath the Project site. The proposed Project's demand for water would be minimal compared to the water demand within the Santa Clara Subbasin, and this impact would be less than significant. No mitigation would be required.

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?

No Impact. The proposed Project would treat all wastewater on-site by using a septic system and leach field. Therefore, the proposed Project would have no impact related to wastewater treatment capacity.

d. Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Construction waste is anticipated to be minimal compared to waste generated throughout the lifetime of the Project during Project operation. The proposed Project would generate approximately 12.23 pounds of solid waste per day during Project operation. Solid waste generation rates are based upon California Department of Resources Recycling and Recovery (CalRecycle) values for warehouse waste generation sources.[72] The incremental increase of solid waste generated by the proposed Project would constitute less than 0.001 percent of the existing daily disposal (625 tons per day [tpd]) at the Newby Island Sanitary Landfill. Furthermore, permitted maximum tonnage is 4,000 tons per day.[73] Therefore, solid waste generated by the proposed Project would not cause the capacity of the Newby Island Sanitary Landfill to be exceeded. The proposed Project would result in a less than significant impact to the generation of 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, and no mitigation would be required.

[72] CalRecycle. Solid Waste Characterization Home. Website: www2.calrecycle.ca.gov/WasteCharacterization (accessed July 20, 2020).

[73] San José, City of. 2015. Newby Island Sanitary Landfill. Solid Waste Facility Permit. February 5, 2015.

e. Would the Project comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed Project would comply with existing and future statutes and regulations, including waste diversion programs mandated by City, State, or federal law. In addition, as discussed above, the proposed Project is the development of one single-family residential units. Therefore, operationally, the proposed Project would not result in an excessive production of solid waste that would exceed the capacity of the existing landfill serving the Project site. Therefore, the proposed Project would not result in an impact related to federal, State, and local management and reduction statutes and regulations related to solid wastes, and no mitigation would be required.

5.19.3 Conclusion

Less Than Significant Impact. The proposed Project would not require construction of new off-site facilities for wastewater treatment, storm drainage, water, waste disposal, telecommunications, natural gas, or electric power. Existing facilities have the capacity to serve the anticipated uses, and the Project would not substantially increase demand upon these facilities compared to existing conditions. No mitigation would be required.

5.20 WILDFIRE

5.20.1 Environmental Setting

5.20.1.1 Regulatory Framework

Federal and State Regulations

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) publishes maps that predict the threat of fire for each county within the State. Local Responsibility Areas and State or Federal Responsibility Areas are classified as either very high fire hazard severity zones (VHFHSZ) or non-VHFHSZ based on factors including fuel availability, topography, fire history, and climate. The 2012 Strategic Fire Plan for California was generated by CAL FIRE to provide guidelines and objectives in order to account for associated fire impacts.

California Fire Code

Chapter 17.12 of the City of San José's (City) Municipal Code adopts the California Fire Code by reference, which is updated every three years. The California Fire Code includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas.

California Emergency Management Agency

The California Emergency Management Agency (CalEMA) was consolidated as part of the Governor's Office on January 1, 2009, merging the former Governor's Office of Emergency Services with the existing Governor's Office of Homeland Security. CalEMA coordinates all State agency response to major disasters to provide support and hazard mitigation efforts for local governments. The agency also ensures the State has the appropriate resources and plans in order to respond in the event of all natural and human-induced emergencies and disasters.

Executive Order N-05-19

On January 9, 2019, Gov. Gavin Newsom announced an E.O. that requires CAL FIRE and other State agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. The E.O. requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

Local Regulations

Envision San José 2040 General Plan

The Environmental Considerations/Hazards (EC) and Parks, Open Space, and Recreation (PR) sections of the City's General Plan include the following goals and policies related to wildfire that are applicable to the proposed Project.

Policy EC-8.1 Minimize development in very high fire hazard zone areas. Plan and construct permitted development so as to reduce exposure to fire hazards and to facilitate fire suppression efforts in the event of a wildfire.

Policy EC-8.2 Avoid actions which increase fire risk, such as increasing public access roads in very high fire hazard areas, because of the great environmental damage and economic loss associated with a large wildfire.

Policy EC-8.3 For development proposed on parcels located within a very high fire hazard severity zone or wildland-urban interface area, implement requirements for building materials and assemblies to provide a reasonable level of exterior wildfire exposure protection in accordance with City-adopted requirements in the California Building Code.

Policy EC-8.4 Require use of defensible space vegetation management best practices to protect structures at and near the urban/wildland interface.

Action EC-8.5 Periodically assist with revisions and updates of appropriate sections of the County-wide Area Plan that address emergency response to fires at the urban/ wildland interface.

Action EC-8.6 Provide information to the public on fire hazard reduction in cooperation with local, regional, and state agencies, including the County of Santa Clara FireSafe Council.

San José Emergency Operations Plan

Under State law, local governments are required to create and administer an Emergency Operations Plan (EOP) under the guidelines provided by the Federal Emergency Management Agency (FEMA). The State Office of Emergency Services (OES) adopts these emergency management guidelines for business activities in the Emergency Operations Center (EOC). The *City of San José Emergency Operations Plan* was adopted in 2004 and was updated most recently on May 15, 2016.

5.20.1.2 Existing Setting

According to the CAL FIRE Very High Fire Hazard Severity Zone Map for the Santa Clara County Region, a portion of the Project site is located within a State Responsibility Area (SRA) for fire service and a High Fire Hazard Severity Zone.[74]

5.20.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
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?	☐	☐	☐	☒

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The Project site is not located within a Very High Fire Hazard Severity Zone, but is located within an SRA. However, as noted in Section 5.9.3(f), the proposed Project would not impair the implementation of, or physically interfere with, an adopted emergency response plan. Therefore, this impact would be less than significant.

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?

Less Than Significant Impact. As described in Section 5.9.3(f), the proposed Project would be required to implement fire resistant building materials and maintain defensible space vegetation consistent with the City's Municipal Code and the CBC. Therefore, the proposed Project would not exacerbate wildfire risks, and this impact would be less than significant.

[74] State of California. Department of Forestry and Fire Protection, Office of the State Fire Marshal. Fire Hazard Severity Zones Maps, Santa Clara County. State and Local Responsibility Areas. Website: https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/ (accessed June 2020).

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?

Less Than Significant Impact. The proposed Project would include the installation of an approximately 1,400-foot-long driveway that would provide access from Santa Teresa Boulevard to the proposed building, a well that would provide water to the proposed residence, and stormwater and wastewater infrastructure, including a leach field. New utilities installed on the Project site are not anticipated to exacerbate fire risk, as they would generally be installed underground and would not require maintenance that would result in ongoing impacts to the environment. Maintenance activities for new utility infrastructure would generally consist of inspection and cleaning of catch basins and storm drain cleanouts, which would not require any excavation or temporary construction activities to perform. The maintenance of a private driveway would also not exacerbate fire risks as maintenance activities would generally consist of cosmetic repairs and the driveway would be relatively small compared to the size of the Project site. Additionally, because the driveway would be located within the County parcel, the Project applicant would be required to clear and maintain vegetation (i.e., with a gravel base, or similar application) within 30 to 50 feet of the driveway pursuant to the County's fire code. The proposed Project would also be required to be reviewed by the County Fire Marshall to ensure the appropriate fire protection measures are in place. Therefore, with compliance with existing regulations, this impact would be less than significant.

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?

Less Than Significant Impact. As described in Section 5.10.3, Hydrology and Water Quality, the portions of the Project site that would be modified by the proposed Project would be treated by on-site stormwater infrastructure, and the drainage patterns on the majority of the Project site would not change. In addition, the proposed Project would include BMPs during construction and operation to ensure the Project site would not be subject to erosion. Therefore, this impact would be less than significant, and no mitigation would be required.

5.20.3 Conclusion

No Impact. With compliance with existing regulations, implementation of the proposed Project would not result in impacts related to wildfires in San José. No mitigation would be required.

5.21 MANDATORY FINDINGS OF SIGNIFICANCE

5.21.1 Environmental Setting

5.21.1.1 Regulatory Framework

Refer to the Regulatory Framework sections (at the beginning of each environmental section) that are provided in throughout Section 5.0 of this Initial Study.

5.21.1.2 Existing Setting

The Project site consists of an undeveloped hillside. No portion of the Project site or the immediately surrounding area contains an open body of water that serves as natural habitat in which fish could exist. Likewise, the Project site is not suitable to support special-status species, and no known candidate, sensitive, or special-status species are known to inhabit the site.

5.21.2 Checklist and Discussion of Impacts

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)	☐	☐	☒	☐
c. Does the Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a. Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporated. Due to the lack of suitable habitat, impacts to candidate, sensitive, or special-status plant and animal species would be less than significant. Based on the Project Description and the preceding responses, development of the proposed Project does not have the potential to degrade the quality of the natural environment. Implementation of the proposed Project would include the removal of some non-native landscaping

and mature trees. The existing on-site trees may, however, provide suitable habitat for nesting birds, some of which are protected by the Migratory Bird Treaty Act (MBTA). Disturbing or destroying active nests that are protected is a violation of the MBTA. In addition, nests and eggs are protected under California Fish and Game Code Section 3503. Incorporation of Mitigation Measure BIO-1, Mitigation Measure BIO-2, Mitigation Measure BIO-3, in Section 5.4, Biological Resources, would ensure that the Project complies with the MBTA and requires nesting bird surveys if vegetation and tree removal occur between February 15 and August 31 to reduce potential Project impacts related to migratory birds. Further, the proposed Project would comply with Standard Permit Conditions, also outlined in Section 5.4, Biological Resources, to limit impacts to on-site trees following implementation of the Project and to ensure compliance with the SCVHP. With Incorporations of Mitigation Measure BIO-1, Mitigation Measure BIO-2 and Mitigation Measure BIO-3, and adherence to Standard Permit Conditions, potential impacts to biological resources would be less than significant.

Although there is little potential for the Project to impact prehistoric resources due to significant prior disturbance from past grading and development activities, Project construction would require grading and excavation activities that may extend into native soils. Standard Permit Conditions outlined in Section 5.5, Cultural Resources, require construction to halt, in the unlikely event archaeological or historic resources are discovered, until a qualified archaeologist can evaluate the find. In the event that human remains are discovered during construction, Standard Permit Conditions, also outlined in Section 5.5, Cultural Resources, require notification of the proper authorities and adherence to standard procedures for the respectful handling of human remains. The potential for paleontological resources on the Project site is considered low because the soils on the Project site are known to have a low sensitivity for paleontological resources. In the unlikely event that fossil remains are encountered on the site, compliance with Standard Permit Conditions, outlined in Section 5.7, Geology and Soils, requires construction to halt in the event a paleontological resource is discovered until a qualified paleontologist can evaluate the find. Compliance with Standard Permit Conditions would reduce any potential impacts to previously undiscovered cultural resources, human remains, or paleontological resources to a less than significant level. No mitigation would be required.

Standard Permit Conditions and Conditions of Approval:Refer to Mitigation Measure BIO-1, Mitigation Measure BIO-2, Mitigation Measure BIO-3 in Section 5.4, Biological Resources; and Standard Permit Conditions outlined in Section 5.5, Cultural Resources and Section 5.7, Geology and Soils. *b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)*

Less Than Significant Impact. The proposed Project involves the construction of one single-family residential use. The proposed Project would rely on and can be accommodated by the existing road system, public parks, public services, and utilities. Based on the Project Description and the preceding responses, impacts related to the proposed Project are less than significant or can be reduced to less than significant levels with incorporation of Standard Permit Conditions and

Conditions of Approval. The proposed Project's contribution to any significant cumulative impacts would be less than cumulatively considerable.

c. Does the Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant. The proposed Project involves the construction of one single-family residential use. The proposed Project would be consistent with all applicable zoning regulations. Therefore, the proposed Project would not require or necessitate a Zone Change, a Zoning Variance, or a General Plan Amendment. Furthermore, the proposed Project would result in less than significant impacts with respect to GHG emissions. As stated previously, the proposed Project would also result in less than significant impacts with respect to aesthetics, air quality, biological, archaeological, paleontological, and tribal cultural resources with implementation of the Standard Permit Conditions listed below. Additionally, the proposed Project would result in less than significant impacts with respect to geological hazards and hazardous materials with implementation of the Conditions of Approval listed below. Project-related impacts with respect to hydrology and water quality, public services, noise, and traffic would also be less than significant with the incorporation of Standard Permit Conditions and Conditions of Approval listed below. Based on the Project Description and the preceding responses, development of the proposed Project would not cause substantial adverse effects to human beings because all potentially significant impacts of the proposed Project would be reduced to a less than significant level through the implementation of the Standard Permit Conditions and Conditions of Approval below.

Standard Permit Conditions and Conditions of Approval:Refer to Standard Permit Conditions in Section 5.3, Air Quality; Standard Permit Conditions and Mitigation Measure BIO-1, Mitigation Measure BIO-2, and Mitigation Measure BIO-3 in Section 5.4, Biological Resources; Standard Permit Conditions in Section 5.5, Cultural Resources; Standard Permit Conditions in Section 5.7, Geology and Soils; Standard Permit Conditions in Section 5.10, Hydrology and Water Quality; and Standard Permit Conditions in Section 5.13, Noise. **Conclusion**

Less Than Significant. The proposed Project would result in less than significant environmental impacts with implementation of Standard Permit Conditions and Conditions of Approval outlined in Section 5.1, Aesthetics; Section 5.3, Air Quality; Section 5.4, Biological Resources; Section 5.5, Cultural Resources; Section 5.7, Geology and Soils; Section 5.9, Hazards and Hazardous Materials; Section 5.10, Hydrology and Water Quality; and Section 5.13, Noise. No mitigation would be required.

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