

DRAFT
Stonebridge Subdivision Project
Initial Study/Mitigated Negative Declaration
2220 Fulton Road
City of Santa Rosa, Sonoma County, California

Prepared for:
City of Santa Rosa
Planning and Economic Development
100 Santa Rosa Avenue, Room 10
Santa Rosa, CA 95404
707.543.4692

Contact: Kristinae Toomians

Prepared by:
FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Liza Baskir, Project Manager

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ACRONYMS AND ABBREVIATIONS

µg/m ³	micrograms per cubic meter
°F	degrees Fahrenheit
°C	degrees Celsius (Centigrade)
AAF	age-specific adjustment factor
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AEP	Association of Environmental Professionals
AFY	acre-feet per year
APN	Assessor's Parcel Number
AQP	air quality plan
ARB	California Air Resources Board
ASF	age sensitivity factor
AT	averaging time
BAAQMD	Bay Area Air Quality Management District
BMP	Best Management Practice
BRA	Biological Resources Analysis
CA-MUTCD	California Manual on Uniform Traffic Control Devices
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CBC	California Building Standards Code
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Survey

Acronyms and Abbreviations

CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPF	cancer potency factor
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBR	daily breathing rate
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
DPS	Distinct Population Segment
DU	dwelling unit
DU/acre	dwelling unit per acre
DWR	California Department of Water Resources
ED	Exposure Duration
EF	Exposure Frequency
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GIS	Geographic Information System
GPCD	gallons per capita per day
GPD	gallons per day
HRA	Health Risk Assessment
HRE	Historic Resources Evaluation
in/sec	inch per second
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	kilo-British Thermal Unit
kWh	kilowatt-hour
L _{dn}	day/night average sound level
L _{eq}	equivalent continuous sound level
L _{max}	maximum noise/sound level

LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L _{max}	maximum instantaneous noise level
LOS	Level of Service
LRA	Local Responsibility Area
M&A	Monk & Associates
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MIR	Maximum Impacted Sensitive Receptor
MLD	most likely descendant
MM	Mitigation Measure
mph	miles per hour
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSA	Metropolitan Statistical Area
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO ₂	nitrogen dioxide
NO _x	oxides of nitrogen
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
OEHHA	California Office of Environmental Health Hazards Assessment
OHP	California Office of Historic Preservation
OPR	Governor's Office of Planning and Research
PD	Planned Development
PG&E	Pacific Gas and Electric Company
PM ₁₀	particulate matter, including dust, 10 micrometers or less in diameter
PM _{2.5}	particulate matter, including dust, 2.5 micrometers or less in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
REL	Reference Exposure Level
RHNA	Regional Housing Needs Assessment
rms	root mean square

Acronyms and Abbreviations

ROG	reactive organic gases
RPS	renewables portfolio standard
RWQCB	Regional Water Quality Control Board
Sonoma Water	Sonoma County Water Agency
SMARA	California Surface Mining and Reclamation Act
SO ₂	sulfur dioxide
SO _x	sulfur oxide
SR	State Route
SRA	State Responsibility Area
SRFD	Santa Rosa Fire Department
SRPD	Santa Rosa Police Department
SUSMP	Standard Urban Storm Water Mitigation Plan
SWITRS	Statewide Integrated Traffic Records System
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TAH	time at home factor
TCR	Tribal Cultural Resource
TIS	Traffic Impact Study
UGB	Urban Growth Boundary
USACE	United States Army Corp of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WBWG	Western Bat Working Group
WELO	Water Efficient Landscape Ordinance
WUI	Wildland-Urban Interface
WWTP	Wastewater Treatment Plant

SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts from implementation of the Stonebridge Subdivision Project (proposed project) in the City of Santa Rosa, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Santa Rosa is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the proposed project. The City has discretionary authority over the project. The intended use of this document is to identify potential environmental impacts that would occur from implementation of the proposed project and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the proposed project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation and elaborates on the information contained in the environmental checklist, along with justification for the responses provided in the environmental checklist.

1.2 - Project Location

The project site is located in the City of Santa Rosa, in Sonoma County, California (Exhibit 1). The project site is located in the northwest area of the City adjacent to Fulton Road. The project site is bound by Fulton Road (west), low-density residential homes (north), existing Woodbridge Reserve (northeast), rural residential ranchettes¹ (east), and medium low-density residential homes (south) (Exhibit 2). The project site consists of Assessor's Parcel Number (APN) 034-030-070 (2220 Fulton Road). Specifically, the project site is located on the *Sebastopol, California* United States Geological Survey (USGS) 7.5-minute Topographical Quadrangle, Township 7 North, Range 8 West, Section 5 Mount Diablo Base Meridian (Approximately Latitude 38° North 28' 30.83" and Longitude 122° West 46' 4.15").

1.3 - Environmental Setting

The 28.6-acre project site consists of undeveloped land with one existing single-family home and related outbuildings on the southwest corner of the site (Exhibit 3). To the west of Fulton Road is unincorporated Sonoma County land developed with very low-density residential uses. Adjacent to the project site, Fulton Road demarcates the City of Santa Rosa's western Urban Growth Boundary (UGB). A single-family home on Fulton Road, single-family homes as part of the existing Woodbridge subdivision, and the Woodbridge Reserve are located directly north of the project site and form the northern boundary. Jack London Elementary School and Jack London School Park are located approximately 0.2 mile north of the project site. Rural residential ranchettes and undeveloped land is located east of the project site. Multiple-family homes are also located directly south of the

¹ The developments to the east of the project site are older housing stock than the developments to the north of the project site.

project site. The Northwestern Pacific Railroad corridor is located approximately 0.5 mile to the northeast. The site is essentially flat and ranges in elevation from a maximum of 142 feet to a minimum of 139 feet above mean sea level (MSL). Habitats on the project site are upland, non-native annual grassland with interspersed seasonal wetlands.

The project site contains 6.31 acres of seasonal wetlands. The project site is known to contain two special-status plant species including Burke's goldfields (*Lasthenia burkei*) and Lobb's buttercup (*Ranunculus lobbii*). The project site contains 32 trees of various species including valley oak (*Quercus lobata*), coast redwood (*Sequoia sempervirens*), weeping willow (*Salix babylonica*), flowering pear (*Pyrus calleryana*), black walnut (*Juglans nigra*), silver maple (*Acer saccharinum*), plum (*Prunus cerasifera*), apple (*Malus domestica*), Deodar cedar (*Cedrus deodara*), honey locust (*Gleditsia triancanthos*), red gum eucalyptus (*Eucalyptus camaldulensis*), and Italian stone pine (*Pinus pinea*).²

1.3.1 - Existing Land Use and Zoning

The project site is designated Low Density Residential by the Santa Rosa General Plan 2035 (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). The Low-Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 dwelling units (DU) per gross acre.³ The Planned Development (PD) zoning designation is intended to implement all types of General Plan land use classifications.

1.4 - Project Description

As shown in Exhibit 6, the proposed project would consist of two subdivided parcels: Parcel 1 (West Parcel) and Parcel 2 (East Parcel). The 14.6-acre West Parcel would contain 105 single-family residential units (7.19 DU per acre [DU/acre]) with related roadways, parking spaces, and stormwater treatment area. The 105 residential units would include five pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98. These single-family attached homes would be price-restricted to be affordable to moderate-income households. No development would occur on the 14.0-acre East Parcel. The total project density would be 3.7 DU/acre. The 14.0-acre East Parcel would act as on-site mitigation by preserving and enhancing existing wetlands and creating new wetlands for the benefit of Burke's goldfields, a State and federally listed endangered species. The two parcels would be separated by a project roadway and fencing. Table 1 provides a summary of the project components.

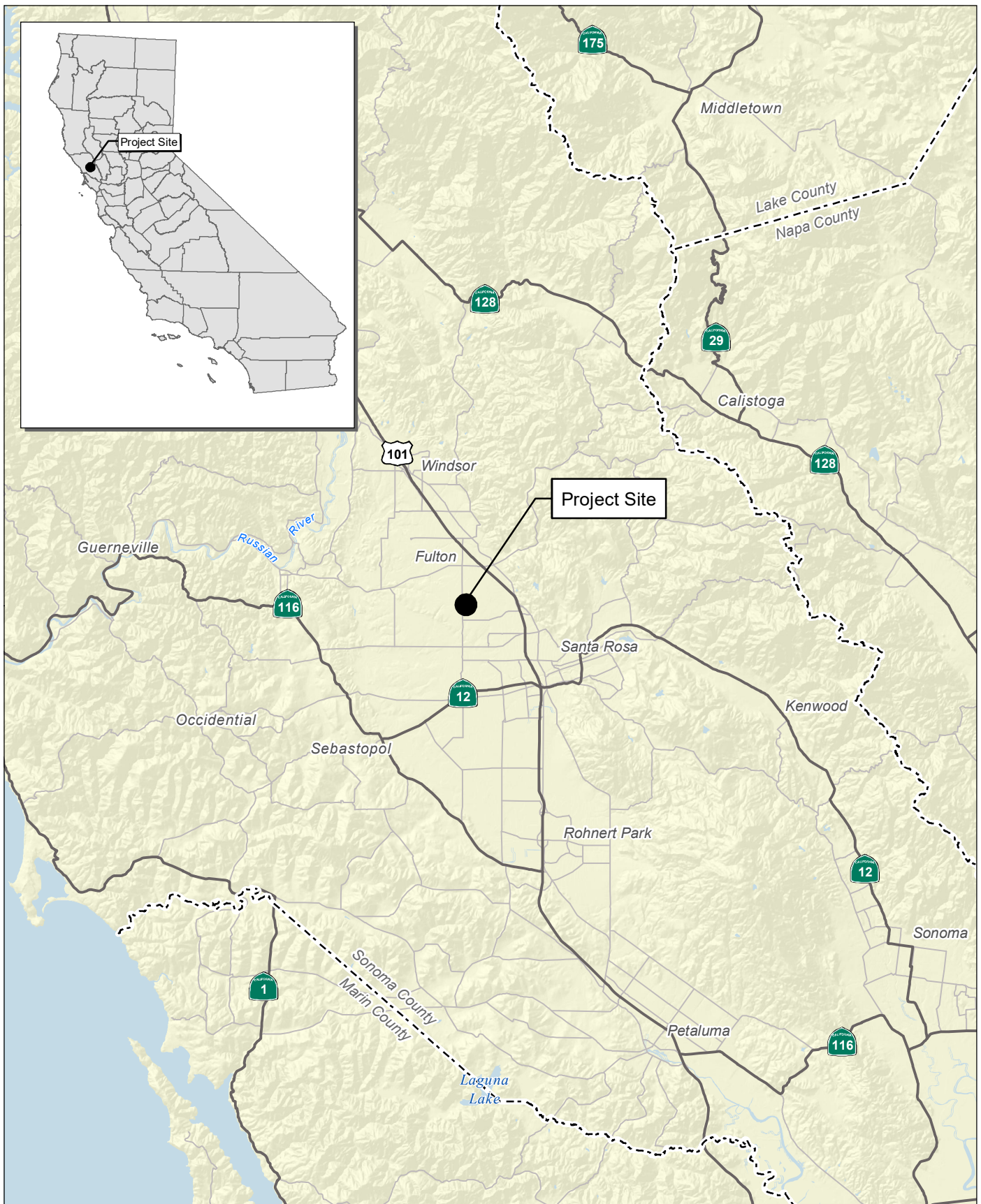
Table 1: Project Components

Project Portion	Acreage	Description
West Parcel	14.60	105 Single-family residential units
Stormwater Treatment Facility	0.45 (included as part of the total West Parcel acreage)	Biofiltration basin for treatment of stormwater prior to off-site release
East Parcel	14.0	Existing, enhanced, and new wetland habitat for Burke's goldfields
Total	28.6	—

Source: Civil Design Consultants, Inc., 2019.

² Horticultural Associates. 2019. Tree Preservation and Mitigation Report, 2220 Fulton Road. May 2019.

³ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 2-9. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>. Accessed March 10, 2020.



Source: Census 2000 Data, The CaSIL

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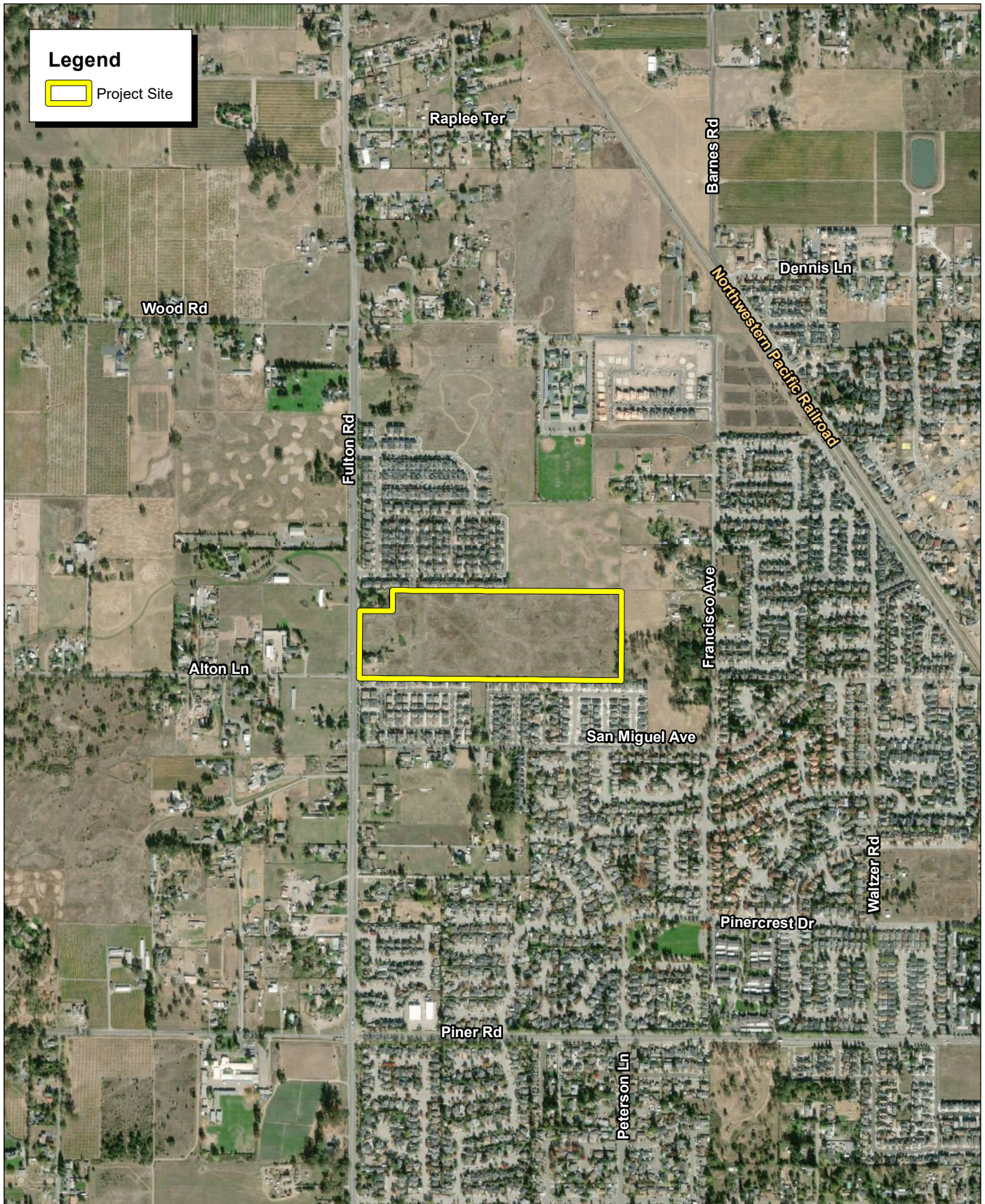


5 2.5 0 5
Miles

Exhibit 1

Regional Location Map

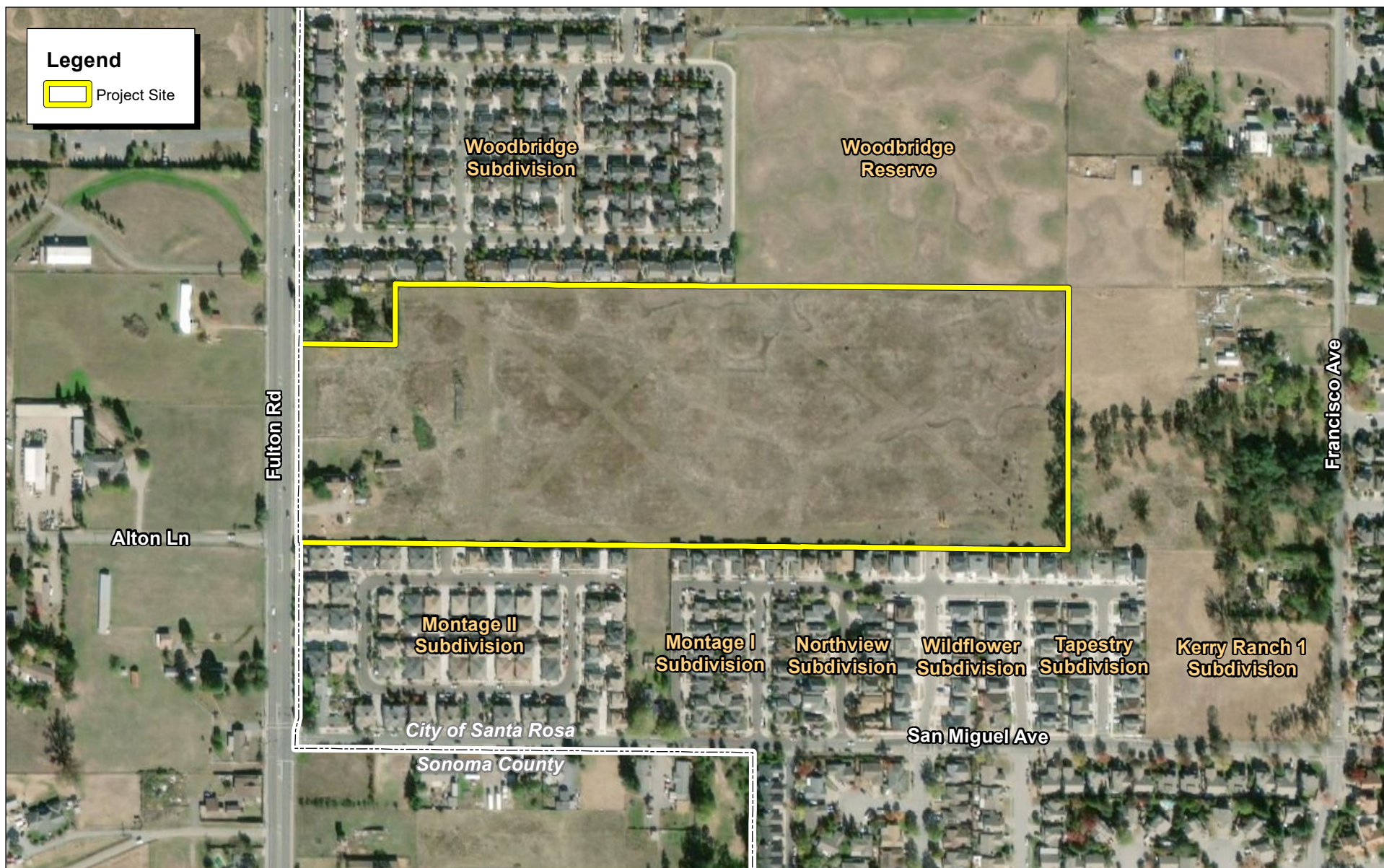
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Source: ESRI Aerial Imagery.



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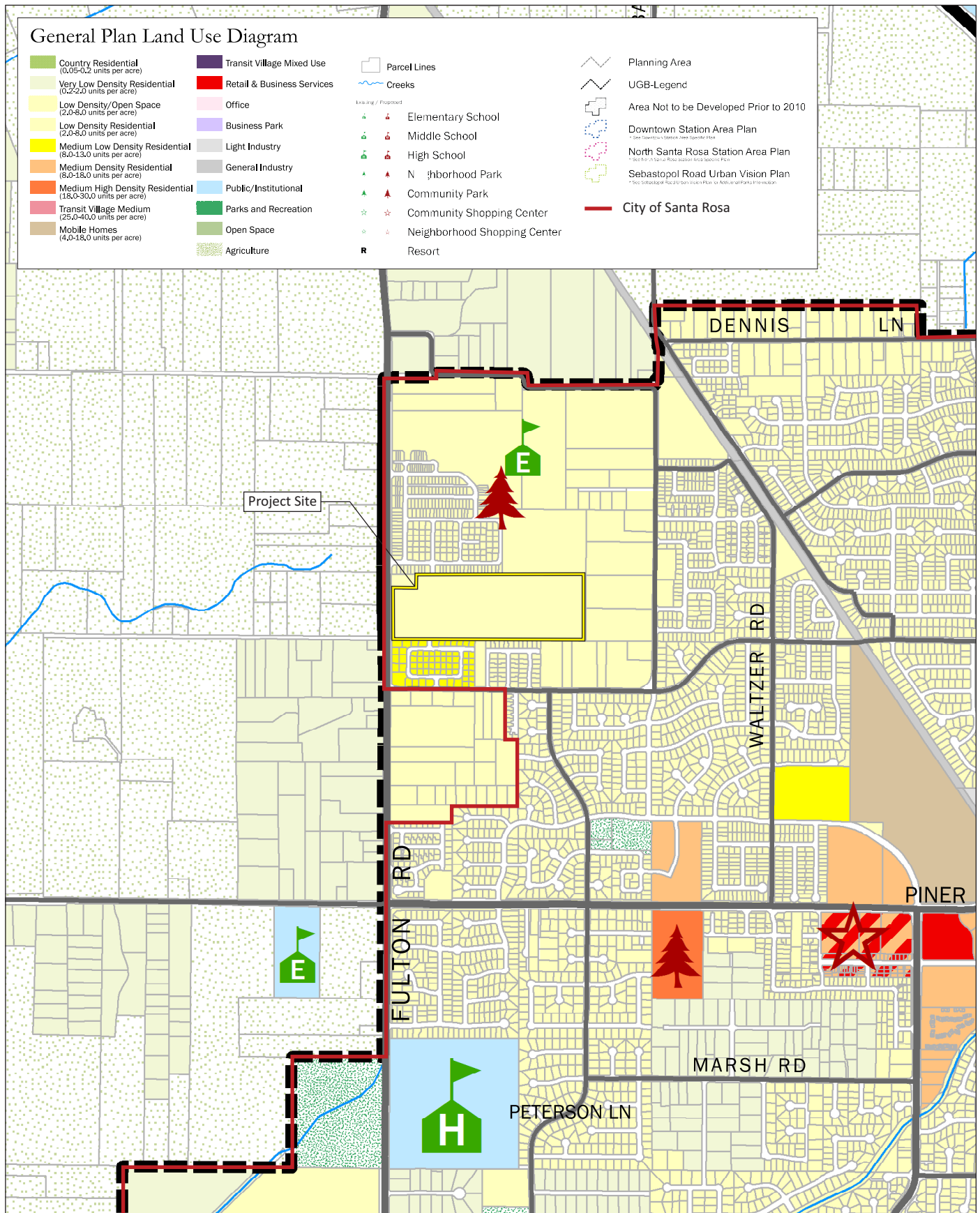


Source: ESRI Aerial Imagery.

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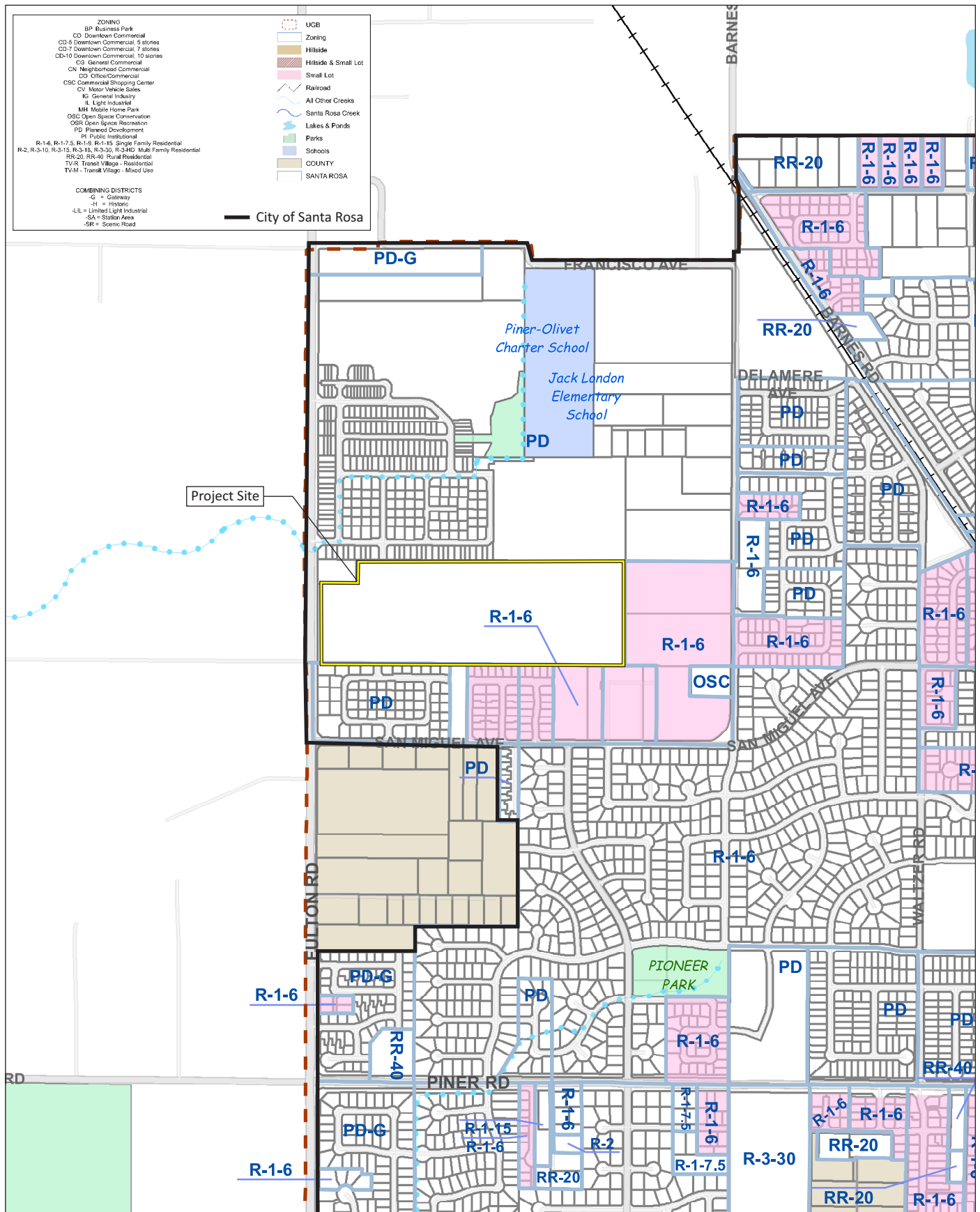
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Source: City of Santa Rosa General Plan Land Use Map, March 2016.



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Source: City of Santa Rosa Zoning Map, August 2015.



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Source: Civil Design Consultants, Inc., November 26, 2019.



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Wetlands Enhancement and Creation

The United States Army Corps of Engineers (USACE) verified 6.31 acres of seasonal wetlands on the project site. The proposed project would result in the fill of 2.52 acres of seasonal wetlands. In addition, 0.13-acre of seasonal wetlands would be permanently filled within the East Parcel as necessary to enhance the functions and services of wetlands within the East Parcel (total = 2.65 acres of permanent fill). Specifically, wetland hydrology that currently pools against the adjacent development's retaining walls will be recontoured into a naturalistic vernal pool configuration and this would require filling 0.13-acre of the 3.79 acres of wetlands that currently occur within the East Parcel. Finally, 0.484-acre of existing seasonal wetland in the East Parcel that currently supports Burke's goldfields will be avoided/protected during the implementation of the wetland creation/enhancement project.

To meet the USACE policy of "no net loss," approximately 1.766 acres of new wetlands are proposed to be created in existing upland habitats in the East Parcel. In addition, the project applicant will purchase 0.89-acre of wetland credits from a USACE (and Regional Water Quality Control Board [RWQCB]) approved Wetland Mitigation Bank. The total creation plus purchase of credit, totals 2.65 acres and meets the USACE no net loss policy or 1:1 impact to mitigation ratio.

In addition, approximately 3.267 acres of existing wetland in the East Parcel will be recontoured (enhanced) to improve hydrology and functions such that the enhanced wetlands will promote/support colonization by the State and federally listed vernal pool plant Burke's goldfields. Within the East Parcel, wetlands that are not occupied by Burke's goldfields would be enhanced to provide conditions that promote establishment of Burke's goldfield colonies. In total, after the enhancement, the East Parcel that currently supports 3.79 acres of wetlands will be able to support 5.52 acres of enhanced wetlands. Enhancing 3.267 acres of wetlands exceeds a 1:1 impact to mitigation ratio. Thus, the proposed project would enhance 3.267 acres (which exceeds 1:1 impacts to enhancement ratio). All together the proposed project would exceed a 2:1 overall replacement/enhancement to impact ratio.

1.4.1 - Demolition and Removal

The proposed project would demolish the existing 1,824-square-foot single-family home and related outbuildings in the southwest portion of the project site in preparation for grading. A total of 10 trees would be removed from the West Parcel.⁴

1.4.2 - Land Uses

West Parcel

The proposed project would develop 105 single-family residential units on the 14.6-acre West Parcel (Exhibit 7). The residential units would be 2-stories with a maximum height of 35 feet. To accommodate this development, 2.52 acres of existing wetlands in the West Parcel would be filled.

⁴ Horticultural Associates. 2019. Tree Preservation and Mitigation Report, 2220 Fulton Road. Page 2.

Project housing would be composed of six different plans with an average lot size of 4,203 square feet. The six different plans would exhibit a mixture of farmhouse, traditional and craftsman architectural styles. The proposed setbacks are summarized in Table 2.

Table 2: Proposed Setbacks

Project Component	Setback ^a
Porch	7.5 feet
Building—Front	10 feet
Building—Rear	15 feet
Build—Side	0 or 4 feet
Garage—Front	19 feet
Note: ^a Setbacks measured from back of sidewalk or property line, whichever is most restrictive. Source: Civil Design Consultants, Inc., 2019.	

Parking

As summarized in Table 3, the proposed project would provide 140 on-street spaces, 210 garage covered spaces, and 210 uncovered driveway spaces within the West Parcel. In total, the proposed project would provide 560 parking spaces with an average of 5.3 spaces per unit. Each garage would contain parking for two vehicles.

Table 3: Project Parking

Parking Type	Number
On-street	140
Garage (Covered)	210
Driveway (Uncovered)	210
Total	560
Total Per Unit	5.3
Source: Civil Design Consultants, Inc., 2019.	

Circulation

Primary vehicular access to the project site would be provided from Fulton Road. Two secondary points of access would be provided via an extension of Andre Lane. One access point would be provided from the Woodbridge subdivision to the north and the second access point would be provided via Orleans Street from the Montage II subdivision to the south (see Exhibit 6). Within the project area, the circulation plan would include a hierarchy of minor streets. Most of the streets would include a 6-foot-wide planter/parkway strip behind the curbs on both sides of the right-of-way and a 5-foot-wide sidewalk behind the planter strip.

Utilities

Water and Wastewater

The proposed project would connect 12-inch water lines and 8-inch sanitary sewer lines to existing 12-inch water and sanitary sewer lines located within Fulton Road. Water and wastewater services would be provided by the City of Santa Rosa.

Storm Drainage

The proposed project would include a stormwater treatment facility in the northwest corner of the project site. The proposed project would include new stormwater drainage lines of various diameters within the project site that would convey all project stormwater to the new treatment area. The treatment area would consist of a stormwater biofiltration basin where stormwater would be treated using Best Management Practices (BMPs) before being discharged off-site to the existing storm drain system in Fulton Road and ultimately to the Laguna de Santa Rosa flow control facility.

Electricity, Natural Gas, and Telecommunications

The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by Pacific Gas and Electric (PG&E). Natural gas services would be provided by PG&E. Local telephone service would be provided by AT&T and cable television would be provided by Comcast.

East Parcel

The 14.0-acre East Parcel contains habitat that supports Burke's goldfields, a federally and State listed endangered species (Exhibit 8). The entire 14.0-acre East Parcel would be preserved in perpetuity including the enhancements of the East Parcel's wetlands and special-status species habitat (described above). The East Parcel is intended to become part of a local larger preservation area that includes the 12.6-acre Woodbridge Reserve to the north and the proposed 4.2-acre Kerry II & III preserve to the east.

1.4.3 - Project Schedule and Phasing

The proposed project would likely be developed over a 3- to 5-year period, within as many as seven project phases. Approximately 15 to 30 houses would be constructed in each phase, and each phase is estimated to take 1 to 2 years to construct and sell. The proposed project could begin construction as soon as 12 months after receiving project approvals. As such, full build-out is anticipated to occur between 2023 and 2028. For the purposes of this analysis, and to provide a worst-case scenario, it is assumed that construction would occur over 2.5 years starting in 2021 and ending in 2023.

1.4.4 - Proposed Land Use Designation and Zoning

At 3.7 units/acre, the proposed project would conform with the existing Low-Density Residential designation. The existing PD zoning allows flexibility with respect to use, building types, lot size, and open space, while ensuring the proposed project complies with Santa Rosa General Plan 2035 and requirements as set forth in the Santa Rosa City Code. The proposed project would maintain the existing Low-Density Residential land use designation and PD zoning. The proposed project qualifies as a residential small lot subdivision (Chapter 20-42.140 of the Santa Rosa City Code) and would require a Conditional Use Permit pursuant to Chapter 20-42.140, Sections (C), (D), and (E). In

addition, the proposed project would adhere to the site planning and project design standards pursuant to Chapter 20-42.140, Section (F).⁵

1.5 - Required Discretionary Approvals

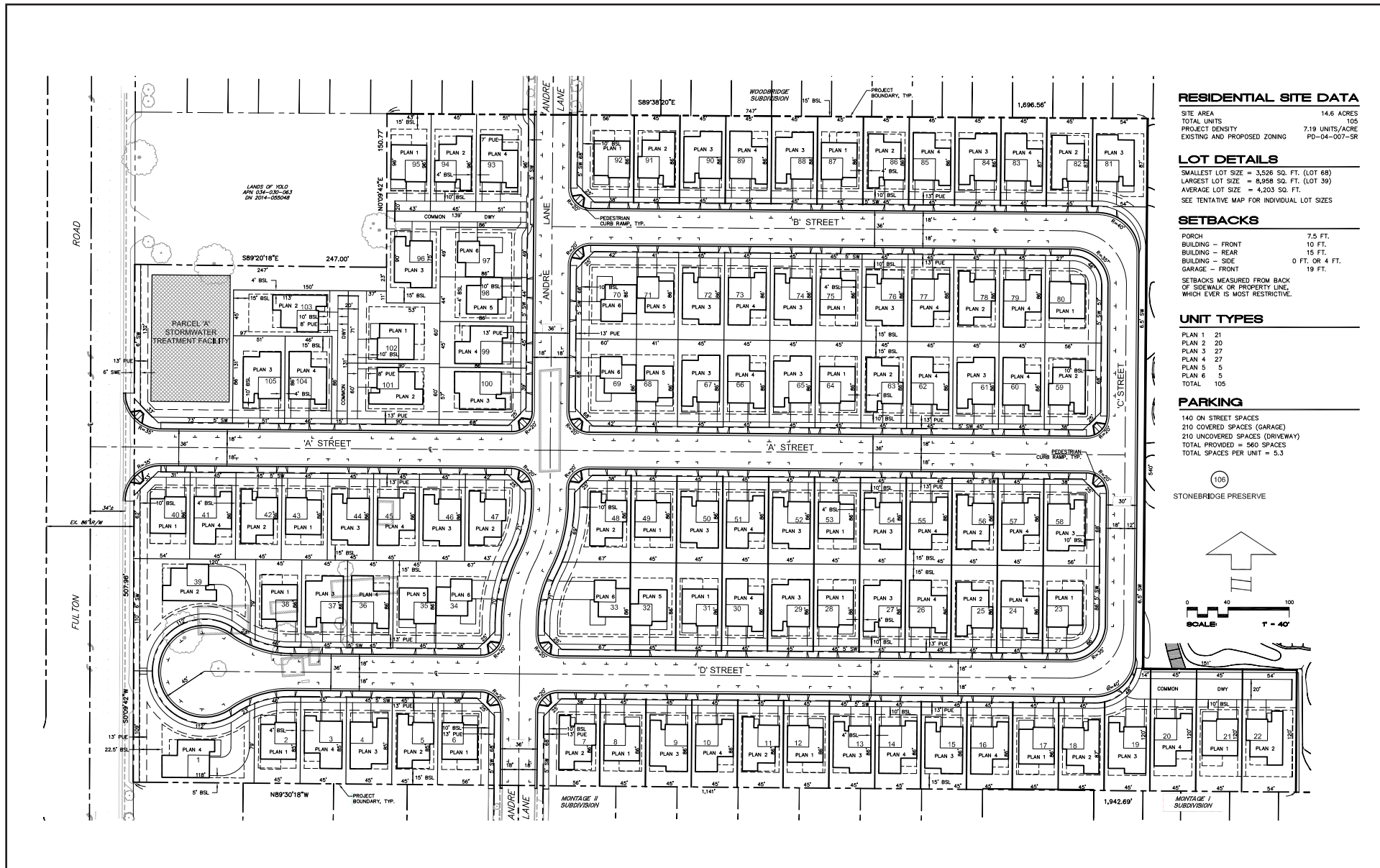
- Conditional Use Permit (City of Santa Rosa)
- Tentative Subdivision Map (City of Santa Rosa)
- Biological Opinion and Incidental Take Authorization (United States Department of Fish and Wildlife Service)
- Section 404 Permit (United States Army Corps of Engineers)
- Incidental Take Permit (California Department of Fish and Wildlife)
- Section 401 Certification (North Coast Regional Water Quality Control Board)

1.6 - Intended Uses of this Document

This Draft IS/MND has been prepared to identify potential environmental impacts that would occur from implementation of the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which period comments concerning the analysis contained in the Draft IS/MND should be sent to:

Kristinae Toomians, Senior Planner
Planning and Economic Development
100 Santa Rosa Avenue, Room 3
Santa Rosa, CA 95404
Phone: 707.543.4692
Email: ktoomains@srcity.org

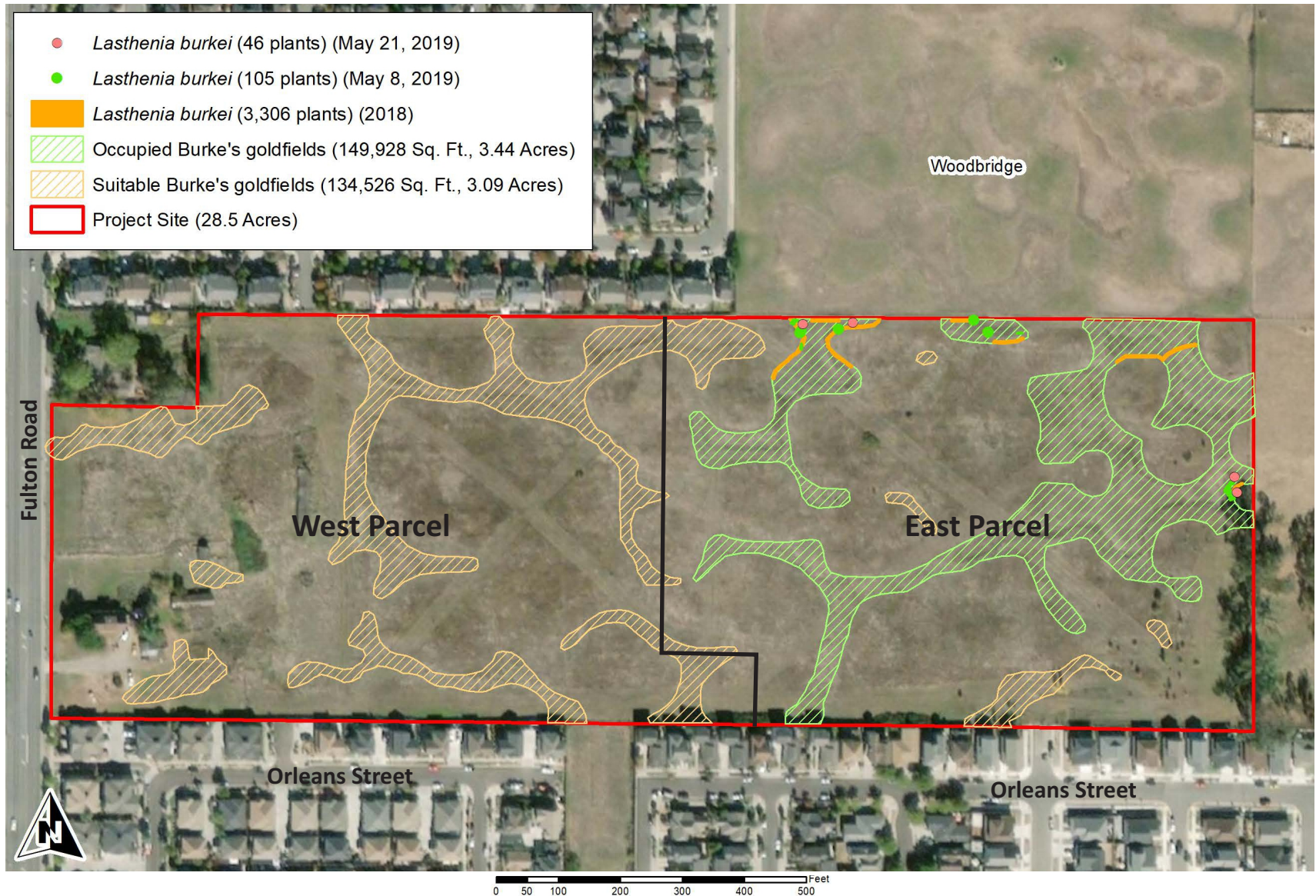
⁵ City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Sections (B), (C), (D), and (F). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.



Source: Civil Design Consultants, Inc., August 13, 2019.



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Source: Monk & Associates, June 18, 2019.

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SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected			
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.			
<input type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture and Forestry Resources	<input checked="" type="checkbox"/> Air Quality	
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy	
<input checked="" type="checkbox"/> Geology/Soils	<input checked="" type="checkbox"/> Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hazards/Hazardous Materials	
<input type="checkbox"/> Hydrology/Water Quality	<input checked="" type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	
<input checked="" type="checkbox"/> Noise	<input type="checkbox"/> Population/Housing	<input type="checkbox"/> Public Services	
<input type="checkbox"/> Recreation	<input checked="" type="checkbox"/> Transportation	<input checked="" type="checkbox"/> Tribal Cultural Resources	
<input type="checkbox"/> Utilities/Services Systems	<input type="checkbox"/> Wildfire	<input checked="" type="checkbox"/> Mandatory Findings of Significance	

Environmental Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: 05/26/2020 Signed: Kristinae L Toomians

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
1. Aesthetics <i>Except as provided in Public Resources Code Section 21099, would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

This section provides a description of existing visual conditions at and near the project site and an assessment of changes to those conditions that would occur from implementation of the proposed project. Review of the Santa Rosa General Plan 2035 (General Plan) provides a basis for the description and analysis in this section.

A proposed project's effect on the visual environment is generally defined in the following terms: (i) a project's physical characteristics and potential visibility, (ii) the extent to which the project's presence would change the perceived visual character and quality of the environment where it would be located, and (iii) the expected level of sensitivity that the viewing public may have in areas where project facilities would alter existing views.

The aesthetic quality of a community is composed of visual resources, which are physical features that make up the visible landscape, including land, water, vegetation, and the built environment (e.g., buildings, roadways, and structures).

Visual Setting

The General Plan Urban Design Element identifies the qualities that make Santa Rosa a unique city. The major topics included are downtown, major city entries, neighborhood design, and hillside

development. The General Plan Urban Design Element identifies the following scenic resources by major topic within the City:

- **Downtown.** Downtown Santa Rosa is generally bound by College Avenue on the north, Brookwood Avenue on the east, Santa Rosa Creek/Sonoma Avenue on the south, and the North Western Pacific Railroad tracks on the west. Mixed office and retail uses are focused within the downtown core, surrounding Old Courthouse Square, and extending both east and west along Third and Fourth Streets. Santa Rosa Plaza, an indoor mall, is located between Old Courthouse Square and Highway 101. Railroad Square, west of Highway 101, features retail, services, and hotel use.
- **Major City Entries.** An east-west highway through western Santa Rosa, State Route 12 (SR-12) known locally as Sonoma Highway (a regional/arterial street) east of Farmers Lane. City entries occur at the UGB in the east (North Melita Road intersection) and west (Fulton Road).
- **Neighborhood Design.** Santa Rosa's diverse neighborhoods offer an array of housing choices. Historic neighborhoods of Victorian cottages and California bungalows contrast dramatically with recent large-scale master planned developments. Some of the most fragile neighborhoods are the rural enclaves with farmhouses, fields, barns, and outbuildings. Urban Design policies attempt to preserve the special character of older neighborhoods while ensuring that new development establishes a sense of neighborhood.
- **Hillside Development.** Santa Rosa is framed by the Sonoma Mountain foothills that are prominently visible from many locations in the flatland areas of the City. The City wishes to retain these views and the natural character of the unbuilt hills by regulating development that might occur on them. The Sugarloaf Ridge is defined in the General Plan as a protected ridgeline and shown in Figure 7-3 of the General Plan. The General Plan includes goals and policies that protect ridgelines and limit ridgeline development.

The existing visual character of the surrounding area generally consists of low to medium density neighborhoods (see Exhibit 3). The existing visual character of the project site is mostly defined by grassland. The project site is relatively flat, aside from areas where depressional wetland habitat is present. The southwestern portion of the project site is developed with an existing single-family home and related outbuildings. A number of ornamental trees, and fruit and nut trees can be found scattered around the project site mostly along the western and eastern edges of the site.

The City of Santa Rosa designates major highways and regional roadways in the City that offer visually pleasing experiences. In addition, the City also designates scenic roads because of their natural setting or historical and cultural features. A scenic road is defined as a highway, road, drive, or street that, in addition to its transportation function, provides opportunities for the enjoyment of natural and human-made scenic resources. Scenic roads direct views to areas of exceptional beauty, natural resources or landmarks, or historic or cultural interest.⁶ The following roadways are located near the project site and are designated in the General Plan as scenic roads:

⁶ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.K-2.

- **Guerneville Road-Piner Road-Hall Road/West Third Street:** Regional/arterial streets that carry regional traffic into Santa Rosa from the west. City entries along these roadways occur at the UGB, which is generally located at Fulton Road. These roadways are located approximately 1.50 miles south of the project site (0.49 mile and 2.52 miles south of the project site, respectively).
- **Mendocino Avenue/Old Redwood Highway-Fulton Road-Calistoga Road:** Regional/arterial streets that carry traffic from the northern edge of the UGB into the City. City entries occur at the UGB, generally north of Hopper Avenue for Old Redwood Highway and Fulton Road. Mendocino Avenue/Old Redwood Highway and Calistoga Road are approximately 1.70 miles and 5.81 miles east of the project site, respectively. Fulton Road is adjacent to the project site to the west, and Calistoga Road is over 5 miles to the northeast of the project site.

Lighting and Glare

Sources of daytime glare include direct beam sunlight and reflections from windows, architectural coatings, glass, and other reflective surfaces. Nighttime illumination and associated glare are generally divided into two sources: stationary and mobile. Stationary sources include structure lighting and decorative landscaping, lighted signs, solar panels, and streetlights. Mobile sources are primarily headlights from motor vehicles.

The project site is located in an urbanized area with existing lighting. The areas to the north and south of the project site contain residences and existing light and glare from urban infrastructure such as roads, windows, and lighting. The area to the east of the project site is sparsely developed and contains minimal lighting. Directly adjacent to the west of the project site is Fulton Road, which contains street lighting.

Chapter 20-30.080 of the City Code establishes standards for lighting. Standards include a maximum height of 14 feet for outdoor lighting. Light fixtures shall be shielded or recessed to reduce light spillage onto adjoining properties. Each light fixture shall be directed downward and away from adjoining properties and public rights-of-way, so that no on-site light fixture directly illuminates an area off the site. No lighting on private property is permitted to produce an illumination level greater than 1 foot-candle on any property within a residential zoning district except on the site of the light source.

Would the project:

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

Less than significant impact. As described previously, the project site is located near two designated scenic roadways, including the directly adjacent Fulton Road from which views of the Sonoma Mountain foothills can be seen to the east. Views of the foothills as seen from the project frontage along Fulton Road would be mostly obstructed as a result of the proposed project, with the exception of a view corridor provided by Street A, consistent with General Plan Policy UD-A-1. However, public views from Fulton Road are primarily from moving vehicles and are, therefore, fleeting and short in duration. Therefore, the level of sensitivity and perceived change would be low. Furthermore, the project's single-family homes would be consistent with allowable on-site land uses

and development regulations including the 35-foot building height maximum, ensuring consistency with surrounding residential development. In summary, project development would not significantly affect a scenic vista or designated scenic road. Therefore, impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. The closest California Department of Transportation (Caltrans) “Eligible” State Scenic Highway is a portion of the Sonoma Highway that is 4.25 miles southeast of the project site. The closest officially designated State Scenic Highway is a portion of the Sonoma Highway that is 8.6 miles southeast of the project site.⁷ The project site is not visible from either roadway. Therefore, no impacts would occur.

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?

Less than significant impact. The project site is located within an urbanized area in the northwest portion of the City of Santa Rosa, adjacent to the UGB. As detailed previously, the project site is surrounded by single and multi-family residential homes to the north, south, and east. In addition, the project site is adjacent to Fulton Road, which is a main arterial road that runs north to south through the City and County. The project site is designated Low Density Residential (Exhibit 4) and zoned Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). These designations allow for 2.0 to 8.0 DU/acre.

The project’s density would be 3.7 DU/acre, which is consistent with the Low-Density Residential designation and PD zoning. The project proposes single-family homes with a maximum height of 35 feet, which would obstruct views of surrounding hillsides from Fulton Road to the east directly along the project frontage. However, the proposed project would maintain a view corridor along Street A, from which foothill views would be visible from Fulton Road, consistent with General Plan Policy UD-A-1. As previously discussed, the level of sensitivity and perceived change would be low in respect to this change in view. As shown in Exhibit 9, the proposed project would be designed to include four different architectural designs for the single-family homes, which would create development with visual interest consistent with General Plan Policy UD-F-4. Therefore, the proposed project would not conflict with applicable zoning or regulations governing scenic quality in an urbanized area and impacts would be less than significant.

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

Less than significant impact. New sources of light associated with the proposed project include interior lighting and exterior lighting for the structures and for decorative landscaping. Additionally,

⁷ California Department of Transportation (Caltrans). 2014. Scenic Highways 2014. Website: <https://databasin.org/maps/new#datasets=1b669cbb6b5341019625153f524ecd57>. Accessed July 22, 2019.

internal streets constructed as part of the project would include street lighting. The project would also provide solar panels on the residential homes. Therefore, the proposed project would create new sources of light and glare compared to existing conditions.

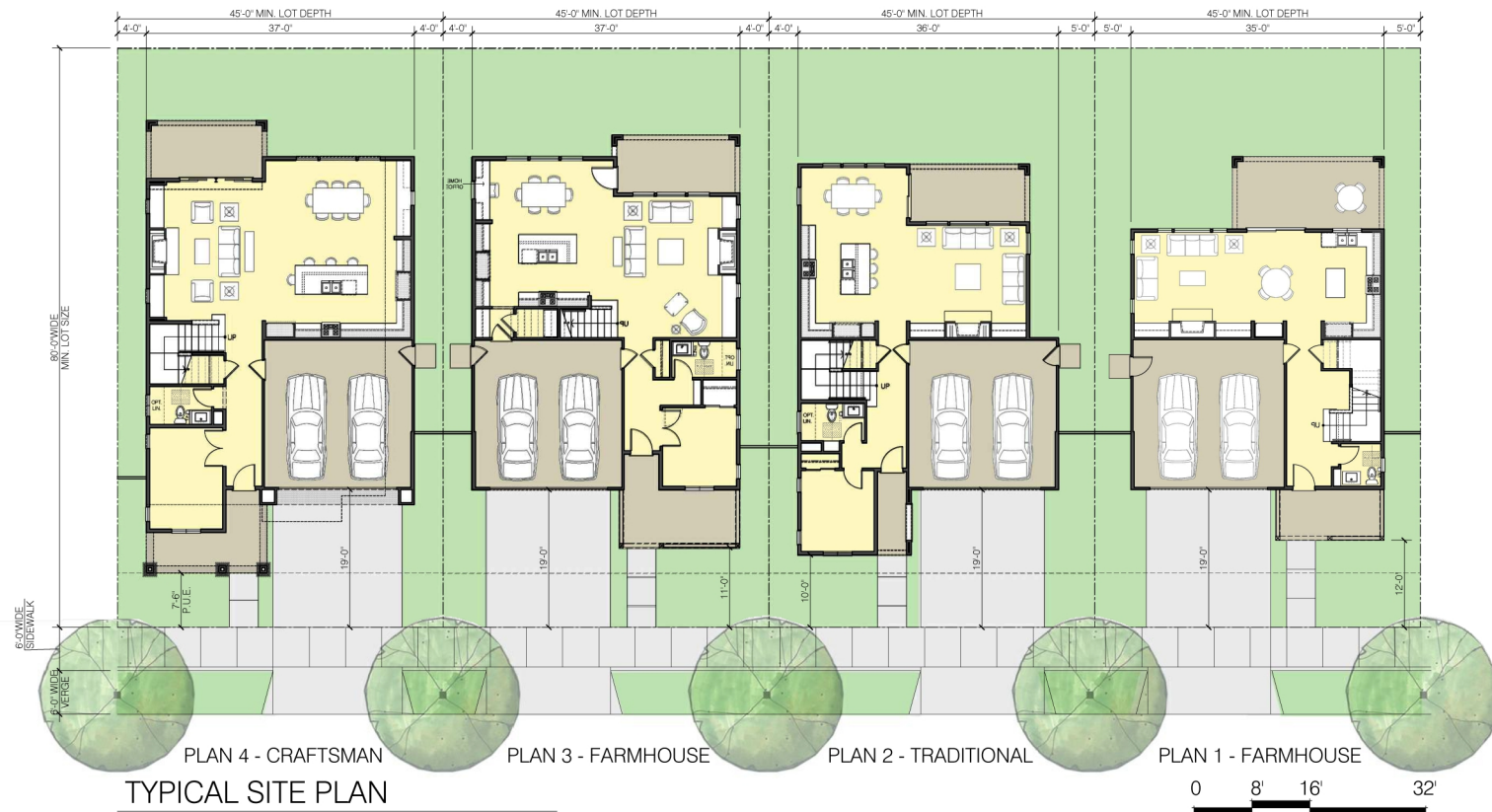
The City would review the proposed project for consistency with General Plan policies and design guidelines intended to reduce daytime glare and nighttime lighting. In addition, during design review, the City would ensure the project's proposed exterior lighting complies with Santa Rosa Municipal Code Chapter 20-30.080. The lighting standards contained in Chapter 20-30.080 of the Municipal Code would prevent lighting from spilling off-site and limit light heights to a maximum of 14 feet tall. Consistency with the Municipal Code would ensure lighting impacts from the proposed project would be reduced to the maximum extent practicable.

Project related traffic would increase mobile sources of light due to headlights. However, nighttime automobile headlight lighting impacts would be intermittent and limited to adjacent streets with existing streetlights. Therefore, impacts from light and glare would be less than significant.

Mitigation Measures

None.

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Source: Hunt Hale Jones, Architecture/Planning/Interiors, June 27, 2019.

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Agriculture and Forestry Resources <i>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 Dept. of Conservation 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 Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Agricultural Resources

The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) was established by the State Legislature in 1982 to assess the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP has established five farmland categories:

- Prime Farmland is farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land must have been used for irrigated agricultural production at some time during the last 4 years before the mapping date and have the ability to store moisture in soil well.
- Farmland of Statewide Importance is similar to Prime Farmland but contains greater slopes and a lesser ability to store soil moisture.
- Unique Farmland is usually irrigated but may include non-irrigated orchards or vineyards as found in some climate zones in California. This land must still have been cropped some time during 4 years prior to the mapping date.
- Farmland of Local Importance is important to the local agricultural economy as determined by each county's board of supervisors and local advisory committee.
- Grazing Land is land on which the existing vegetation is suited to the grazing livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

The FMMP classifies the project site as "Farmland of Local Importance" and most of its surroundings as "Urban and Build-up Land." There is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the vicinity. The project site is not zoned for agricultural uses.

The Williamson Act, classified in 1965 as the California Land Conversation Act, allows local governments to enter into contracts with private landowners, offering tax incentives in exchange for an agreement that the land will remain undeveloped or related open space use only for a period of 10 years. There are currently no properties under Williamson contract located on the project site or within the surrounding area.⁸

Forest Resources

CEQA requires the evaluation of forest and timber resources where those resources are present; however, the project site is located within a residential area of Santa Rosa, and there is no forest land as described in Public Resources Code Section 12220(g), timberland as defined by Public Resources Code Section 4526, or property zoned for Timberland Production as defined by Government Code Section 51104(g) on the site or in its vicinity.

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?**

⁸ County of Sonoma Permit and Resource Management Department. 2019. Williamson Act 2019 Calendar Year. Website: <https://sonomacounty.ca.gov/PRMD/Administration/GIS/Map-Gallery/>. Accessed March 25, 2020.

Less than significant impact. As described previously, while the adjacent area is classified as “Urban and Built-Up Land,” the project site is classified as “Farmland of Local Importance.”⁹ Farmlands of Local Importance are “lands which are classified as having the capability for producing locally important crops such as grapes, corn, etc., but may not be planted at the present time.”¹⁰ However, there is no on-site cultivation and there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project area. Therefore, development of the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

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

No impact. The General Plan Land Use Diagram designates the project site as Low Density Residential, which indicates the City anticipates the development of residential land uses on this site.¹¹ There are currently no properties under Williamson contract located on the project site or surrounding area.¹² As such, there would be no impacts relating to conflicts with an 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 Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No impact. The project site is in an urban area of Santa Rosa that does not meet the State’s definitions of forest land and timberland. Therefore, the project would not conflict with existing zoning for forest land, timberland, or timberland zoned for timberland production. No impact would occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. As described previously, the project site is located in an urbanized area and does not qualify as forest land as defined by the State. Therefore, the project would not result in the loss of or conversion of forest land to a non-forest use. No impact would occur.

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

Less than significant impact. All areas surrounding the project site are classified as “Farmland of Local Importance” or “Urban and Built-up Land.” As stated previously, Farmland of Local Importance is classified as having capacity to yield locally important crops but may not be cultivated at the present time. Implementation of the project would convert the project site from Farmland of Local Importance to Urban and Built-Up Land. However, the General Plan designates the site as Low

⁹ California Department of Conservation. 2018. Sonoma County Important Farmland 2016.

¹⁰ California Department of Conservation. 2018. Sonoma County Important Farmland 2016.

¹¹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. General Plan Land Use Diagram. Website: <https://srcity.org/DocumentCenter/View/24996/General-Plan-Land-Use-Diagram-PDF---July-2019>. Accessed March 10, 2020.

¹² County of Sonoma Permit and Resource Management Department. 2019. Williamson Act 2019 Calendar Year. Website: <https://sonomacounty.ca.gov/PRMD/Administration/GIS/Map-Gallery/>. Accessed March 25, 2020.

Density Residential, which indicates the City anticipates urban development on the project site.¹³ Additionally, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance located within the project site or surrounding areas. Therefore, impacts related to conversion of Farmland or forest land to a non-agricultural or non-forest use would be less than significant.

Mitigation Measures

None.

¹³ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. General Plan Land Use Diagram. Website: <https://srcity.org/DocumentCenter/View/24996/General-Plan-Land-Use-Diagram-PDF---July-2019>. Accessed March 10, 2020.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Air Quality <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.</i> <i>Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Air pollutants relevant to the CEQA checklist questions for Air Quality are briefly described below.

- Ozone is a gas that is formed when reactive organic gases (ROG) and oxides of nitrogen (NO_x)—both byproducts of internal combustion engine exhaust—undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are conducive to its formation. Health effects can include, but are not limited to irritated respiratory system, reduced lung function, and aggravated chronic lung diseases.
- ROG, or volatile organic compounds (VOCs), are defined as any compound of carbon—excluding carbon monoxide (CO), carbon dioxide (CO₂), carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.
- Nitrogen dioxide (NO₂) forms quickly from NO_x emissions. Health effects from NO₂ can include the following: potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.

- CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during the winter morning, with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are a primary source of CO in the Sonoma County region, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Potential health effects from CO depends on exposure and can include slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; or death.
- Sulfur dioxide (SO₂) is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO_x) include SO₂ and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although SO₂ concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because SO₂ is a precursor to sulfate and PM₁₀.
- Respirable Particulate Matter (PM₁₀) and Fine Particulate Matter (PM_{2.5}) consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. Health effects from short-term exposure (hours/days) can include the following: irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. Health effects from long-term exposure can include the following: reduced lung function; chronic bronchitis; changes in lung morphology; or death.
- Toxic air contaminants (TACs) refer to a diverse group of air pollutants that can affect human health but have not had ambient air quality standards established for them. Diesel particulate matter (DPM) is a toxic air contaminant that is emitted from construction equipment and diesel fueled vehicles and trucks. Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.

The project site is located in the San Francisco Bay Area Air Basin (Air Basin), where air quality is regulated by the Bay Area Air Quality Management District (BAAQMD). Where available, the significance criteria established or recommended by the BAAQMD were used to make determinations related to the CEQA Appendix G checklist's air quality impact questions. In accordance with CEQA Guidelines Section 15064.7 (Thresholds of Significance), the City exercises its own discretion to use the significance thresholds in the BAAQMD CEQA thresholds based on substantial evidence contained in the BAAQMD's record for adoption of the thresholds (which is relied on and incorporated herein).

Accordingly, the assessment of the project's air quality impacts uses the thresholds and methodologies from the BAAQMD May 2017 CEQA Air Quality Guidelines to determine the potential impacts of the project on the existing environment.¹⁴ The significance thresholds used in this analysis are based on the BAAQMD standards and as set forth in Table 4 below. In developing thresholds of significance for air pollutants, the BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 4: Thresholds of Significance

Pollutant	Construction Thresholds Average Daily Emissions	Operational Thresholds	
		Average Daily Emissions	Annual Average Emissions
Criteria Air Pollutants			
VOC (or ROG)	54 pounds/day	54 pounds/day	10 tons/year
NO _x	54 pounds/day	54 pounds/day	10 tons/year
PM ₁₀	82 pounds/day	82 pounds/day	15 tons/year
PM _{2.5}	54 pounds/day	54 pounds/day	10 tons/year
CO	Not Applicable	9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive Dust	Construction Dust Ordinance or other Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources			
Excess Cancer Risk	10 per one million	10 per one million	
Chronic or Acute Hazard Index	1.0	1.0	
Incremental annual average PM _{2.5}	0.3 µg/m ³	0.3 µg/m ³	
Health Risks and Hazards for Sensitive Receptors (Cumulative from All Sources within 1,000-Foot Zone of Influence) and Cumulative Thresholds for New Sources			
Excess Cancer Risk	100 per 1 million		
Chronic Hazard Index	10.0		
Annual Average PM _{2.5}	0.8 µg/m ³		
Notes: µg/m3 = micrograms per cubic meter CO = carbon monoxide NO _x = oxides of nitrogen ppm = parts per million ROG = reactive organic gases VOC = volatile organic compounds PM ₁₀ = particulate matter, including dust, 10 micrometers or less in diameter PM _{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter Source: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en . Accessed December 10, 2019.			

¹⁴ Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed March 10, 2020.

Would the project:

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

Less than significant impact with mitigation incorporated. The project site is located in the Air Basin, where air quality is regulated by the BAAQMD. Attainment status for a pollutant is determined for the Air Basin based on standards set by the United States Environmental Protection Agency (EPA) or California Environmental Protection Agency (Cal/EPA) for federal and State, respectively. The Air Basin is designated nonattainment for 1-hour ozone (State), 8-hour ozone (State and federal), 24-hour PM₁₀ (State), annual PM₁₀ (State), annual PM_{2.5} (State), and 24-hour PM_{2.5} (federal).¹⁵

To address regional air quality standards, the BAAQMD has adopted several air quality policies and plans, the most recent of which is the 2017 Clean Air Plan.¹⁶ The 2017 Clean Air Plan was adopted in April of 2017 and serves as the regional air quality plan (AQP) for the Air Basin for attaining federal ambient air quality standards. The primary goals of the 2017 Clean Air Plan are to protect public health and protect the climate. The 2017 Clean Air Plan acknowledges that the BAAQMD's two stated goals of protection are closely related. As such, the 2017 Clean Air Plan identifies a wide range of control measures intended to decrease both criteria pollutants¹⁷ and greenhouse gases (GHGs).¹⁸ In September 2010, the BAAQMD adopted their final Bay Area 2010 Clean Air Plan, which became the most recent ozone plan for the Air Basin. The 2010 Clean Air Plan identifies how the Air Basin would achieve compliance with the State 1-hour air quality standard for ozone, and how the region will reduce ozone transport from the Air Basin to other basins downwind. The 2017 Clean Air Plan updates the BAAQMD 2010 Clean Air Plan, pursuant to air quality planning requirements defined in the California Health and Safety Code.

The 2017 Clean Air Plan also accounts for projections of population growth provided by the Association of Bay Area Governments (ABAG) and vehicle miles traveled (VMT) provided by the Metropolitan Transportation Commission and identifies strategies to bring regional emissions into compliance with federal and State air quality standards. A project would conflict with or obstruct implementation of the 2017 Clean Air Plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

The BAAQMD does not provide a numerical threshold of significance for project-level consistency analysis with AQPs. Therefore, the following criteria will be used for determining a project's consistency with the AQP.

- **Criterion 1:** Does the project support the primary goals of the AQP?

¹⁵ Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. Last updated January 2017. Website: <https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status>. Accessed January 8, 2020.

¹⁶ Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Website: <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>. Accessed November 25, 2019.

¹⁷ The EPA has established National Ambient Air Quality Standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

¹⁸ A greenhouse gas is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which ultimately leads to global warming.

- **Criterion 2:** Does the project include applicable control measures from the AQP?
- **Criterion 3:** Does the project disrupt or hinder implementation of any AQP control measures?

Criterion 1

The primary goals of the 2017 Clean Air Plan, the current AQP to date, are to:

- Attain air quality standards;
- Reduce population exposure to unhealthy air and protecting public health in the Bay Area; and
- Reduce greenhouse gas emissions and protect the climate.

A measure for determining if the project supports the primary goals of the AQP is if the project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the air quality plans. The development of the AQP is based, in part, on the land use general plan determinations of the various cities and counties that constitute the Air Basin. The project site is designated Low Density Residential by the General Plan (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5). The Low Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 DU per gross acre.¹⁹ At 3.7 DU/acre, the proposed project would conform with the existing Low Density Residential designation. Therefore, emissions related to development of the project site were included in growth forecasts for the current AQP.

The proposed project would develop 105 single-family residential units. The Traffic Impact Study (TIS) prepared for the project evaluated 120 single-family residential units for analysis of traffic-related impacts.²⁰ To be consistent with the project-specific TIS, total trips generated by 120 units were used to estimate emissions presented in the air quality analysis.²¹ Consistent with the Project Description (Section 1.4), all other assumptions and analysis for air quality assume 105 single-family residential units. The proposed project is consistent with the project site's existing zoning and General Plan land use designation and traffic generated by the proposed project would be included in the traffic volumes projected in the General Plan and subsequent air quality plan. Because the proposed project would not increase the VMT generated by the project site compared to the assumptions used in the AQP, it is reasonable to conclude that the project would comply with the goals and development assumptions in the applicable AQP.

Criterion 2

The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollutants and GHGs at the local, regional, and global levels. Along with the traditional stationary, area, mobile source, and transportation control measures, the 2017 Clean Air Plan contains a number of control measures designed to protect the climate and promote mixed use, compact development to reduce vehicle emissions and exposure to pollutants from stationary and mobile sources. The 2017 Clean Air Plan

¹⁹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, pages 2-9. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>. Accessed November 25, 2019.

²⁰ W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

²¹ Ibid.

also includes an account of the implementation status of control measures identified in the 2010 Clean Air Plan.

Table 5 lists the Clean Air Plan policies relevant to the proposed project and evaluates the project's consistency with the policies. As shown below, the project would be consistent with applicable measures.

Table 5: Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
Stationary Control Measures	
SS29: Asphaltic Concrete	Consistent. Paving activities associated with the proposed project would be required to utilize asphalt that does not exceed BAAQMD emission standards.
SS36: Particulate Matter from Trackout	Consistent. Mud and dirt that may be tracked out onto the nearby public roads during construction activities shall be removed promptly by the contractor based on BAAQMD's requirements. Mitigation Measure (MM) AIR-1, identified under Impact 3(b), would implement BMPs recommended by the BAAQMD for particulate matter (PM) dust emissions during construction.
SS38: Fugitive Dust	Consistent. Material stockpiling and track out during grading activities shall utilize BMPs recommended by the BAAQMD to minimize the creation of fugitive PM dust. MM AIR-1, identified under Impact 3(b), would require the BMPs recommended by the BAAQMD for fugitive PM dust emissions to be implemented during construction.
Transportation Control Measures	
TR9: Bicycle and Pedestrian Access Facilities	Consistent. The proposed project would comply with TR9 by providing pedestrian connectivity within the West Parcel and from the West Parcel to surrounding land uses. There are sidewalks along Fulton Road and plans for a connected sidewalk network throughout the project site.
Buildings Control Measures	
BL1: Green Buildings	Consistent. The proposed project would comply with the latest energy efficiency standards, California Green Building Standards Code (CALGreen), and would incorporate applicable energy efficiency features designed to reduce project energy consumption. Details related to applicable energy efficiency features are described in more detail in Impact 6, Energy.

Table 5 (cont.): Project Consistency with Applicable Clean Air Plan Control Measures

Control Measure	Project Consistency
BL2: Decarbonize Buildings	Consistent. The proposed project would comply with the latest energy efficiency standards (such as CALGreen) and incorporate applicable energy efficiency features designed to reduce project energy consumption.
BL4: Urban Heat Island Mitigation	Consistent. The proposed project would incorporate landscaping throughout the West Parcel. The proposed project would provide landscaping in accordance with City standards that would serve to reduce the urban heat island effect and would include the planting of shade trees.
Energy Control Measures	
EN2: Decrease Energy Use	Consistent. The project applicant would be required to conform to the energy efficiency requirements of CALGreen, also known as Title 24, which was adopted in order to meet an Executive order in the Green Building Initiative to improve the energy efficiency of buildings through aggressive standards. Specifically, new development must implement the requirements of the most recent Building Energy Efficiency Standards, which would be the Title 24 standards in effect at the time that building permits are obtained. The 2019 Building Efficiency Standards went into effect on January 1, 2020.
Natural and Working Lands Control Measures	
NW2: Urban Tree Planting	Consistent. The proposed project would incorporate landscaping throughout the West Parcel. The proposed project would provide landscaping in accordance with City standards that would serve to reduce the urban heat island effect and would include the planting of shade trees.
Source of control measures: Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. April 19. Website: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans . Accessed November 25, 2019.	

In summary, the proposed project would not conflict with any applicable measures under the 2017 Clean Air Plan after the implementation of Mitigation Measure (MM) AIR-1 (described in more detail in Impact 3(b)); therefore, the proposed project would be consistent with Criterion 2 after incorporation of mitigation.

Criterion 3

The proposed project would not preclude extension of a transit line or bike path, propose excessive parking beyond parking requirements, or otherwise create an impediment or disruption to

implementation of any AQP control measures. As shown in Table 5 above, the proposed project would incorporate several AQP control measures as project design features. Therefore, the proposed project would not disrupt or hinder implementation of any AQP control measures and is consistent with Criterion 3.

Summary

The proposed project would be consistent with all three criteria after the incorporation of MM AIR-1. Thus, the proposed project would not conflict with the 2017 Clean Air Plan. Therefore, impacts associated with conflicting with or obstructing implementation of the 2017 Clean Air Plan would be less than significant with mitigation.

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 with mitigation incorporated. This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. As discussed in Impact 3(a), the region is designated nonattainment for the federal and State ozone standards, the State PM₁₀ standards, and the federal and State PM_{2.5} standards. Potential impacts would result in exceedances of State or federal standards for NO_x or particulate matter (PM₁₀ and PM_{2.5}). ROG emissions must also be evaluated because of their participation in the formation of airborne ozone.

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the Air Basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The thresholds of significance represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts. Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level would also not be considered to result in a cumulatively considerable contribution to regional air quality impacts.

The project's construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. Construction and operational emissions generated by the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2.

A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are contained in Appendix A.

Construction Emissions

During construction, site grading and other earth moving activities would generate fugitive dust (PM_{10} and $PM_{2.5}$). The majority of this fugitive PM dust would remain localized and be deposited near the project site. However, given the earthmoving activities associated with the proposed project and construction activities in general, there is a potential for impacts related to fugitive PM dust unless control measures are implemented to reduce the emissions from this source. Operation of the off-road construction equipment and on-road vehicle trips would also generate exhaust-related criteria air pollutant emissions as discussed in more detail below.

Construction Fugitive Dust PM_{10} and $PM_{2.5}$

The BAAQMD does not recommend a numerical threshold for fugitive PM dust. Instead, the BAAQMD bases the determination of significance for fugitive PM dust on a consideration of the control measures to be implemented. If all appropriate emission control measures recommended by the BAAQMD are implemented for a project, then fugitive PM dust emissions during construction are considered to be properly mitigated and thus less-than-significant. During construction activities, the air pollution control measures, as outlined in MM AIR-1, shall be implemented to reduce fugitive PM dust during construction of the proposed project. With incorporation of this mitigation measure, short-term construction impacts associated with the generation of fugitive PM dust would be less than significant.

Construction Air Pollutant Emissions: ROG, NO_x , Exhaust PM_{10} , and Exhaust $PM_{2.5}$

As previously discussed, CalEEMod version 2016.3.2 was used to estimate the project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from a wide variety of land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_x , exhaust PM_{10} , and exhaust $PM_{2.5}$ construction emissions to determine significance for this criterion.

For the purpose of this analysis, construction of the proposed project was assumed to begin in April 2021 and conclude in October 2023. The proposed project is anticipated to be built in five phases, with earth-moving activities occurring for the entire site in the first phase. If the construction schedule is delayed and starts later than April 2021, construction emissions would likely decrease because of improvements in emissions and equipment technology, more stringent regulatory requirements, and turnover of older equipment from the fleet. The assumed construction schedule is provided in Table 6.

Table 6: Conceptual Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days Per Week	Total Working Days
	Start Date	End Date		
Phase 1: Site Work for the Entire Site Area to be Developed, Paving of Internal Streets/On-street Parking Areas, and Construction Activities Related to the Stormwater Treatment Facility				
Demolition	4/1/2021	4/28/2021	5	20
Site Preparation	4/29/2021	5/12/2021	5	10
Grading	5/13/2021	6/23/2021	5	30
Stormwater Treatment Facility	5/13/2021	9/29/2021	5	100
Paving	6/24/2021	9/29/2021	5	70
Phase 1 Home Construction: Building Construction of Homes 1-21				
Building Construction	9/30/2021	8/3/2022	5	220
Paving	8/4/2022	8/17/2022	5	10
Architectural Coating	8/18/2022	8/31/2022	5	10
Phase 2 Home Construction: Building Construction of Homes 22-42				
Building Construction	4/13/2021	2/14/2022	5	220
Paving	2/15/2022	2/28/2022	5	10
Architectural Coating	3/1/2022	3/14/2022	5	10
Phase 3 Home Construction: Building Construction of Homes 43-63				
Building Construction	10/25/2021	8/26/2022	5	220
Paving	8/27/2022	9/9/2022	5	10
Architectural Coating	9/10/2022	9/23/2022	5	10
Phase 4 Home Construction: Building Construction of Homes 64-84				
Building Construction	5/6/2022	3/9/2023	5	220
Paving	3/10/2023	3/23/2023	5	10
Architectural Coating	3/24/2023	4/6/2023	5	10
Phase 5 Home Construction: Building Construction of Homes 85-105				
Building Construction	11/17/2022	9/20/2023	5	220
Paving	9/21/2023	10/4/2023	5	10
Architectural Coating	10/5/2023	10/18/2023	5	10
Source: Appendix A.				

The CalEEMod default schedule for building construction was extended by 660 days to match the anticipated construction schedule provided by the project applicant. Because the expected schedule and the default schedule differ, the equipment in the building construction phase was adjusted to retain the default horsepower-hours. The duration of construction activity and associated

equipment represent a reasonable approximation of the expected construction fleet as required by CEQA Guidelines. Complete construction assumptions are included in Appendix A.

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, along with the duration of use. Average daily construction emissions are compared with the significance thresholds in Table 7.

Table 7: Average Daily Construction Emissions (Unmitigated)

Parameter	Air Pollutants			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Construction Emissions—2021 (tons/year)	0.48	4.43	0.19	0.18
Construction Emissions—2022 (tons/year)	1.25	1.96	0.10	0.09
Construction Emissions—2023 (tons/year)	0.78	0.80	0.04	0.04
<i>Total Construction Emissions (tons/year)</i>	<i>2.51</i>	<i>7.20</i>	<i>0.33</i>	<i>0.31</i>
Total Emissions (lbs/year)	5,010	14,404	652	611
Average Daily Emissions (lbs/day)¹	7.53	21.66	0.98	0.92
Significance Threshold (lbs/day)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
Notes: ¹ Calculated by dividing the total number of pounds by the total 665 working days of construction for the duration of construction (2021-2023). Calculations use unrounded totals. Totals may not sum due to rounding. lbs = pounds ROG = reactive organic gases NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns in diameter PM _{2.5} = particulate matter 2.5 microns in diameter Source of thresholds: Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. May. Website: http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en . Accessed June 24, 2019. Source of emissions: CalEEMod Output (see Appendix A).				

As shown in Table 7, the construction emissions from all construction activities are below the recommended thresholds of significance; therefore, construction of the proposed project would have a less-than-significant impact with respect to emissions of ROG, NO_x, exhaust PM₁₀, and exhaust PM_{2.5}. As previously discussed, the proposed project would implement MM AIR-1, which includes BMPs recommended by the BAAQMD, to reduce potential impacts related to fugitive PM dust emissions from use of the construction equipment. Therefore, project construction would have a less-than-significant cumulative impact after implementation of mitigation.

Operational Emissions

Operational Air Pollutant Emissions: ROG, NO_x, PM₁₀, PM_{2.5}

As previously discussed, the pollutants of concern include ROG, NO_x, PM₁₀, and PM_{2.5}. The project operational emissions for the respective pollutants were calculated using CalEEMod version 2016.3.2. Operational emissions were estimated for the year 2023, which is the earliest year when all homes could be occupied. The proposed project's long-term operational emissions were compared with the BAAQMD's operational thresholds of significance to evaluate potential impacts. The estimated annual emissions from project operations are presented in Table 8 and maximum daily emissions are presented in Table 9.

Table 8: Annual Operational Emissions (Unmitigated)

Emissions Source	Tons per Year			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Area	1.21	0.01	0.00	0.00
Energy	0.02	0.14	0.01	0.01
Mobile (Motor Vehicles)	0.31	1.52	0.01	0.01
<i>Estimated Annual Emissions</i>	<i>1.54</i>	<i>1.67</i>	<i>0.03</i>	<i>0.03</i>
Existing Annual Emissions ¹	(0.01)	(0.01)	(0.01)	(0.00)
Estimated Net Emissions	1.53	1.65	0.02	0.03
Thresholds of Significance	10	10	15	10
Exceeds Significance Threshold?	No	No	No	No
Notes: Calculations use unrounded totals. Totals may not sum due to rounding. ¹ Existing emissions from the project site were subtracted from the proposed project's emissions to calculate the net change in long-term operational emissions, which were then compared with the BAAQMD's thresholds of significance. ROG = reactive organic gases NO _x = oxides of nitrogen PM ₁₀ = particulate matter 10 microns or less in diameter PM _{2.5} = particulate matter 2.5 microns or less in diameter Source: CalEEMod output (see Appendix A).				

Table 9: Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Area	6.78	0.10	0.05	0.05
Energy	0.09	0.77	0.06	0.06
Mobile (Motor Vehicles)	1.94	8.52	5.63	1.55
<i>Estimated Daily Emissions</i>	<i>8.81</i>	<i>9.39</i>	<i>5.74</i>	<i>1.66</i>
Existing Daily Emissions ¹	(0.06)	(0.07)	(0.05)	(0.01)

Table 9 (cont.): Daily Operational Emissions (Unmitigated)

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Estimated Net Daily Emissions	8.75	9.32	5.69	1.65
Thresholds of Significance	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
<p>Notes:</p> <p>Calculations use unrounded totals. Totals may not sum due to rounding.</p> <p>¹ Existing emissions from the project site were subtracted from the proposed project's emissions to calculate the net change in long-term operational emissions, which were then compared with the BAAQMD's thresholds of significance.</p> <p>ROG = reactive organic gases NO_x = oxides of nitrogen</p> <p>PM₁₀ = particulate matter 10 microns or less in diameter</p> <p>PM_{2.5} = particulate matter 2.5 microns or less in diameter</p> <p>The highest daily project emissions occurred in the winter run for NO_x, PM₁₀, and PM_{2.5}. The highest ROG emissions occurred in the summer run.</p> <p>Calculations use unrounded results.</p> <p>Source: CalEEMod output (see Appendix A).</p>				

As shown in Table 8 and Table 9, the proposed project would not result in operational-related air pollutants or precursors that would exceed the BAAQMD's thresholds of significance, indicating that ongoing project operations would not be considered to have the potential to generate a significant quantity of air pollutants. Therefore, project operations would have a less than significant cumulative impact.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact with mitigation incorporated. A sensitive receptor is defined by the BAAQMD as the following: "[f]acilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples include schools, hospitals, and residential areas." Existing sensitive receptors located closest to the project site in each direction are listed below.

- Existing multi-family residences spanning the length of the project site's southern boundary. The four residences located immediately east of Fulton Road are the closest off-site sensitive receptors, located approximately 8 feet south of the project site.
- Existing multi-family residences spanning the length of the project site's northern boundary; the closest of these is the multi-family residence located on the southwest corner of Tedeschi Drive and Andre Lane, approximately 20 feet north of the project site.
- A single-family residence located approximately 430 feet west of the project site.
- A single-family residence located approximately 1,330 feet east of the project site.

As a residential development project, the proposed project itself would be considered a sensitive receptor once operational. Most emissions during construction are generated during the site preparation and grading phases when heavy equipment is used to prepare the land for construction. Grading activities and site preparation activities for the West and East Parcels would occur in the first phase of construction and generate the greatest amount of emissions during construction. These grading and site preparation emissions for the West and East Parcels would not overlap with project operation. Earliest home occupancy is expected to occur in August 2022. Therefore, operations and occupancy of the proposed single-family homes could overlap with construction activities that would occur from August 2022 to October 2023, when all intensive site preparation and grading has been completed. Construction activities during this time would primarily include home building, paving, painting, and landscaping. Limited amounts of diesel equipment are used during home construction, which would not contribute substantially to the health risk during construction. Therefore, for the purposes of the Health Risk Assessment (HRA), sensitive receptors associated with future residences were not included as part of the construction HRA.

The following four criteria were applied to determine the significance of project emissions to sensitive receptors:

- **Criterion 1:** Construction of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 2:** The cumulative health impact would not result in an exceedance of the cumulative health risk significance thresholds.
- **Criterion 3:** Operation of the project would not result in an exceedance of the health risk significance thresholds.
- **Criterion 4:** A CO hotspot assessment must demonstrate that the project would not result in the development of a CO hotspot that would cause an exceedance of the CO ambient air quality standards.

Criterion 1: Project Construction Toxic Air Pollutants

An assessment was made of the potential health impacts to surrounding sensitive receptors resulting from the proposed project's TAC emissions during construction. A summary of the assessment is provided below, while the detailed assessment is provided Appendix A.

DPM has been identified by the California Air Resources Board (ARB) as a carcinogen. Major sources of DPM include diesel-fueled off-road construction equipment, heavy-duty delivery trucks, and a portion of construction worker vehicles.

Estimation of Construction DPM Emissions

Construction DPM emissions (represented as PM_{2.5} exhaust) were estimated using CalEEMod version 2016.3.2, as described under the discussion for Impact 3(b). The total construction duration was assumed to last approximately 2.5 years. The construction DPM emissions were assumed to be distributed over the project area with a working schedule of 8 hours per day and 5 days per week. Emissions modeled during the 8-hour workday were averaged over the entire day to model a 24-

hour-per-day average emission rate. The adjusted emissions were used to calculate average concentrations throughout the entire construction duration.

Construction exhaust emissions of DPM, prior to the implementation of mitigation, are shown in Table 10.

Table 10: Project DPM Construction Emissions (Unmitigated)

Parameter	On-site DPM ⁽¹⁾ (as PM _{2.5} Exhaust) (tons/year)	Off-site DPM ^{(1),(2)} (as PM _{2.5} Exhaust) (tons/year)	Total DPM (tons/year)
Total Construction Emissions (Unmitigated)	0.9061	0.0008	0.9069
<p>Notes:</p> <p>⁽¹⁾ Emissions modeled for 8 hours each day were adjusted using a factor of 3 to correct for an average 24-hour per day exposure period.</p> <p>⁽²⁾ The off-site emissions are estimated for four construction vehicle travel routes within approximately 1,000 feet of the project site (each modeled route is between 0.60 mile and 0.71 mile).</p> <p>Source: Appendix A.</p>			

Estimation of Cancer Risks

The California Office of Environmental Health Hazards Assessment (OEHHA) is the lead State agency for the assessment of health risks posed by environmental contaminants.²² The OEHHA and BAAQMD have developed guidelines for estimating cancer risks that provide adjustment factors that emphasize the increased sensitivities and susceptibility of young children to exposures to TACs.^{23,24} These adjustment factors include age-sensitivity weighting factors, age-specific daily breathing rates, and age-specific time-at-home factors. The recommended method for the estimation of cancer risk is shown in the equations below with the cancer risk adjustment factors provided in Table 11 for several types of sensitive/residential receptors (infant, child, and adult).

$$\text{Cancer Risk} = C_{\text{DPM}} \times \text{Inhalation Exposure Factor} \quad (\text{EQ-1})$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

²² California Office of Environmental Health Hazard Assessment (OEHHA). 2020. What We Do. Website: <https://oehha.ca.gov/about/what-we-do>. Accessed January 8, 2020.

²³ Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics NSR [New Source Review] Program Health Risk Assessment (HRA) Guidelines. Website: http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en. Accessed December 10, 2019.

²⁴ Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Project Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Website: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>. Accessed December 10, 2019.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu\text{g}/\text{m}^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = \text{CPF} \times \text{EF} \times \text{ED} \times \text{DBR} \times \text{AAF}/\text{AT} \quad (\text{EQ-2})$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 (mg/kg-day)⁻¹ for DPM

EF = Exposure Frequency (days/year)

ED = Exposure Duration (years of construction)

AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rate (DBR), and time at home factors (TAH)—see Table 11.

AT = Averaging time period over which exposure is averaged (days)

The OEHHA-recommended values for the various cancer risk parameters, shown in EQ-2, above, are provided in Table 11.

Table 11: Exposure Assumptions for Cancer Risk

Receptor Type	Exposure Frequency		Exposure Duration (years)	Age Sensitivity Factors (ASF)	Time at Home Factor (TAH) (%)	Daily Breathing Rate (DBR) ⁽¹⁾ (L/kg-day)
	Hours/day	Days/year				
Sensitive/Residential—Infant						
3 rd Trimester	24	350	0.25	10	85	361
0 to <1 year	24	350	1.00	10	85	1,090
1 to <2 years	24	350	1.00	10	85	1,090
2 to <3 years	24	350	0.30	3	72	631
Sensitive Receptor—Child						
3 to 16 years	24	350	2.55	3	72	572
Sensitive Receptor—Adult						
> 16 years	24	350	2.55	1	73	261
Notes:						
⁽¹⁾ The daily breathing rates recommended by the BAAQMD for sensitive/residential receptors assume the 95 th percentile breathing rates for all individuals less than 2 years of age and 80 th percentile breathing rates for all older individuals.						
(L/kg-day) = liters per kilogram body weight per day						
Sources: Appendix A.						
Bay Area Air Quality Management District (BAAQMD). 2016. Air Toxics NSR [New Source Review] Program Health Risk Assessment (HRA) Guidelines. Website: http://www.baaqmd.gov/~media/files/planning-and-research/rules-and-regs/workshops/2016/reg-2-5/hra-guidelines_clean_jan_2016-pdf.pdf?la=en . Accessed December 10, 2019.						
Office of Environmental Health Hazard Assessment (OEHA). 2015. Air Toxics Hot Spots Project Risk Assessment Guidelines: The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. February. Website: https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf . Accessed December 10, 2019.						

Estimation of Non-cancer Chronic Hazards

An evaluation of the potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by the OEHHA were used for the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index. The Hazard Index is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals (i.e., REL).

The hazard index assumes that chronic sub-threshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity reference exposure level. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. For purposes of this assessment, the TAC of concern is DPM for which the OEHHA has defined a reference exposure limit for DPM of 5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). The principal toxicological endpoint assumed in this assessment was through inhalation.

Estimation of Health Risks and Hazards from Project Construction

The estimated health and hazard impacts from construction emissions at the Maximum Impacted Sensitive Receptor (MIR) are provided in Table 12. The estimates shown in Table 12 and Table 13 include application of BMPs recommended by the BAAQMD, as required by MM AIR-1. It should be noted that inclusion of MM AIR-1 only reduces $\text{PM}_{2.5}$ total and not $\text{PM}_{2.5}$ exhaust.

Table 12: Project Construction Health Risks and Hazards (Unmitigated)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index ⁽¹⁾	Annual $\text{PM}_{2.5}$ Concentration ($\mu\text{g}/\text{m}^3$)
Risks and Hazards at the MIR: Infant ⁽²⁾	34.03	0.023	0.133
Risks and Hazards at the MIR: Child ⁽²⁾	7.57	0.023	0.133
Risks and Hazards at the MIR: Adult ⁽²⁾	0.84	0.023	0.133
BAAQMD Significance Threshold	10.0	1.0	0.3
Exceeds Individual Source Threshold?	Yes	No	No
Notes: MIR = Maximum Impacted Sensitive Receptor ¹ Chronic non-cancer hazard index was estimated by dividing the annual average DPM concentration (as $\text{PM}_{2.5}$ exhaust) by the REL of $5 \mu\text{g}/\text{m}^3$ ² The MIR is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive. The MIR is the discrete point where pollutant concentrations were the highest out of all the modeled sensitive receptors. Therefore, the MIR is not necessarily the closest sensitive receptor to the project site. . Source: Appendix A.			

As shown in Table 12, construction of the proposed project would exceed the applicable BAAQMD thresholds for one of the three health impact metrics prior to the application of mitigation beyond that required by MM AIR-1. Specifically, the DPM concentration during construction of the proposed project would exceed the applicable cancer risk significance threshold at the MIR for the infant scenario. This would represent a potentially significant construction TAC exposure impact. Therefore, additional mitigation is required to reduce the impact during the construction period.

MM AIR-2 requires the project applicant and/or construction contractor to provide documentation to the City of Santa Rosa that all off-road diesel-powered construction equipment greater than 50 horsepower meets EPA or ARB Tier IV Final off-road emissions standards. Table 13 shows the health risks and non-cancer hazard index for construction with implementation of Tier IV Final mitigation, as required by MM AIR-2.

Table 13: Project Construction Health Risks and Hazards (Mitigated)

Health Impact Metric	Cancer Risk (risk per million)	Chronic Non-Cancer Hazard Index ⁽¹⁾	Annual PM _{2.5} Concentration (µg/m ³)
Risks and Hazards at the MIR: Infant ⁽²⁾	9.03	0.006	0.031
Risks and Hazards at the MIR: Child ⁽²⁾	2.01	0.006	0.031
Risks and Hazards at the MIR: Adult ⁽²⁾	0.22	0.006	0.031
BAAQMD Significance Threshold	10.0	1.0	0.3
Exceeds Individual Source Threshold?	No	No	No
Notes: MIR = maximum impacted sensitive receptor ¹ Chronic non-cancer hazard index was estimated by dividing the annual average DPM concentration (as PM _{2.5} exhaust) by the REL of 5 µg/m ³ . ² The MIR is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive. Source: Appendix A.			

As noted in Table 13, the project's construction-related health risks would not exceed any applicable BAAQMD significance threshold after the incorporation of MM AIR-1 and MM AIR-2; therefore, project-related emissions would not result in significant health impacts to nearby sensitive receptors during construction.

Criterion 2: Cumulative Health Risk Assessment

The BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project. For a project-level analysis, the BAAQMD provides three tools for use in screening potential sources of TACs. These tools are:

- **Surface Street Screening Tables.** The BAAQMD pre-calculated potential cancer risks and PM_{2.5} concentration increases for each county within their jurisdiction for roadways that meet BAAQMD "major roadway" criteria of 10,000 vehicles or 1,000 trucks per day. Risks are

assessed by roadway volume, roadway direction, and distance to sensitive receptors.²⁵ Fulton Road, located adjacent to the project site, is considered a major roadway.²⁶

- **Freeway Screening Analysis Tool.** The BAAQMD prepared a Google Earth file that contains pre-estimated cancer risk, hazard index, and PM_{2.5} concentration increases for highways within the Bay Area. Risks are provided by roadway link and are estimated based on direction and distance to the sensitive receptor. There are no freeways located within 1,000 feet of the project site.²⁷
- **Stationary Source Risk and Hazard Screening Tools.** The BAAQMD prepared a Google Earth file that contains the locations of all stationary sources within the Bay Area that have BAAQMD operating permits.²⁸ The BAAQMD has also prepared a Geographic Information System (GIS) tool with the location of permitted sources, which has been updated more recently than the previously mentioned Google Earth tool.²⁹ For each emissions source, the BAAQMD provides conservative estimates of cancer risk, non-cancer hazards, and PM_{2.5} concentrations. Using information from both the Google Earth file and the GIS tool, there are no existing stationary sources located within approximately 1,000 feet of the project site.

Cumulative Health Risk Assessment at the Maximum Impacted Receptor

A cumulative HRA was performed that examined the cumulative impacts of the project's construction emissions and sources of TAC emissions within 1,000 feet of the project. Based on the analysis presented within this impact analysis (Impact 3(c)), Criterion 1, the MIR was determined to be a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive (see Table 12 and Table 13). Therefore, the cumulative health impacts on this maximally impacted receptor (from project construction) were estimated.

The cumulative health risk results are summarized at the MIR during project construction in Table 14.

Table 14: Summary of the Cumulative Health Impacts at the Maximum Impacted Receptor during Construction

Source	Source Type	Distance from MIR ⁽¹⁾ (feet)	Cancer Risk (per million)	Chronic HI	PM _{2.5} Concentration (µg/m ³)
Project					
Construction (Unmitigated)	Diesel Construction Equipment	26	34.03	0.023	0.133

²⁵ Bay Area Air Quality Management District (BAAQMD). 2015. Roadway Screening Analysis Calculator. Website: <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed November 11, 2019.

²⁶ County of Sonoma. 2019. Traffic Surveys. Website: <https://sonomacounty.ca.gov/TPW/Roads/Services/Traffic-Engineering/Traffic-Surveys/>. Accessed December 2, 2019.

²⁷ Bay Area Air Quality Management District (BAAQMD). 2011. Highway Screening Analysis Tool—Sonoma County. April 28. Website: <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed November 11, 2019.

²⁸ Bay Area Air Quality Management District (BAAQMD). 2012. Stationary Source Screening Analysis Tool—Marin_Sonoma_2012. Website: <http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools>. Accessed November 11, 2019.

²⁹ Bay Area Air Quality Management District (BAAQMD). 2017. Permitted Stationary Sources Risk and Hazards. Permitted Stationary Sources Risk and Hazards. Website: <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>. Accessed November 11, 2019.

Table 14 (cont.): Summary of the Cumulative Health Impacts at the Maximum Impacted Receptor during Construction

Source	Source Type	Distance from MIR ⁽¹⁾ (feet)	Cancer Risk (per million)	Chronic HI	PM _{2.5} Concentration (µg/m ³)
Construction (Mitigated)	Diesel Construction Equipment	26	9.03	0.006	0.031
Existing Roadways					
Local Road ⁽²⁾	Fulton Road	10	23.98	N/A	0.453
Cumulative Health Risks from Project Construction and Existing TAC Sources					
Cumulative Total with Project Construction (Unmitigated)			58.01	0.023	0.586
BAAQMD's Cumulative Thresholds of Significance			100	10	0.8
Threshold Exceedance?			No	No	No
<p>Notes:</p> <p>(1) The maximum impacted sensitive receptor is a single-family home located approximately 26 feet north of the project site, on the south side of Tedeschi Drive.</p> <p>(2) The cancer risk calculated estimated using the BAAQMD Roadway Screening Analysis Calculator was adjusted by a correction factor of 1.3744 to incorporate the latest OEHHA guidance. Source of 1.3744 correction factor: BAAQMD recommendation confirmed through personal communication with BAAQMD Environmental Planner, Areana Flores, on January 8, 2020.</p> <p>BAAQMD = Bay Area Air Quality Management District MIR = maximum impacted receptor N/A = not available Source: Appendix A.</p>					

As noted in Table 14, the cumulative impacts from the project construction and existing sources of TACs would be less than the BAAQMD's cumulative thresholds of significance. Thus, the cumulative health risk impacts from project construction would be less than significant.

Cumulative HRA at the Project Site During Operations

The project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site. However, the California Supreme Court concluded in *California Building Industry Association v. BAAQMD* that agencies subject to CEQA are not required to analyze the impact of existing environmental conditions on a project's future users or residents. Although impacts from existing sources of TAC emissions on sensitive receptors on the project site are not subject to CEQA, the BAAQMD recommends assessing the potential cumulative impacts from sources of TACs within 1,000 feet of a project when siting new sensitive land uses. Therefore, for informational purposes and in the spirit of CEQA's full disclosure, the potential TAC risks to the project's future residents were analyzed. The BAAQMD's various screening tools, which quantify health risks from existing stationary and permitted sources, were used to estimate the health risks (associated with TAC sources within 1,000 feet of the project site) on future residents within the proposed project.

The cumulative health risk results are summarized at project buildout in Table 15.

Table 15: Summary of the Health Impacts at the Project Site during Project Operations

Source	Source Name/Source Type	Distance from Project Site (feet)	Cancer Risk (per million)	Chronic Hazard Index	PM _{2.5} Concentration (µg/m ³)
Existing Roadways					
Local Road ⁽¹⁾	Fulton Road	10	23.98	N/A	0.453
Project-level Health Risks					
Maximum Individual Source			23.98	0.0	0.453
BAAQMD Project-level Thresholds of Significance			10	1	0.3
Threshold Exceedance?			Yes	No	No
Cumulative Health Risks					
Cumulative Total			23.98	0.0	0.453
BAAQMD Cumulative Thresholds of Significance			100	10	0.8
Threshold Exceedance?			No	No	No
Notes: ⁽¹⁾ The cancer risk calculated estimated using the BAAQMD Roadway Screening Analysis Calculator was adjusted by a correction factor of 1.3744 to incorporate the latest OEHHA guidance. Source of 1.3744 correction factor: BAAQMD recommendation confirmed through personal communication with BAAQMD Environmental Planner, Areana Flores, on January 8, 2020. BAAQMD = Bay Area Air Quality Management District N/A = not available Source: Appendix A.					

As shown in Table 15, the cumulative health impacts to the future on-site residents from existing TAC emission sources located within 1,000 feet of the project would not exceed the BAAQMD's cumulative health significance thresholds; however, TACs from a single source (Fulton Road) would exceed the BAAQMD's project-level health significance thresholds. As previously discussed, this analysis was included for informational purposes.

Criterion 3: Project-Specific Operation Toxic Air Pollutants

The proposed project would develop 105 single-family residences and would not generate substantial on-site TAC emissions during operation. Residential land uses are not land uses that are typically associated with TAC emissions and the proposed project does not include any features that would include more than usual TAC emission. As described in the TIS, the project is expected to generate a net increase of 1,124 daily vehicle trips per.³⁰ The proposed project would primarily generate trips associated with residents, visitors, employees, and customers traveling to and from the project site. The daily travel trips to and from the project site would primarily be generated by passenger vehicles. Because nearly all passenger vehicles are gasoline-combusted, the proposed project would not

³⁰ Bay Area Air Quality Management District (BAAQMD). 2017. Permitted Stationary Sources Risk and Hazards. Permitted Stationary Sources Risk and Hazards. Website: <https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65>. Accessed November 11, 2019.

generate significant amount of DPM emissions during operation. Therefore, the proposed project would not result in significant health impacts to nearby sensitive receptors during operation.

Criterion 4: CO Hotspot

Localized high levels of CO (CO hotspot) are associated with traffic congestion and idling or slow-moving vehicles. The BAAQMD recommends a screening analysis to determine if a project's operation has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is not necessary. The project would result in a less than significant impact to air quality for local CO if the following screening criteria are met:

- **Screening Criterion 1:** The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
- **Screening Criterion 2:** The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- **Screening Criterion 3:** The project traffic 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 (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The project-specific TIS identified peak-hour traffic volumes for nine intersections affected by the project.³¹ As discussed above, the proposed project is consistent with the existing zoning and General Plan land use designations and therefore is not anticipated to generate trip volumes or land use types that the existing roadway network or applicable congestion management plan has not accounted for. As identified in the TIS, the maximum peak-hour intersection volume would occur at the Fulton Road/San Miguel Road intersection in the Baseline Plus Project scenario during the PM peak-hour. The estimated volume at the Fulton Road/San Miguel Road intersection under this scenario is 3,116 PM peak-hour trips. This level of peak-hour trips is substantially less than BAAQMD's second and third screening criteria of 44,000 vehicles per hour and 24,000 vehicles per hour respectively. Lastly, the proposed project would not be located in a vertically- or horizontally-limited mixing zone. The proposed project would not result in an increase of traffic volumes at affected intersections to more than 44,000 vehicles per hour and would not increase traffic volumes at affected intersections to more than 24,000 where vertical or horizontal mixing is substantially limited; accordingly, the proposed project is consistent with the screening criteria. The proposed project's impact related to air quality for local CO emissions would be less than significant.

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

Less than significant impact. As stated in the BAAQMD 2017 Air Quality Guidelines, odors are generally regarded as an annoyance rather than a health hazard and the ability to detect odors varies considerably among the populations and overall is subjective.

³¹ W-Trans. 2019. Traffic Impact Study for 2220 Fulton Road Project. October 22.

Odors can cause a variety of responses. The impact of an odor often results from interacting factors such as frequency (how often), intensity (strength), duration (time), offensiveness (unpleasantness), location, and sensory perception. Two circumstances have the potential to cause odor impacts:

- 1) A source of odors is proposed to be located near existing or planned receptors; or
- 2) A receptor land use is proposed near an existing or planned source of odor.

The BAAQMD does not have a recommended odor threshold for construction activities. However, the BAAQMD recommends screening criteria that are based on distance between types of sources known to generate odor and the receptor. For projects within the screening distances, the BAAQMD has the following threshold for project operations:

An odor source with five (5) or more confirmed complaints per year averaged over three years is considered to have a significant impact on receptors within the screening distance shown in Table 3-3 [of the BAAQMD's CEQA Guidelines].

Projects that would site an odor source or a receptor farther than the applicable screening distance, shown in Table 16 below, would not likely result in a significant odor impact.

Table 16: Odor Screening Distances

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Source: BAAQMD 2017.	

Project Construction

Diesel exhaust and VOCs would be emitted during construction of the proposed project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore would not create objectionable odors affecting a substantial number of people. As such, construction odor impacts would be less than significant.

Project Operation

Project as an Odor Generator

Land uses typically associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project involves the construction and operation of a single-family residential development and does not contain land uses typically associated with objectionable odors. During operation of the project, odors would primarily consist of vehicles traveling to and from the site. These occurrences would not produce significant odors; therefore, operational impacts would be less than significant.

Project as a Sensitive Receptor

The project involves the construction and operation of a single-family residential development and would have the potential to place sensitive receptors (residents) near existing or planned sources of odors during project operations. The project site is not located within the vicinity of agricultural operations (e.g., dairies, feedlots, etc.), landfills, asphalt batch plants, chemical manufacturing, or recycling centers; however, the project site is located within the project screening distances for one potential source of odor, as defined in Table 16. A public records request (No. 2019-09-0301) was filed with the BAAQMD to obtain the most recent 3-year odor complaint history for the potential odor generators within the vicinity of the project site; the information obtained from the public records request is summarized in Table 17.

Table 17: Summary of Odor Complaint Records

Name of Facility	Location	Land Use/Type of Operation	Number of Complaints Over Most Recent 3-year Period ¹	Average Number of Complaints per Year	Distance from the Project Site
Pagnano's Automotive	2815 Alton Lane, Santa Rosa, CA 95403	Painting/Coating Operations	0	0	0.54 mile west of the project site
Note: ¹ August 2016–September 2019					

Based on the responses from the BAAQMD, there are no land uses within the screening distances shown in Table 3-3 of the BAAQMD's guidance that have received five or more confirmed complaints per year for any recent 3-year period. For the facility outlined in Table 17, there are existing residential uses located closer to this facility than the proposed project. Therefore, the uses in the vicinity of the project would not cause substantial odor impacts to the project. The proposed project would not place odor sensitive receptors near an existing or planned source of odor affecting a substantial number of people. Therefore, operational odor impacts in terms of the project site as an odor sensitive receptor would be less than significant.

Mitigation Measures

- MM AIR-1** During construction activities, the following Best Management Practices (BMPs) shall be implemented:
- Exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
 - All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
 - All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
 - All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
 - All roadways, driveways, and sidewalks shall be paved as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
 - Idling times shall be minimized either by shutting equipment off 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 California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
 - All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
 - A publicly visible sign shall be posted with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours of a complaint or issue notification. The Bay Area Air Quality Management District (BAAQMD) phone number shall also be visible to ensure compliance with applicable regulations.
- MM AIR-2** During construction activities, all off-road equipment with engines greater than 50 horsepower shall meet either the United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier IV Final off-road emission standards. The construction contractor shall maintain records concerning its efforts to comply with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Biological Resources <i>Would the project:</i>				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

This section evaluates potential effects on biological resources that may result from project implementation. The analysis is based on the following reference materials provided in Appendix B:

- Site specific Biological Resources Analysis (BRA) prepared on February 25, 2020, by Monk & Associates, Inc.
- USACE Jurisdictional Delineation Verification Letter, dated March 9, 2016.

- USACE Waters of the State Jurisdictional Wetland Delineation Map, dated March 7, 2016.
- Tree Preservation and Mitigation Report prepared on May 9, 2019, by John C. Meserve at Horticultural Associates.
- Results from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California database searches.

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 Game or U.S. Fish and Wildlife Service?**

Less than significant impact with mitigation incorporated. For the purpose of this analysis, special-status species are plants and animals that are legally protected under the California and Federal Endangered Species Acts (CESA and FESA, respectively) or other regulations, and species that are considered rare by the scientific community (for example, the CNPS). Special-status species are defined as:

- Plants and animals that are listed or proposed for listing as threatened or endangered under the CESA (Fish and Game Code § 2050 *et seq.*; 14 California Code of Regulations [CCR] § 670.1 *et seq.*) or the FESA (50 Code of Federal Regulations [CFR] 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);
- Plants and animals that are candidates for possible future listing as threatened or endangered under the FESA (50 CFR 17; FR Vol. 64, No. 205, pages 57533-57547, October 25, 1999); and under the CESA (California Fish and Game Code § 2068);
- Plants and animals that meet the definition of endangered, rare, or threatened under CEQA (14 CCR § 15380) that may include species not found on either State or Federal Endangered Species lists;
- Plants occurring on Ranks 1A, 1B, 2A, 2B, 3, and 4 of CNPS Electronic Inventory (CNPS).³² The CDFW recognizes that Ranks 1A, 1B, 2A and 2B of the CNPS inventory contain plants that, in the majority of cases, would qualify for State listing, and CDFW requests their inclusion in Environmental Impact Reports (EIRs). Plants occurring on CNPS Ranks 3 and 4 are "plants about which more information is necessary," and "plants of limited distribution," respectively.³³ Such plants may be included as special-status species on a case by case basis due to local significance or recent biological information; under the CEQA review process only CNPS Rank 1 and 2 species are considered since these are the only CNPS species that meet CEQA's definition of "rare" or "endangered." Impacts to Rank 3 and 4 species are not regarded as significant pursuant to CEQA;

³² CNPS (California Native Plant Society). 2001. Inventory of rare and endangered plants of California (sixth editions). Rare plant scientific advisory committee, David P. Tibor, convening editor, California Native Plant Society. Sacramento, CA. X+338 pps.

³³ Ibid.

- Migratory nongame birds of management concern listed by United States Fish and Wildlife Service (USFWS) (Migratory Nongame Birds of Management Concern in the United States: The list 1995; Office of Migratory Bird Management; Washington D.C.; Sept. 1995);
- Animals that are designated as "species of special concern" by CDFW (2019);
- Animal species that are "fully protected" in California (Fish and Game Codes 3511, 4700, 5050, and 5515), and
- Bat species that are designated on the Western Bat Working Group's (WBWG) Regional Bat Species Priority Matrix as: "RED OR HIGH." This priority is justified by the WBWG as follows:

"Based on available information on distribution, status, ecology, and known threats, this designation should result in these bat species being considered the highest priority for funding, planning, and conservation actions. Information about status and threats to most species could result in effective conservation actions being implemented should a commitment to management exist. These species are imperiled or are at high risk of imperilment."

The project site is relatively flat, except for where depressional wetland habitat is present. The habitat on the project site is upland annual grasslands and seasonal wetlands. The western portions of the project site contain characteristics of land that has been developed or disturbed in several areas, including existing occupied buildings, impervious gravel parking areas, previous agricultural activity, and disturbed soils. Much of the project site is covered by a series of seasonal wetlands, which extend into the Woodbridge Reserve parcel northeast of the project site (Exhibit 3). The remainder of vegetation found on the project site consists of upland annual grasslands, dominated by non-native grasses. A number of ornamental trees, and fruit and nut trees can be found scattered around the project site mostly along the western and eastern edges of the site. Two special-status plant species and one special-status wildlife species were evaluated for their potential to occur on the project site, based on their ecology and regional occurrences within USGS *Sebastopol, California* 7.5-minute quadrangle, as discussed below.

Special-status Plant Species

A plant's potential to occur on the project site was based on presence of suitable habitats, soil types, and occurrences recorded by the CNPS' Inventory of Rare and Endangered Plants of California or CNDDDB within the Sebastopol quadrangle, and as recorded in the BRA.³⁴ Forty special-status plant species have been recorded with potential to occur within the project site based on the CNDDDB and CNPS *Inventory of Rare and Endangered Plants of California* database searches, but because of previous development and current disturbances at the project site, most of these species are unlikely to occur.

The wetlands in the East Parcel are dominated by native plant species such as California semaphore grass (*Pleuropogon californicus*), meadow barley (*Hordeum brachyantherum*), smooth goldfields

³⁴ Monk & Associates Environmental Consultants. 2020. Biological Resources Analysis, 2220 Fulton Road, City of Santa Rosa, California. Walnut Creek, CA. February 25.

(*Lasthenia glaberrima*), and coyote thistle (*Eryngium aristulatum*). Non-native wetland species also occur such as curly dock (*Rumex crispus*), pennyroyal (*Mentha pulegium*), and Italian rye grass (*Festuca perennis*). The upland grasslands on the West Parcel are dominated by non-native plant species such as slender oats (*Avena barbata*), hare barley (*Hordeum murinum* ssp. *leporinum*), subterranean clover (*Trifolium subterraneum*), vernal grass (*Anthoxanthum aristatum*), perennial ryegrass, six-weeks fescue (*Festuca bromoides*), soft chess (*Bromus hordeaceus*), shamrock clover (*Trifolium dubium*), and several species of vetch (*Vicia* sp.).

The project site has undergone multiple years of special-status plant surveys exceeding USACE, CDFW, and United States Fish and Wildlife Service (USFWS) policies that require 2 years of special-status plant surveys in the Santa Rosa Plain prior to the time a project is permitted to impact seasonal wetlands. Special-status plant surveys were conducted by Laurence P. Stromberg, PhD in 2015, 2016, 2017, and 2019. Monk & Associates Biologists also conducted special-status plant surveys on the project site in 2019.

Only two special-status plants were identified on the project site during all years of special-status plant surveys: Burke's goldfields and Lobb's buttercup. Burke's goldfields, a federal and state listed endangered plant species, is discussed below. Lobb's buttercup is only a CNPS Rank 4 plant without a CESA or FESA status. CNPS Rank 4 plants are not protected pursuant to CEQA and this plant is not discussed further.

Burke's Goldfields

A small number of Burke's goldfields were found in isolated pools within the proposed East Parcel (Exhibit 8). Burke's goldfield is a federally- and State-listed endangered species that is protected under FESA and CESA, respectively.

Wetlands where Burke's goldfields occur within the proposed East Parcel are hydrologically isolated from the seasonal wetlands on the western portion of the project site by a naturally occurring watershed break. The residential subdivision component (the West Parcel) of the proposed project would occur in a separate micro-watershed than the proposed East Parcel to avoid impacting endangered plants. Because the Burke's goldfield colonies (consisting of 0.484 acre) only occur within the proposed East Parcel and because these pools would not be directly impacted by proposed wetland enhancement/creation in the East Parcel (as described in the Project Description), there would be no direct project impacts to occupied Burke's goldfield pools. Rather, wetlands that would be impacted (by both development and wetland enhancement) are regarded as impacting "suitable" vernal pool (rare plant) habitat.

Approximately 2.65 acres of "suitable" vernal pool (rare plant) habitat would be impacted by the proposed project (2.52 acres would be permanently filled to facilitate housing construction on the West Parcel and 0.13-acre would be permanently filled on the East Parcel to enhance the functions and services of wetlands within the East Parcel). As detailed in the USFWS's *Programmatic Biological Opinion for U.S. Army Corps of Engineers Permitted Projects that Affect the California Tiger Salamander and Three Endangered Plant Species on the Santa Rosa Plain, California*, projects are required to mitigate impacts to suitable vernal pool habitat via preservation of vernal pool habitats. This impact would be mitigated to a less than significant level based on proposed wetlands

preservation/restoration, creation, and enhancement as detailed in the Project Description. In pre-application meetings with the USFWS and CDFW, these agencies agreed that the proposed mitigation plan for the proposed project meets their criteria for Burke's goldfields mitigation on the Santa Rosa Plain. Pursuant to MM BIO-1a, a mitigation compliance report shall be submitted to the City planning staff or staff Biologist at least 30 days prior to breaking ground.

The plan to create and enhance Burke's goldfields habitat would require collection of seeds from a property or properties that support healthy donor colonies of Burke's goldfields. The CDFW owns Woodbridge Reserve and will own the Alton Lane Mitigation Site in the near future. Since seeds are proposed to be collected in spring of 2021 for use in the East Parcel, the CDFW would have to permit collection of Burke's goldfield seeds from one of these sites, or other site(s) designated by the CDFW. Harvesting seeds, if carefully executed, would not result in significant impacts to donor populations. As detailed in MM BIO-1a, the project applicant would apply to the CDFW for an Incidental Take Permit pursuant to Section 2081 of the California Fish and Game Code. Wetland enhancement and creation in the East Parcel is expected to increase seasonal wetland functions and values. The proposed project's establishment of a new Burke's goldfields preserve would increase the Santa Rosa Plain population of Burke's goldfields, in keeping with the 2016 USFWS Recovery Plan for the Santa Rosa Plain³⁵ and CDFW's objectives for promotion of endangered vernal pool plants on the Santa Rosa Plain. None of the sparse occurrences of Burke's goldfields in the East Parcel would be impacted during enhancement of wetlands within the East Parcel.

Special-status Wildlife Species

Because of the disturbed nature of the project site and previous agricultural uses coupled with an absence of suitable habitat, few special-status wildlife species have the potential to occur within the project site boundaries. No special-status animals have ever been mapped on or adjacent to the project site. According to CDFW CNDDDB records, a total of three special-status animal species are known to occur in the region of the project site. Two of these species, the western pond turtle (*Actinemys marmorata*) and the Coho salmon (*Oncorhynchus kisutch*), do not have the potential to occur on the project site because of an absence of stream channels, drainages, or other permanent aquatic habitat. As such, only California tiger salamander (*Ambystoma californiense*) was evaluated for potential to occur on the project site. This species is discussed below.

California Tiger Salamander

The project site falls within the known range of the Sonoma County Distinct Population Segment (DPS) of the California tiger salamander. This DPS is federally listed as endangered and State-listed as threatened and therefore is protected pursuant to FESA and CESA, respectively. The project site also lies within USFWS designated Critical Habitat for this species. While the USFWS does not require mitigation for impacts to Critical Habitat, the USFWS must consider whether impacts to Critical Habitat would preclude recovery of the species prior to the time it can authorize Incidental Take for proposed projects.³⁶

³⁵ United States Fish and Wildlife Service (USFWS). 2016. Recovery Plan for the Santa Rosa Plain. Website: <https://www.amphibians.org/wp-content/uploads/2019/04/USFWS-Recovery-Plan-for-the-Santa-Rosa-Plain.pdf>. Accessed January 21, 2020.

³⁶ G. Monk personal communication with J. Hanni of the USFWS, October 2019.

Migration/Dispersal Habitat

The closest known record of breeding California tiger salamanders to the project site is at the Alton Lane Mitigation Site located approximately 2,230 feet west and on the other side of Fulton Road (Exhibit 10). The USFWS's 2007 *Programmatic Biological Opinion* for the Santa Rosa Plain requires a 1:1 mitigation ratio for a project that is greater than 2,200 feet and within 1.3 miles of a known California tiger salamander breeding site. Thus, the proposed project would result in a potentially significant impact to California tiger salamander dispersal/migration habitat.

Breeding and Over-Summering Habitat

Based upon the multitude of California tiger salamander studies conducted over many years on properties immediately adjacent to or near the project site, all with negative findings, and the absence of CNDDDB records for California tiger salamander east of Fulton Road and north of Santa Rosa Creek, Monk & Associates concluded that project implementation is unlikely to result in any impacts to California tiger salamander, either to occupied habitat or to individual California tiger salamanders,³⁷ and there is no expectation that the proposed project would result in “take” of California tiger salamander. However, the CDFW requested that a full “Protocol” California tiger salamander study be completed pursuant to the “*Interim guidance on-site assessment and field surveys for determining presence or a negative finding of the California tiger salamander.*”³⁸ A Protocol California tiger salamander study includes an upland survey (aka “winter pitfall trapping study”) and two spring larval breeding pool surveys to prove absence of California tiger salamander on a project site.

One year of spring larval surveys was completed in spring 2019 on the project site per protocol and was negative for California tiger salamander larvae. The winter pitfall trapping study was initiated in October 2019 and was completed on March 15, 2020 per protocol. The upland drift fence survey had negative findings (that is, no adult or juvenile California tiger salamanders were identified on the project site) after greater than 30 survey nights (in comparison, the Alton Lane Mitigation Site drift fence/pitfall trapping array, which is only 2,230 feet northwest of the project site, captured over 790 California tiger salamanders during the same survey period (D. Cook, pers. comm. with G. Monk).³⁹ The second larval survey will be complete by May 15, 2020. The completion of the Protocol California tiger salamander study will provide data that will either support or refute a conclusion that California tiger salamander are unlikely to occur on the project site. Until the Protocol California tiger salamander study is complete and California tiger salamander has been determined conclusively to be absent, impacts to California tiger salamander are regarded as potentially significant. If California tiger salamanders are found during the course of the surveys, pursuant to MM BIO-1b, the project applicant would be required to obtain an Incidental Take Authorization from the CDFW and the Biological Opinion prepared by the USFWS would also include conditions for the proposed project to ensure the recovery of this species. Additionally, MM BIO-1b would require wetland creation/enhancement to provide habitat mitigation at a 3:1 replacement ratio. The project applicant would be responsible for meeting the habitat mitigation requirements as set forth by the 2016 USFWS Recovery Plan for the

³⁷ California Natural Diversity Database (CNDDDB). 2019. RareFind 5. Computer printout for special-status species within a 3-mile radius of the project site.

³⁸ United States Fish and Wildlife Service (USFWS). 2003. Interim guidance on site assessment and field surveys for determining presence or a negative finding of the California tiger salamander. Website: https://www.fws.gov/ventura/docs/species/protocols/cts/catigersalamander_survey-protocols.pdf. Accessed January 21, 2020.

³⁹ David Cook. Consulting Wildlife Biologist. Personal communication: phone call with G. Monk. March 16, 2020.

Santa Rosa Plain.⁴⁰ Implementation of MM BIO-1b would reduce impacts to breeding and over-summering habitat for the California tiger salamander to a less than significant level.

Nesting Birds

The project site and its adjacent areas contain mature trees that support potential habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and their eggs and young (protected under California Fish and Game Code Sections 3503 and 3503.5). These species include white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), and common song birds (passerine birds). Construction activities could disturb nesting and breeding birds in trees within and around the construction site. Potential impacts on special-status and migratory birds that could result from construction and operation of the proposed project include destruction of eggs or occupied nests, mortality of young, and abandonment of nests with eggs or young birds prior to fledging. If MBTA protected species are present, impacts to these species would be significant. MM BIO-1c would require preconstruction surveys and alternating construction activities to avoid disturbance of any active nests and prevent take of individuals roosting in trees, which would reduce impacts to migratory and nesting birds and raptors protected under the MBTA to less than significant.

- 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?**

No impact. There is no riparian habitat or sensitive natural community on the project site that has been identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community.

- 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?**

Less than significant impact with mitigation incorporated. The USACE issued an Approved Jurisdictional Determination (Appendix B) in 2016, verifying the presence of 6.31 acres of waters of the United States (specifically seasonal wetlands) on the project site. The proposed project would permanently impact 2.52 acres of seasonal wetlands on the West Parcel. In addition, 0.13-acre of seasonal wetlands would be permanently impacted within the East Parcel as necessary to enhance functions and services of wetlands resulting in the permanent loss of 2.65 acres of seasonal wetlands (Exhibit 11). These impacts are potentially significant. As discussed in the Project Description and described in MM BIO-1d, in total, after the wetland enhancement, the East Parcel that currently supports 3.79 acres of wetlands would be able to support 5.52 acres of enhanced wetlands. All together the proposed project would exceed a 2:1 overall replacement/enhancement to impacts ratio (5.52 replaced/enhanced: 2.65 acre permanently impacted = approximately 2.1:1) and impacts would be less than significant with mitigation incorporated.

⁴⁰ United States Fish and Wildlife Service (USFWS). 2016. Recovery Plan for the Santa Rosa Plain. Website: <https://www.amphibians.org/wp-content/uploads/2019/04/USFWS-Recovery-Plan-for-the-Santa-Rosa-Plain.pdf>. Accessed January 21, 2020.

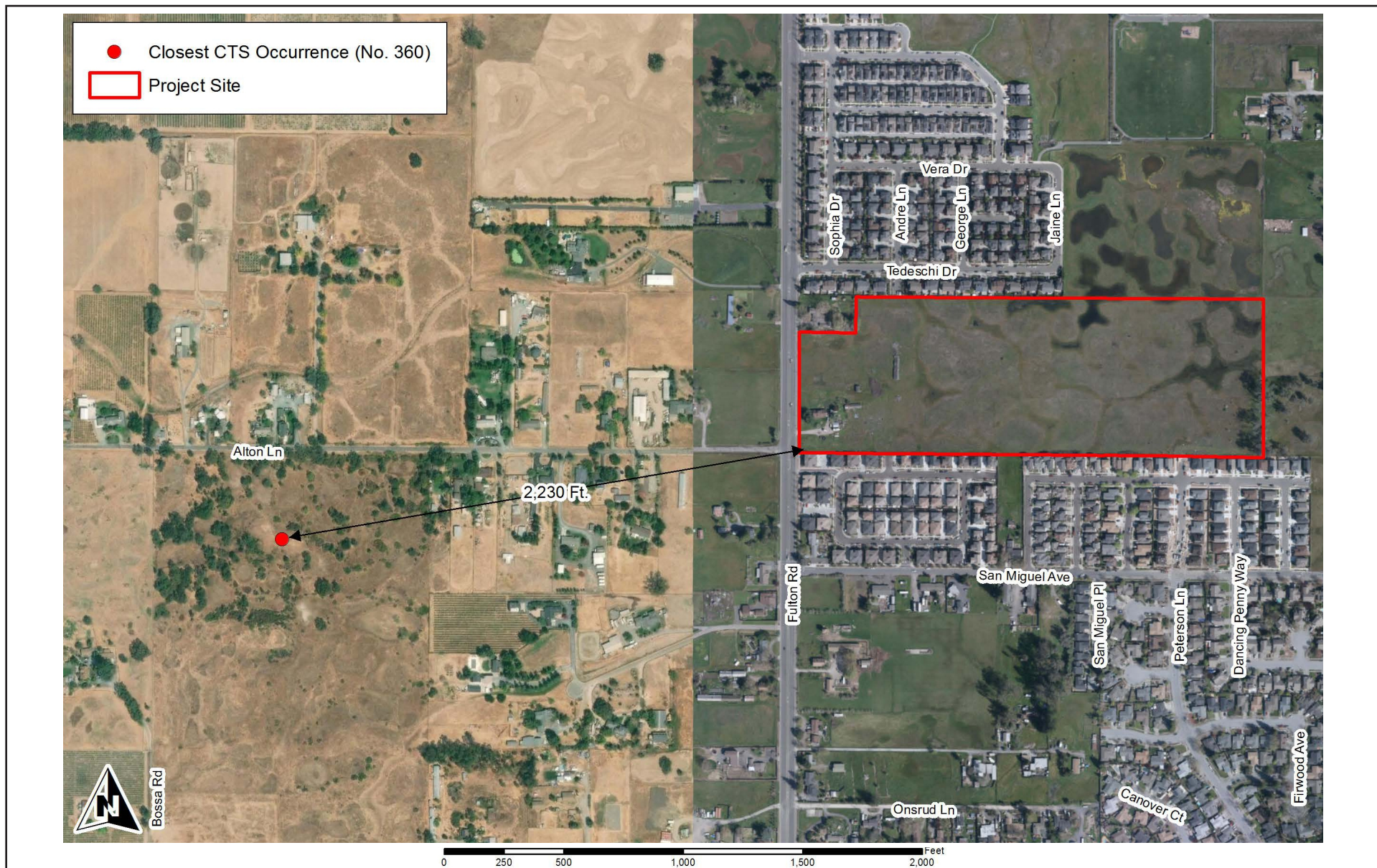
- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?**

Less than significant impact. The project site is an open grassland/seasonal wetland mosaic habitat surrounded by developed properties to the north, south, and east. Though there are some small parcels to the northeast and east that are either designated open space (Woodbridge Reserve) or currently undeveloped (Kerry Ranch parcels), these properties abut already developed lands and do not provide a large swath of contiguous, open land to serve as a wildlife movement corridor. To the immediate west of the project site is Fulton Road, a heavily travelled and highly trafficked road which is an impediment to wildlife movements and removes any wildlife corridor function/value to wildlife originating west of the project site. Therefore, the proposed project would not interfere substantially with movement of fish or wildlife.

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

No impact. The City of Santa Rosa Municipal Code Ordinance No. 17-24 covers tree alteration, removal, relocation, and necessary permits and provides a definition for heritage trees. None of the trees on-site meet the City's definition of a "heritage tree." The coast live oak (*Quercus agrifolia*), which is the one tree on-site that could qualify as a heritage tree, is less than 18 inches in diameter at breast height and would not qualify as a heritage tree. Similarly, according to the Tree Ordinance Section 17-24.030, impacts to the existing landscape trees would not require a permit. The eucalyptus trees on-site are a non-native, invasive species and though not mentioned specifically in the City's Tree Ordinance, they would not be protected. In addition, there are no designated protected trees or street trees on the project site. Therefore, there would be no impact.

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Source: Monk & Associates, November 19, 2019.

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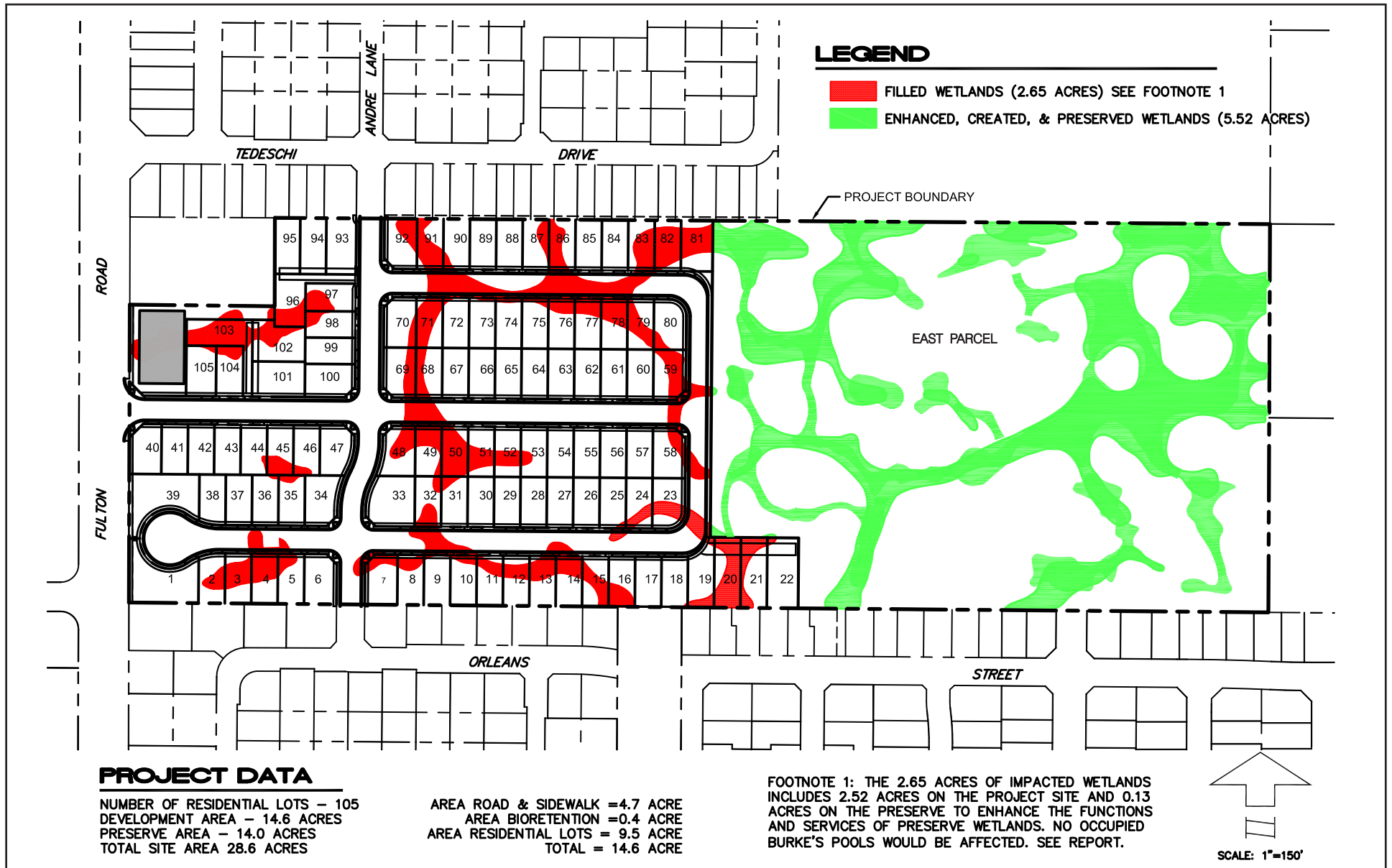


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Exhibit 10 Closest Known Occurrence of California Tiger Salamander to Project Site

CITY OF SANTA ROSA • STONEBRIDGE SUBDIVISION PROJECT
INITIAL STUDY / MITIGATED NEGATIVE DECLARATION

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Source: Civil Design Consultants, Inc., July 2019.



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f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

Less than significant impact with mitigation incorporated. There are no Habitat Conservation Plans or Natural Community Conservation Plans in force in the City of Santa Rosa. However, the proposed project does lie within the boundaries of the Santa Rosa Plain Conservation Strategy (the Strategy). The Strategy covers California tiger salamander and four endangered plant species: Burke's goldfields, Sonoma sunshine (*Blennosperma bakeri*), Sebastopol meadowfoam (*Limnanthes vinculans*), and many-flowered navarretia (*Navarretia leucocephala* ssp. *plieantha*)(listed plants). The purpose of the Strategy is to:

- Establish a long-term conservation program sufficient to mitigate potential adverse effects of future development on the Santa Rosa Plain, and to conserve and contribute to the recovery of the listed species and the conservation of their sensitive habitat;
- To accomplish the preceding [goal] in a fashion that protects stakeholders' (both public and private) land use interests, and
- To support issuance of an authorization for incidental take of California tiger salamander and listed plants that may occur over the course of carrying out a broad range of activities on the Santa Rosa Plain.⁴¹

As discussed in Impact 4(a), a small number of Burke's goldfields were found in isolated pools within the East Parcel and the project site lies within USFWS designated Critical Habitat for California tiger salamander. Therefore, the proposed project could impact species protected by the Strategy. The proposed project would include wetlands preservation/restoration, creation, and enhancement to preserve and promote the establishment of Burke's goldfield colonies (as detailed in Section 1.4, Project Description). In addition, the proposed project would implement MM BIO-1a, MM BIO-1b, and MM BIO-1d, which would reduce potential impacts to these species to less than significant. Therefore, the proposed project would not conflict with the provisions of the Strategy, and impacts would be less than significant with mitigation.

Mitigation Measures

MM BIO-1a Prepare Rare Plant Mitigation Compliance Report and Obtain California Department of Fish and Wildlife Incidental Take Permit Prior to Initiating Construction

A mitigation compliance report shall be submitted to the City Planning Staff or Staff Biologist at least 30 days prior to breaking ground on the residential subdivision portion of the proposed project. The report shall detail progress made towards implementation of vernal pool creation/enhancement. Provided mitigation is well underway or adequate security has been provided and approved by the City, the City may approve commencement of the development portion of the project thereafter.

⁴¹ United States Fish and Wildlife Service (USFWS). 2005. Santa Rosa Plain Conservation Strategy. Website: <https://www.fws.gov/sacramento/es/Recovery-Planning/Santa-Rosa/santa-rosa-strategy.php>. Accessed January 17, 2020.

The project applicant shall apply to the California Department of Fish and Wildlife (CDFW) for an Incidental Take Permit (ITP) pursuant to Section 2081(a) of the California Fish and Game Code that allows collection of Burke's goldfield seeds. The ITP must be obtained prior to the start of wetland creation/enhancement. Per a Seed Collection Plan prepared by L. Stromberg for the proposed Stonebridge Preserve, Burke's goldfield seeds shall be collected from several possible source populations that the CDFW may designate, including the Alton Lane Mitigation Site and/or Woodbridge Reserve.

MM BIO-1b Obtain Permits and Mitigate for Loss of Habitat as Stipulated by Resource Agencies for Potential Impacts to California Tiger Salamander Habitat

Positive Survey Results: If the Protocol Survey demonstrates that the project site is occupied by California tiger salamander then:

1. The project applicant would obtain a California Endangered Species Act (CESA) 2081(b) Incidental Take Permit from the California Department of Fish and Wildlife (CDFW) and the Biological Opinion prepared by the United States Fish and Wildlife Service (USFWS) would also include conditions for the proposed project to ensure the recovery of the species. Any conditions in these permits/authorizations shall be implemented by the applicant prior to grading the project site.
2. The project applicant shall also obtain a Section 404 permit from the United States Army Corp of Engineers (USACE) for discharge of fill or dredged material to waters of the United States (pursuant to MM BIO-1d). Under Section 7 of the Federal Endangered Species Act (FESA), the USACE is required to consult with the USFWS. Under Section 7, the USFWS shall prepare a Biological Opinion that provides FESA Incidental Take authorization for the proposed project. The Biological Opinion shall impose mitigation requirements for potential impacts to California tiger salamander migration/dispersal habitat and suitable rare plant habitat. These requirements will become conditions of the USACE permit. The project applicant shall implement applicable USACE permit conditions including the conditions in the USFWS Biological Opinion.
3. Consistent with mitigation requirements imposed by the CDFW and USFWS for impacts to occupied habitat, mitigation shall be implemented at a 3:1 replacement to impact ratio (i.e., 3 acres of occupied California tiger salamander habitat shall be preserved in perpetuity for each acre of impact from the proposed project). Establishment of the 14-acre East Parcel preserve shall be allowed to constitute a pro rata acreage share of this California tiger salamander mitigation requirement. The remainder of mitigation shall be met by purchasing mitigation credits at a USFWS-approved mitigation bank within the Alton Lane California Tiger Salamander Management Area (see Figure 12 of the Biological Resources Analysis). After approved credits are purchased, proof of purchase shall be provided to the City of Santa Rosa, CDFW, and USFWS prior to the time that grading may commence on the project site.

Negative Survey Results: If the Protocol Survey confirms that California tiger salamander are not present on the project site, the project applicant shall provide mitigation for California tiger salamander dispersal/migration habitat at a 1:1 ratio (i.e., 1 acre of preservation for each acre of development—or a pro rata share thereof) in accordance with the USFWS Programmatic Biological Opinion for the Santa Rosa Plain. Establishment of the East Parcel shall constitute this California tiger salamander mitigation requirement. The proposed 14-acre East Parcel would meet the 1:1 mitigation requirement.

MM BIO-1c Avoid Active Nesting Birds During Construction

If construction or tree removal is proposed during the nesting season for local avian species (typically February 1 through August 31), a focused survey for active nests of raptors, waterfowl (including ducks), and passerine birds within and in the vicinity of the project site (no less than 200 feet outside the project boundaries, where possible) shall be conducted by a qualified Biologist within 15 days of commencing earth-movement, construction or tree removal. Two surveys shall be conducted, at least 1 week apart, with the second survey occurring no more than 2 days prior to tree removal. If no active nests are found, tree removal or construction activities may proceed.

If an active nest is located during pre-construction surveys, a qualified Biologist shall establish a temporary protective nest buffer around the nest(s). The nest buffer should be staked with orange construction fencing. The buffer must be of sufficient size to protect the nesting site from construction-related disturbance and shall be established by a qualified Ornithologist or Biologist with extensive experience working with nesting birds near and on construction sites. Typically, adequate nesting buffers are 50 feet from the nest site or nest tree dripline for passerine birds or waterfowl and up to 300 feet for sensitive nesting birds and several raptor species known to nest in the region of the project site. If the nesting bird or raptor is listed by the California Department of Fish and Wildlife (CDFW), this agency shall be notified regarding the status of the nest.

No construction or earth-moving activity shall occur within any established nest protection buffer prior to September 1 unless it is determined by a qualified Ornithologist/Biologist that the young have fledged (left the nest) and have attained sufficient flight skills to avoid project construction zones, or that the nesting cycle is otherwise complete. In the region of the project site, most species complete nesting by mid-July. This date can be significantly earlier or later and would have to be determined by a qualified Biologist. At the end of the nesting cycle, as determined by a qualified Biologist, temporary nesting buffers may be removed, and construction may commence in established nesting buffers without further regard for buffered nest site(s).

MM BIO-1d Obtain a Section 404 Permit from the United States Army Corps of Engineers (USACE) for Impacts to waters of the United States and a Section 401 Water Quality Certification for Impacts to waters of the State

The project applicant shall obtain a Section 404 permit from the USACE and Section 401 permit from the Regional Water Quality Control Board (RWQCB) for discharge of fill or dredged material to waters of the United States and state. The proposed project shall compensate for the loss of 2.65 acres of waters of the United States and State at a 2:1 mitigation ratio, or as otherwise required by the USACE and RWQCB to achieve no net loss of wetlands.

The project applicant proposes to construct, enhance, and avoid a total of 5.52 acres of wetlands in the East Parcel. This will be accomplished by creating a total of 1.766 acres of new wetlands, as well as enhancing 3.267 acres of degraded wetlands and avoiding 0.484-acre of existing wetlands within the East Parcel (this enhancement and creation is shown on Exhibit 11). To meet the USACE “no net loss” policy, the project applicant will also purchase 0.89-acre of wetland mitigation credit from the Hazel Mitigation Bank or another USACE and RWQCB-approved wetland mitigation bank in order to meet the USACE and RWQCB not net loss policies. Taken together this mitigation will exceed a 2:1 overall replacement/enhancement to impacts ratio.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Cultural Resources <i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

This section describes the existing cultural resources setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on information provided by the Archeological Resources Study prepared by Tom Origer & Associates, dated March 28, 2019; a Historic Resources Evaluation (HRE) prepared by Daly & Associates in February 2020, California Native American Heritage Commission (NAHC); Northwest Information Center (NWIC); National Register of Historic Places (NRHP); California Register of Historical Resources (CRHR); California Historical Landmarks list; California Points of Historical Interest list; California Historical Resources Inventory; and a pedestrian survey of the site conducted by Tom Origer & Associates. The NWIC records search results, NAHC and Tribal correspondence, and Archeological Resources Study are provided in Appendix C.

Northwest Information Center

Julia Franco of Tom Origer & Associates reviewed the archaeological site base maps and records, survey reports, and other materials on file at the NWIC on February 25, 2019 (NWIC File 18-1609). The library and project files at Tom Origer & Associates and various on-line databases were also reviewed. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, and historic maps and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project area.

Results from the NWIC indicate that 30 reports are on file within a 0.5-mile radius of the project area and three of these studies were conducted adjacent to the project site. Six resources have been recorded within 0.5 mile of the project site. All six of the resources recorded within 0.5 mile of the project site are historic-era resources and would not extend into the project site. There are no

resources located on the project site. A records search map identifying the project boundaries and 0.5-mile search radius along with relevant records search results may be found in Appendix C.

Native American Heritage Commission and Tribal Outreach

Tom Origer & Associates sent a request to the NAHC to determine whether any sacred sites are listed on its Sacred Lands File within the project area and the names of Native American individuals and groups that would be appropriate to contact regarding the proposed project. Letters were also sent to the following groups:

- Cloverdale Rancheria of Pomo Indians of California
- Dry Creek Rancheria of Pomo Indians
- Federated Indians of Graton Rancheria
- Kashia Band of Pomo Indians of the Stewarts Point Rancheria
- Lytton Rancheria of California
- Middletown Rancheria of Pomo Indians of California
- Mishewal-Wappo Tribe of Alexander Valley

This outreach represents notification regarding the proposed project and provides Tribes an opportunity for comment. A letter was received via email from Ryan Peterson, Administrative Assistant for the Middletown Rancheria Tribal Historic Preservation Department, on March 12, 2019. The Middletown Rancheria of Pomo Indians of California had no comment at this time, but if evidence of human habitation is found they request that work stop immediately and that they be notified.

A response was received on March 12, 2019, from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the Lytton Rancheria of California. Ms. Tomaras stated that the Tribe has no specific information about the project but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts and sites may be encountered during project construction and they will be consulting with the appropriate lead agency.

A response was received on March 12, 2019, from Dino Franklin, Chairman of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. Chairman Franklin stated that he was unable to comment on the proposed project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.

A response was received on March 25, 2019, from Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Ms. McQuillen requested the results of the cultural resources study and the recommendations made based on those results.

No other responses have been received as of the date of this report. The NAHC and tribal contact efforts are available in Appendix C.

Site Visit and Field Survey

A surface field survey of the project site was conducted on March 14 and 30, 2019. The purpose of this survey was to locate any signs of potentially significant historic or prehistoric cultural deposits that could be affected by development. Surface examination consisted of walking in 15-meter transects using hoes as needed to expose the ground surface and examining soils from rodent burrows. In addition to the surface survey, three auger borings were excavated using a 4-inch diameter barrel auger to examine subsurface soils.

Historic Resources Evaluation

Daly & Associates conducted a survey of the project site to provide a historic evaluation of the built-environment. Architectural Historian, Pamela Daly, conducted an intensive-level field survey on December 16, 2019. The fieldwork consisted of inspecting the extant built-environment resources located on the project site and observing the overall interrelationship of the structure and surrounding landscape to determine if there is evidence of a historical resource.

A house and six outbuildings are located within the project site. County records indicate that the house was constructed in 1930 and has not previously been evaluated for historic significance.⁴² Properties over 50 years in age are considered potentially eligible for listing in the NRHP, CRHR, or local listings of historic resources and, consequently, could be considered historic resources under CEQA Guidelines. The buildings were evaluated relative to the following four CRHR eligibility criteria, which are based on NRHP Standards A–D.

- **Criterion A: Event.** 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.
- **Criterion B: Person.** It is associated with the lives of persons important to local, California, or national history.
- **Criterion C: Architecture.** It embodies the distinctive characteristics of a type, period, or method of construction that represents 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.
- **Criterion D: Information Potential.** It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

All of the buildings were evaluated by Daly & Associates for potential historic significance and eligibility for the CRHR pursuant to Criterion 1-4. The HRE determined that the house and associated outbuildings were constructed in 1930 by Joseph and Mary Memeo as a home farm. There is no evidence that the subject property was associated with any persons or events from when the area south of Fulton Station was first settled in the 1870s, or with the agricultural history of Sonoma County. The dwelling and outbuildings on the project site present no unique design or technology that would cause them (individually or collectively) to be considered an advancement in the history

⁴² Tom Origer & Associates. 2019. Archeological Resources Study, page 15.

of egg or chicken ranches. The project site was improved in 1930 but does not appear to have the capacity to convey any historic association to the history of Santa Rosa or Sonoma County of the 1930s. While the project site does not appear to have met the criteria to be determined a historic property for listing in the NRHP, it has maintained sufficient levels of physical integrity for its history to be evaluated for significance. A copy of the HRE including building descriptions and Department of Parks and Recreation (DPR) recordation forms may be found in Appendix C.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. The project site is not significant under Criterion A of the NRHP. The house was constructed in 1929-1930 on land that had not been improved until that time, possibly due to the natural wetlands that comprise a majority of the East Parcel. Joseph Memeo appears to have established a poultry and egg ranch on his land and dry-farmed the wetlands when possible. Historic aerial photographs present evidence that these activities continued into the 1980s. Research did not reveal that the Joseph Memeo ranch contributed to the history of poultry-keeping in the area of Fulton or Santa Rosa, or with any events that made a significant contribution to the agricultural history of the region or Sonoma County. As a result, the project site is not eligible for listing in the NRHP under Criterion A.

Research did not uncover any substantial contributions by persons residing at the property important to the history of the local area, Santa Rosa, or Sonoma County. As a result, the buildings on the project site have not been found to be directly associated with any persons important to the history of Santa Rosa, California, or the United States and does is not significant under Criterion B of the NRHP.

The residence and outbuildings on the project site were constructed almost 60 years after the land had been sold in 1868 as excess railroad lands by the General Land Office. The residence is not a significant or exceptional example of a Craftsman style house, and the outbuildings are those that would have been constructed to support a home-based egg and chicken ranch. The residence and outbuildings are not the product of the work of a master craftsman or engineer and do not possess high artistic value. The outbuildings do not embody any distinctive or rare characteristics of method of construction. As a result, the buildings on the project site are not eligible for listing under Criterion C as a resource significant to the history of Santa Rosa, California, or the United States.

The project site does not appear to have the capacity to yield information important to the prehistory or history of Santa Rosa, Sonoma County, or California. The buildings on the project site are not eligible for listing in the NRHP under Criterion D.

The buildings on the project site are not eligible for listing in the NRHP under Criterion A-D.

While unlikely, subsurface construction activities always have the potential to damage or destroy previously undiscovered historic resources such as wood, stone, foundations, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramic, and other refuse, if encountered. This would represent a potentially significant impact related to historic resources.

Implementation of MM CUL-1, which requires all work within 100 feet of a find to cease, would ensure that this potential impact is reduced to a less than significant level.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than significant impact with mitigation incorporated. The results of the NWIC records search show that 30 cultural resources lie within 0.5 mile of the project site. However, there are no known archeological resources on-site. Furthermore, the field survey did not find archeological resource indicators on the project site or in the auger borings. Additionally, the Archeological Resources Study determined that based on the project site's geology, historical hydrology, and other factors, the possibility for buried archeological resources to occur is very low.

As with historical resources, it is possible that earthmoving activities associated with project construction could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would be a potentially significant impact. Implementation of MM CUL-1 would ensure that this potential impact is reduced to a less than significant level.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than significant impact with mitigation incorporated. No human remains or cemeteries are known to exist within or near the project site. Although human remains within the project site are unlikely, there is always the possibility that earthmoving activities associated with project construction could potentially damage or destroy previously undiscovered human remains. This would be a potentially significant impact.

In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-2 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

Mitigation Measures

MM CUL-1 In the event a potentially significant cultural resource is encountered during subsurface earthwork activities, all construction activities within a 100-foot radius of the find shall cease, the City shall be notified of the find, and workers shall avoid altering the materials until an Archaeologist who meets the Secretary of Interior's Professional Qualification Standards for archaeology has evaluated the situation. The project applicant shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Potentially significant cultural resources consist of but are not limited to stone, bone, glass, ceramics, fossils, wood, or shell artifacts, or features including hearths, structural

remains, or historic dumpsites. The Archaeologist, in consultation with the appropriate Tribe, shall make recommendations concerning appropriate measures that will be implemented to protect the resource, including but not limited to excavation and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Any previously undiscovered resources found during construction within the project site shall be recorded on appropriate Department of Parks and Recreation (DPR) 523 forms and will be submitted to the City of Santa Rosa, the NWIC, and the State Historic Preservation Office (OHP), if required.

MM CUL-2 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. If during the course of project development there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for appropriate treatment and disposition of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.
2. Where the following conditions occur, the landowner or his or her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site 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 notified by the commission.
 - The descendant identified fails to make a recommendation.
 - The landowner or his authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The project applicant may develop a plan for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
6. Energy <i>Would the project:</i>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

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?**

Less than significant impact. A discussion of the project's energy use is presented below. Energy use consumed by the proposed project was estimated and includes natural gas, electricity, and fuel consumption for the proposed project. Energy calculations are included as part of Appendix D of this Draft IS/MND.

Construction

During construction, the proposed project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. No natural gas would be utilized as part of construction. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site demolition, site preparation, grading, paving, and building construction. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools.

Based on CalEEMod estimates for the proposed project, (see modeling output files in Appendix A), construction-related vehicle trips and construction equipment usage would consume an estimated 117,975 gallons of diesel and gasoline combined during the construction phase (Appendix D). Construction assumptions used to estimate energy consumption for the proposed project were consistent with those used to estimate air quality related emissions and are included in Appendix A. The complete calculations for the project's construction energy consumption are included in Appendix D.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations Title 13, Sections 2449(d)(3) and 2485 limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. In addition, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Single-wide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 32,885 kilowatt-hour (kWh) during the 31-month construction phase (Appendix D). The City of Santa Rosa has established standard conditions of project approval that limit hours of construction to between the hours of 7:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 6:00 p.m. on Saturdays; no construction is permitted on Sundays and holidays. As on-site construction activities would be restricted to these hours, it is anticipated that the use of construction lighting would also be similarly limited. Because of the temporary nature of construction and the financial incentives for developers and contractors to implement efficient energy use, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impact related to fuel and electricity consumption would be less than significant.

Operation

Electricity and Natural Gas

Building operations for the proposed project would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting (indoor and outdoor), and appliances. Based on CalEEMod estimates for the proposed project, long-term operations would consume approximately 849,510 kWh of electricity per year and an estimated 3,051,830 kilo-British Thermal Unit (kBtu) of natural gas per year (Appendix D). Current on-site operational energy use from existing land uses include an estimated 8,091 kWh of electricity and an estimated 29,065 kBtu of natural gas on an annual basis. After netting out existing uses, the proposed project would consume 841,419 kWh of electricity and 3,022,765 kBtu of natural gas per year above existing conditions. However, the proposed project would achieve net zero electricity through a combination of on-site solar and the purchase of renewable electricity to comply with the City of Santa Rosa Climate Action Plan (City's CAP), Action 1.1.3, which requires new developments after 2020 to utilize net zero electricity.⁴³ The proposed project would be designed and constructed in accordance with the City's CAP, City of Santa Rosa's CALGreen Requirements, and CALGreen 2020 Tier 1 Standards, which are based on the State's Title 24 energy efficiency standards.

CALGreen Requirements include building, electricity, and water conservation energy saving measures that are required to be completed as part of the building permitting process.⁴⁴ Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical,

⁴³ City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: <https://srcity.org/DocumentCenter/View/10762>. Accessed December 5, 2019.

⁴⁴ City of Santa Rosa. 2017. City of Santa Rosa Residential 2016 CALGreen+Tier 1 Checklist. February. Website: <https://srcity.org/DocumentCenter/View/15211/2016-CALGreen-Checklist-New-Residential>. Accessed December 5, 2019.

electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Compliance with Title 24 standards would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Energy- and water-efficient design measures for the proposed project would include the incorporation of solar power design, water-efficient landscaping, and high-efficiency lighting and appliances. These standards are widely regarded as the most advanced energy efficiency standards and compliance with Title 24 standards would ensure that operational energy consumption would not result in the use of energy in a wasteful or inefficient manner. Therefore, the operational impact related to building electricity and natural gas consumption would be less than significant.

Fuel

Long-term operational energy consumption would also occur from fuel combustion associated with daily vehicle trips. Fuel consumption would be primarily related to vehicle use by residents and visitors. Based on CalEEMod estimates, vehicle trips associated with the project would result in 2.6 million VMT and consume an estimated 100,857 gallons of gasoline and diesel combined on an annual basis.⁴⁵ Estimated operational vehicle trips from land uses currently occupying the project site result in 21,542 VMT and consume an estimated 830 gallons of fuel (gasoline and diesel combined) annually.⁴⁶ Therefore, the proposed project would result in net increase of 2,595,128 VMT and 100,827 gallons of annual fuel consumption (gasoline and diesel combined).

Bike lanes are located along Fulton Road and Piner Road and would serve the project site and connect the proposed project to other land uses. The proposed project would be within 4 miles of two regional routes of travel, which would reduce resident's travel distance to major freeways. For these reasons, transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during long-term operations. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Less than significant impact. A discussion of the project's potential to conflict with or obstruct a State or local plan for renewable energy or energy efficiency is presented below.

Construction

As described above, construction activities would involve energy consumption in various forms and would be limited by California regulations such as California Code of Regulations Title 13, Sections 2449(d)(3) and 2485 which limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. The proposed project would be required to comply with these regulations. There are no renewable energy standards applicable to construction activities for the

⁴⁵ Based on the 2,616,670 annual VMT consistent with CalEEMod output (Appendix A) and an average fuel consumption determined using Emission Factors Model (EMFAC) 2014 factors for Sonoma County in the 2023 calendar. Website: <https://www.arb.ca.gov/emfac/2014/>. Accessed December 6, 2019.

⁴⁶ Based on the 21,542 annual VMT consistent with CalEEMod output (Appendix A) and an average fuel consumption determined using EMFAC 2014 factors for Sonoma County in the 2023 calendar year. Source of EMFAC Factors: California Air Resources Board (ARB). 2014. EMFAC 2014 Web Database, Sonoma County. Website: <https://www.arb.ca.gov/emfac/2014/>. Accessed December 6, 2019.

proposed project. Thus, it is anticipated that construction of the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, impacts would be less than significant.

Operation

Additionally, California's Renewables Portfolio Standard (RPS) requires that 33 percent of electricity retail sales be served by renewable energy sources by 2020. PG&E would provide the delivery of electricity to the project through the existing grid, while Sonoma Clean Power would provide the electric generation service. Sonoma Clean Power's power mix as of 2018 includes 42 percent large hydroelectric, 49 percent renewable, and 9 percent general system power. Sonoma Clean Power's renewable energy resource mix is comprised of 42 percent large hydro, 22.7 percent wind, 7.6 percent solar, 17.7 percent geothermal, 9.4 percent CAISO system power, and 0.6 percent biomass and biowaste, as well as an EverGreen option for 100 percent local renewable service.⁴⁷ Senate Bill (SB) 32 mandates a Statewide GHG emissions reduction goal to 40 percent below 1990 levels by the year 2030. Sonoma Clean Power's current power mix already exceeds State requirements for 2020. Therefore, the proposed project would receive electricity from a utility company that meets California's RPS requirements as well as the State requirements for 2020.

In addition, the proposed homes would be designed and constructed in accordance with the State's Title 24 energy efficiency standards and would include rooftop solar. To comply with the City's CAP, Action 1.1.3, which requires new developments after 2020 to utilize zero net electricity, future residents will be required to purchase electricity through PG&E's Solar Choice Program that allows for the purchase and use of 100 percent renewable solar energy.⁴⁸ Thus, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

Mitigation Measures

None.

⁴⁷ Sonoma Clean Power. 2019. About Us. Website: <https://sonomacleanpower.org/power-sources>. Accessed January 16, 2020.

⁴⁸ Ibid.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
7. Geology and Soils <i>Would the project:</i>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Descriptions and analysis in this section are based on the General Plan and General Plan EIR as well as a Paleontological Records Search prepared by Kenneth L. Finger, PhD, on August 14, 2019 (provided in Appendix E).

The project site is within the boundaries of Santa Rosa, California in Sonoma County. The City of Santa Rosa lies within the Coast Ranges, which are composed of marine sedimentary deposits and volcanic rocks. The Coast Ranges, located between the Pacific Ocean and the Sacramento and San Joaquin Valleys, go as far north as the Oregon border with California, and south to the Santa Ynez Mountains near Santa Barbara.⁴⁹ Santa Rosa is within the northern part of the Coast Ranges that are comprised of greywacke, shale, greenstone, basalt, chert, gravel, silt, clays, mudstones, and sandstone rock types.⁵⁰ Gently sloping alluvial plains, upland foothills, and low valleys characterize the topography of Santa Rosa.⁵¹ According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), the soil types of the project site are Clear Lake clay and Huichica loam 0 to 2 percent slopes, 2 to 9 percent slopes, and 0 to 5 percent slopes.⁵² Clear Lake clay is poorly draining, negligible to high runoff, and slow to very slow permeability.⁵³ Huichica loam is imperfectly draining, runoff is slow, and permeability is moderately slow to very slow.⁵⁴

The City of Santa Rosa is in the San Francisco Bay Area, a seismically active region. The City is approximately 8 miles southeast of the Maacama Fault Zone, lies adjacent to the Rodgers Creek Fault Zone, and is 20 miles northeast of the San Andreas Fault Zone.⁵⁵ The Maacama Fault Zone is a system capable of producing a maximum magnitude 7.1 earthquake. The project site is not located in an Alquist-Priolo Earthquake Fault Zone. The Rodgers Creek and San Andreas Fault Zones are two active faults that are responsible for major earthquakes in the last 150 years.⁵⁶ The closest Alquist-Priolo Earthquake Fault Zones are the Healdsburg, Mark West Springs, and Santa Rosa zones.⁵⁷ The General Plan EIR identifies strong seismic ground shaking from faults near the City of Santa Rosa as a potentially significant impact for the City.⁵⁸ The liquefaction susceptibility level in the City of Santa Rosa is rated moderate.⁵⁹ The project site is not located in an area susceptible to landslide occurrence.⁶⁰

The project site is located in a paleontological region with 10 known Pleistocene vertebrate localities with recorded recovered fossils and eleven Pliocene vertebrate localities. The project site is not located on geologic formations or near geologic formations that have yielded paleontological resources.⁶¹

Would the project:

⁴⁹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). 2019. Soil Survey. Website: [https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx?aoicords=\(-122.76966%2038.47581,-122.76966%2038.47443,-122.76282%2038.47445,-122.76289%2038.47624,-122.76875%2038.47623,-122.76873%2038.47582,-122.76966%2038.47581\)\)](https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx?aoicords=(-122.76966%2038.47581,-122.76966%2038.47443,-122.76282%2038.47445,-122.76289%2038.47624,-122.76875%2038.47623,-122.76873%2038.47582,-122.76966%2038.47581))). Accessed August 15, 2019.

⁵³ United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Clear Lake. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html. Accessed August 16, 2019.

⁵⁴ United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Huichica. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HUICHICA.html. Accessed August 16, 2019.

⁵⁵ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.

⁵⁶ Ibid.

⁵⁷ California Department of Conservation. 2019. Regulatory Maps. Website: <https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/>. Accessed August 15, 2019.

⁵⁸ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.

⁵⁹ United States Geological Survey (USGS). Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California. 2006.

⁶⁰ County of Sonoma Permit and Resource Management Department. 2016. Sonoma County Hazard Mitigation Plan: Landslide Susceptibility. Website: <https://sonomacounty.ca.gov/PRMD/Long-Range-Plans/Hazard-Mitigation/Landslide-Hazard-Areas/>. Accessed August 16, 2019.

⁶¹ Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

- 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.**

No impact. As stated, the project site is not located within or on an Alquist-Priolo Earthquake Fault Zone as determined by the California Department of Conservation, Geologic Survey Regulator Maps.⁶² The nearest fault zones to the project site, approximately 8 miles from Santa Rosa, are the Maacama and Rodgers Creek Fault Zones.⁶³ A fault does not run through the project site and the nearest fault is approximately 4 miles east. These distances preclude the possible exposure to fault rupture. Thus, no impact would occur.

ii) **Strong seismic ground shaking?**

Less than significant impact with mitigation incorporated. The project site could experience severe seismic ground shaking similar to other parts of the Bay Area. Strong seismic ground shaking from the Maacama and Rodgers Creek Faults could result in structural failure and collapse of structures, or cause non-structural building elements to collapse, presenting a hazard to building occupants, a potentially significant impact.

The proposed project would be subject to the most recent California Building Standards Code (CBC) requirements for reducing seismic hazards. In addition, implementation of MM GEO-1 would ensure the project design and construction plans follow recommendations contained in a project site specific design-level geotechnical report prepared for the project by a licensed Professional Engineer. Recommendations could include details on proper excavation methods, fill material, slab-on-grade requirements, or other seismic design parameters consistent with the most recent CBC. Therefore, impacts would be less than significant with mitigation incorporated.

iii) **Seismic-related ground failure, including liquefaction?**

Less than significant impact with mitigation incorporated. The project site is in an area with moderate liquefaction potential. As such, the seismic-related ground failure impacts would be potentially significant. Implementation of MM GEO-1 would require the applicant to submit a project site-specific design-level geotechnical report for review and approval prior to issuance of a grading or building permit and to include the resulting recommendations in the construction, grading, and development plans. In addition, a licensed Professional Engineer shall design all soil engineering recommendations and structural foundations. Implementation of MM GEO-1 would ensure design and construction plans account for and address any potentially significant impacts related to liquefaction. Therefore, impacts would be less than significant with mitigation incorporated.

⁶² California Department of Conservation. 2019. Regulatory Maps.
Website: <https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/>. Accessed August 15, 2019.

⁶³ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report.

iv) Landslides?

No impact. Landslides typically occur on slopes or areas surrounded by steep slopes. The project site is generally flat, containing elevations of approximately 138 to 142 feet above MSL.⁶⁴ The surrounding area is characterized by level, urbanized land and vacant rangeland. The probability for landslides to affect the project site is extremely low. Thus, no impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less than significant impact. Project construction would include clearing, grading, excavation, and other earthmoving activities. These activities would expose surface soils to wind and precipitation, which could cause soil erosion and loss of topsoil. Projects that disturb one or more acres of soil are required to obtain the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit), issued by the State Water Resources Control Board (State Water Board). The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must list BMPs the proposed project will implement to control erosion and prevent the conveyance of sediments off-site. Implementation of the conditions of the Construction General Permit would reduce erosion impacts resulting from project construction to less than significant levels.

Upon completion of construction, the West Parcel would be developed stormwater system designed to accommodate runoff from impervious surfaces, thereby minimizing potential erosion risk. The East Parcel would mostly remain unaltered grasslands and wetlands. Santa Rosa City Code Chapter 19-64 Grading and Erosion Control contains erosion control requirements for new construction and development projects to minimize sediment in stormwater runoff and minimize erosive processes. Adherence with the applicable requirements of the Construction General Permit and the Santa Rosa City Code would ensure impacts would be less than significant.

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?

Less than significant impact with mitigation incorporated. As discussed under Impacts 7 (a)(i),(ii),(iii), and (iv), the proposed project could experience structural failures and liquefaction due to seismic ground shaking from regional faults or improperly built structures. Implementation of MM-GEO 1, requiring review and approval of a project specific, design-level geotechnical report prior to issuance of grading or building permit, would ensure that proper recommendations are included in the project design and construction plans and that the project complies with the most recent edition of the CBC. As such, implementation of MM GEO-1 would reduce impacts to less than significant.

⁶⁴ Basics Environmental, Inc. 2019. Phase I Environmental Site Assessment Report, 2220 Fulton Road, Santa Rosa, California, March.

- 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?**

Less than significant impact with mitigation incorporated. Soils within the project site include Clear Lake clay and Huichica loam. According to the USDA, Clear Lake clay soils are categorized as very plastic, referring to the soil type's ability to be easily molded or continuously deformed by various pressures or physical processes. Clear Lake clay soils are slow to very slow in permeability and poorly draining.⁶⁵ Huichica loam ranges from slightly to very plastic between depths of 0-30 inches and is non-plastic at depths greater than 30 inches. Huichica loam permeability is very to moderately slow and characterized as imperfectly draining.⁶⁶ These soils have the potential to expand, compress, or deform because of the poor permeability and plastic qualities leading to building and roadway structural and foundational failures. These qualities could present potentially significant impacts related to soil expansion.

MM GEO-1 would ensure the project applicant submits a project site-specific design-level geotechnical report prepared by a licensed Professional Engineer for review and approval prior to issuance of a grading or building permit. The geotechnical report would evaluate the project site's soils and determine the required construction and development plans details needed to reduce impacts from expansive soil conditions. As a result, impacts would be less than significant with mitigation incorporated.

- e) **Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

No impact. The project does not propose the use of septic tanks on-site. The proposed project would connect to the City's wastewater system and would comply with applicable wastewater requirements outlined in Impact 18, Utilities, of this Draft IS/MND. As such, no impacts would occur.

- f) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less than significant impact with mitigation incorporated. The project site is entirely on Pliocene beds of the Huichica and Glen Ellen Formations (QT). Glen Ellen and Huichica formations are continental deposits that could contain significant paleontological resources. A Paleontological Records Search of Sonoma County revealed 10 Pleistocene vertebrate species and 11 Pliocene plant species fossil types have been recovered within the county. However, the Pleistocene vertebrate localities fossils are not recovered from Huichica or Glen Ellen formations and recovery of Pliocene plant localities are not mapped for the vicinity of the project site.⁶⁷ In addition, a localized Paleontological Records Search of the project site revealed no significant paleontological resources recorded from the Huichica or Glen Ellen formations within the area. Therefore, paleontological

⁶⁵ United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Clear Lake. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CLEAR_LAKE.html. Accessed August 16, 2019

⁶⁶ United States Department of Agriculture (USDA). 2018. National Cooperative Soil Survey. Huichica. Website: https://soilseries.sc.egov.usda.gov/OSD_Docs/H/HUICHICA.html. Accessed August 16, 2019.

⁶⁷ Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

monitoring is not recommended.⁶⁸ Although unlikely, excavation during construction could unearth paleontological resources, a potentially significant impact. Implementation of MM GEO-2 would ensure a professional Paleontologist would educate construction crews on how to identify fossils and the correct procedure to follow if paleontological resources are found. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

- MM GEO-1** Prior to issuance of grading or building permits, the project applicant shall submit a design-level geotechnical report that provides geotechnical recommendations for the project based on adequate subsurface exploration, laboratory testing, and engineering analysis. In addition, the project applicant shall submit plans to the City of Santa Rosa for review and approval demonstrating project compliance with the latest adopted edition of the California Building Standards Code (CBC) seismic requirements and the recommendations of the design-level geotechnical report. A licensed Professional Engineer shall design all soil engineering recommendations and structural foundations. The final project plans shall incorporate the recommendations from the approved, design-level geotechnical report. A licensed Geotechnical Engineer or Certified Engineering Geologist shall supervise all on-site soil engineering activities.
- MM GEO-2** Prior to issuance of grading or building permits, the project applicant and City shall ensure a professional Paleontologist has trained the construction crew on how to recognize fossils and the procedure to follow in the event paleontological resources are discovered.

⁶⁸ Finger, Kenneth L. PhD. Consulting Paleontologist. Personal communication: letter. August 14, 2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
8. Greenhouse Gas Emissions <i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Would the project:

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

Less than significant impact with mitigation incorporated. Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities such as demolition, site preparation and grading, running of construction equipment engines, movement of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker motor vehicle trips.

Long-term, operational GHG emissions would result from project-generated vehicular traffic, on-site combustion of natural gas for space and water heating, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, and the emissions associated with the hauling and disposal of solid waste from the project site.

The 2017 BAAQMD Thresholds contain the following for project-related GHGs:

For land use development projects (including residential, commercial, industrial, and public land uses and facilities), (1) the threshold is compliance with a qualified GHG Reduction Strategy; or (2) annual emissions less than 1,100 metric tons per year of carbon dioxide equivalent (CO₂e); or (3) 4.6 metric tons CO₂e/service population/year (residents + employees).

It should be noted that the BAAQMD's thresholds of significance were established based on meeting the 2020 GHG targets set forth in the Assembly Bill (AB) 32 Scoping Plan.

The BAAQMD has not yet updated their recommended GHG emissions thresholds to address target reductions past year 2020. However, consistent with current State directives (AB 32 and AB 398), the updated target requires an additional 40 percent reduction in GHG emissions by year 2030. Applied to the BAAQMD quantitative thresholds based on 2020 AB 32 GHG reduction goals, this would equate to 660 metric tons (MT) CO₂e per year by year 2030 or 2.6 MT CO₂e per year per service population by year 2030.

Qualified GHG Strategies remain an appropriate threshold if the project's full buildout year falls within the time horizon covered within a Qualified GHG Strategy and if the Qualified GHG Reduction Strategy demonstrates compliance with post-2020 GHG reduction goals. The City of Santa Rosa calculated GHG emissions reductions with implementation of the City's CAP not just for comparison to the 2020 targets, but also out to year 2035 to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the City's CAP, implementation of the measures of the City's CAP are expected to decrease GHG emissions to 2.3 MT CO₂e per person per year by year 2035.⁶⁹ While this timeframe is 5 years after the assumed 2030 target threshold, the City's CAP notes that with a reduction to 2.9 MT CO₂e per person per year in 2020 with assumed steady reductions over time, it can be concluded that emissions would be below 2.6 MT CO₂e per person per year (or a 40 percent reduction below 2020 thresholds) by year 2030.⁷⁰

Project Construction

The proposed project would emit GHG emissions during construction from off-road equipment, worker vehicles, and material delivery and/or hauling. Detailed construction assumptions are provided in Appendix A. The BAAQMD does not presently provide a construction-related GHG generation threshold but recommends that construction-generated GHGs be quantified and disclosed. Total GHG emissions generated during all phases of construction were combined and are presented in Table 18.

Table 18: Construction Greenhouse Gas Emissions

Construction Phase	MT CO ₂ e per year ¹
Demolition—2021	36
Site Preparation—2021	17
Grading—2021	90
Paving—2021	74
Paving—2022	25
Paving—2023	17
Building Construction—2021	561

⁶⁹ City of Santa Rosa Community Development. 2012. Climate Action Plan: City of Santa Rosa. Website: <https://srcity.org/DocumentCenter/View/10762/Climate-Action-Plan-PDF?bidId=>. Accessed: May 26, 2020. June 5.

⁷⁰ Ibid.

Table 18 (cont): Construction Greenhouse Gas Emissions

Construction Phase	MT CO ₂ e per year ¹
Building Construction—2022	288
Building Construction—2023	122
Architectural Coating—2022	4
Architectural Coating—2023	3
Total Construction Emissions	1,237
Emissions Amortized Over 30 Years¹	41
Notes: MT CO ₂ e = metric tons of carbon dioxide equivalent ¹ Emissions are rounded to the nearest whole number ² Construction GHG emissions are amortized over the 30-year lifetime of the project. Source: CalEEMod Output (Appendix A).	

As shown in Table 18, construction of the proposed project is estimated to generate approximately 1,237 MT CO₂e over the entire project construction duration. As discussed above, neither the City of Santa Rosa nor the BAAQMD have an adopted thresholds of significance for construction-related GHG emissions. Because construction would be temporary and would not result in a permanent increase in emissions, the proposed project would not interfere with the implementation of AB 32 or Senate Bill (SB) 32.

Project Operation

Operational or long-term emissions occur over the life of a project. The major sources for operational GHG emissions include:

- Motor Vehicles:** These emissions refer to exhaust related GHG emissions from the cars and trucks that would travel to and from the project site. Vehicle trips associated with project operations would primarily include resident and visitor trips to and from the proposed single-family residential project. Trip generation rates used in estimating mobile-source emissions were consistent with those presented in the traffic analysis prepared for the project by W-Trans.⁷¹ The combined trip generation potential is estimated to result in an average of 1,124 trips per day based on the projected trips from residents and visitors. The TIS⁷² considered 120 single-family residential units (as opposed to 105 units) for analysis. To be consistent with the TIS,⁷³ total trips generated by 120 units (i.e. 1,124 trips) is used for the GHG analysis. Apart from the total trips generated by the proposed project, all other assumptions and analysis for construction and operational GHG emissions for the proposed project are based on 105 single-family residential units.

⁷¹ W-Trans. 2019. Traffic Impact Study for 2220 Fulton Road Project. October 22.

⁷² Ibid.

⁷³ Ibid.

- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site for heating water, space heating, dryers, stoves, or other uses.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project. PG&E is a utility providing electricity and natural gas service to Sonoma County. The proposed project would receive natural gas through PG&E. The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by PG&E. GHG emissions from energy consumption were calculated using PG&E's electricity intensity factors for CO₂, N₂O, and CH₄. The proposed project would include solar panels that that would generate on-site renewable energy; reductions for solar were accounted for in estimating the project's generation of operational GHG emissions in compliance with Title 24 minimum requirements for single-family residences.⁷⁴
- **Water Transport:** These emissions refer to those associated with the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

The City's CAP follows both the State CEQA Guidelines and BAAQMD's Guidelines by incorporating the standard elements of a Qualified GHG Reduction Strategy. Standard elements of a Qualified GHG Reduction Strategy include measures or a group of measures (including performance standards) that demonstrate with substantial evidence that if implemented on a project-by-project basis would collectively achieve specified emissions levels.

Establishing consistency with a qualified GHG Reduction Strategy (per CEQA Guidelines § 15183.5) is an appropriate approach to determine significance for individual projects and is one of the three recommended BAAQMD thresholds previously discussed. This approach allows lead agencies to analyze and mitigate the significant effects of GHG emissions at a programmatic level to reduce GHG emissions, so that later individual development projects may tier from the prior analysis to determine significance. Appendix D of the City's CAP describes in detail how the City's CAP was developed to satisfy the requirements of the BAAQMD's guidelines on the standard elements of a Qualified GHG Reduction Strategy, with the intent to allow future development projects to determine that a project has a less than significant impact on GHG emissions as long as it is in compliance with the City's CAP. These standard elements of a Qualified GHG Reduction Strategy and the of incorporation of each element into the City's CAP, are provided in Table 19.

⁷⁴ California Energy Commission (CEC). 2018. 2019 Title 24, Part 6, Building Energy Efficiency Standards Rulemaking. April. Website: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=223257-3>. Accessed December 10, 2019.

Table 19: City of Santa Rosa Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic range.	Incorporated. The CAP consists of a city-wide GHG emissions inventory, which separates activities that generate GHG emissions into sectors including vehicle transportation, building energy usage, water delivery systems and others. The CAP includes existing and projected GHG emissions for the defined geographic range of the City of Santa Rosa. "Business-as-usual GHG forecast" (status quo before state, regional, and local reduction efforts are taken into consideration) GHG emissions are included in the CAP for years 2007, 2015, 2020, and 2035.
Establish a level, based on substantial evidence below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable.	Incorporated. The City, in coordination with the Climate Protection Campaign, Sonoma County, and the other nine municipalities in Sonoma County, established one of the most aggressive GHG reduction targets in the state and nation by committing to reduce GHG emissions 25 percent below 1990 levels by 2015. The CAP demonstrates that the City would meet this reduction goal by 2020 with implementation of measures in the CAP. Furthermore, this goal exceeds the requirements of the AB 32 2020 reduction targets. With implementation of the reduction measures a total of 558,090 MT CO ₂ e is expected to be reduced in the City of Santa Rosa by 2020. The CAP includes calculated GHG emission reductions with implementation of the CAP not just for comparison to the 2020 targets but also out to year 2035, to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the CAP, implementation of the measures of the Santa Rosa CAP are expected to decrease GHG emissions to 2.3 MT CO ₂ e per person per year by year 2035.
Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area.	Incorporated. As previously mentioned, the CAP demonstrates that the City would GHG emissions 25 percent below 1990 levels by year 2020. The CAP includes calculated GHG emission reductions with implementation of the CAP not just for comparison to the 2020 targets but also out to year 2035, to be consistent with the planning horizon of the General Plan. As summarized on page ES-7 of the CAP, implementation of the measures of the Santa Rosa CAP are expected to decrease GHG emissions to 2.3 MT CO ₂ e per person per year by year 2035. In addition, the CAP states that its reduction measures build on previous efforts (particularly the Climate Protection Campaign's Community CAP). In addition, the measures offer a diverse mix of regulatory and incentive-based programs for both new and existing development.

Table 19 (cont.): Santa Rosas Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Specify measures or a group of measures, including performance standards that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.	Incorporated. As explained on page ES-9 of the CAP, the CAP includes an implementation chapter and implementation matrix with details specific to each measure. Details described in the matrix include the following for individual measures: the responsible department, the implementation timeframe, and co-benefits. The CAP intended for this implementation matrix to be used to monitor the City's progress toward implementing the goals and policies included in the CAP. At the project level, the CAP includes a New Development Checklist for individual development projects to fill out to demonstrate compliance with the CAP.
Monitor the plan's progress.	<p>Incorporated. As previously explained, the CAP includes an implementation matrix that will be used to monitor the City's progress toward implementing the goals and policies included in the CAP. The plans for implementation and monitoring are further explained on page D-9 of the CAP. The CAP indicates that it plans for staff to coordinate City Green Team meetings, track implementation of GHG reduction strategies and progress toward GHG reduction targets, and prepare annual reports to the City Council on CAP implementation and progress.</p> <p>The City has actively implemented and continues to actively implement GHG reduction measures from the community-wide CAP (City's CAP) applicable to this project and the Municipal Operations Climate Action Plan (Municipal CAP), with goals and policies related to GHG emissions produced by municipal activities and developments, to reduce local GHG emissions to meet state, regional, and local reduction targets. These actions are documented on "Climate Action Planning in Santa Rosa."⁷⁵</p> <p>In February 2019, the Santa Rosa City Council designated implementation of the City's CAP as a Tier One Council priority. A Climate Action Subcommittee was formed in 2019 to provide guidance and oversight of the implementation of the Municipal CAP and the City's CAP with a goal of reducing the local GHG emissions and ensuring long-term sustainability and resilience from climate change and its effects.</p>

⁷⁵ City of Santa Rosa. no date. Climate Action Planning in Santa Rosa. Website: <https://srcity.org/1634/Climate-Action-Planning>. Accessed: May 26, 2020.

Table 19 (cont.): Santa Rosas Climate Action Plan Consistency with Elements of a Qualified Greenhouse Gas Reduction Strategy

Standard Elements of a Qualified GHG Reduction Strategy	The City of Santa Rosa Climate Action Plan's Incorporation of Elements of a Qualified GHG Reduction Strategy
Adopt the GHG reduction strategy in a public process following environmental review.	Incorporated. The City's CAP was adopted on June 5, 2012 and was adopted as a GHG reduction strategy in a public process following environmental review.
Source of City's CAP: City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: https://srcity.org/DocumentCenter/View/10762 . Accessed May 26, 2020. June 5.	

As detailed in Table 19, the City's CAP remains a Qualified GHG Reduction Strategy and demonstrates that it would meet the anticipated State 2030 GHG emissions reductions targets. If the proposed project can demonstrate consistency with the City's CAP, its impacts related to GHG emission by year 2030 would be considered less than significant and fully consistent with State GHG emissions reduction requirements, with *no need to quantify project-specific emission*. This is consistent with BAAQMD guidelines related to the analysis of projects and accounts for the anticipated updates to BAAQMD's 2030 GHG targets.

To ensure new development projects comply with the City's CAP, the City developed the New Development Checklist. The proposed project's compliance with the New Development Checklist is shown in Table 20. Measures denoted with an asterisk are required in all new development projects. As shown in the table, the proposed project would comply with all applicable requirements.

Table 20: Consistency with Santa Rosa's Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
Required Measures	
1.1.1: Comply with CALGreen Tier 1 standards*	Complies. The proposed project would implement required green building strategies to comply with Tier 1 CALGreen standards. The proposed project includes sustainability design features that support the Green Building Strategy. ¹
1.1.3: After 2020, all new development will utilize zero net electricity*	Complies. The proposed project would be required to comply with California's Building Energy Efficiency Standards. ¹
1.3.1: Install real-time energy monitors to track energy use*	Complies. The proposed project would be built to comply with all regulations.
1.4.2: Comply with the City's tree preservation ordinance*	Complies. The proposed project's landscaping plan contains multiple trees, particularly along the project's proposed roadways. For all proposed tree removal, the proposed project would be required to comply with the City's tree preservation ordinance. ²

Table 20 (cont.): Consistency with Santa Rosa’s Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
1.4.3: Provide public & private trees in compliance with the Zoning Code*	Complies. The proposed project would be required to comply with the City’s Zoning Code.
1.5: Install new sidewalks and paving with high solar reflectivity materials*	Complies. The proposed project would be required to construct paved areas in accordance with City standards.
4.1.2: Install bicycle parking consistent with regulations*	Complies. The proposed project would include private garages for each single-family residence and would therefore meet bicycle-parking requirements. ³
4.3.5: Encourage new employers of 50+ to provide subsidized transit passes*	Not applicable. The proposed project is a residential development and would not have new employees.
5.2.1: Provide alternative fuels at new refueling stations*	Not applicable. The proposed project would not include refueling stations.
6.1.3: Increase diversion of construction waste*	Complies. The proposed project would be required to comply with existing regulations.
7.1.1: Reduce potable water use for outdoor landscaping*	Complies. The proposed project would conform to the City’s WELO and other outdoor water efficiency requirements.
7.1.3: Use water meters which track real-time water use*	Complies. The proposed project would include water meters in accordance with City standards.
7.3.2: Meet on-site meter separation requirements in locations with current or future recycled water capabilities*	Not applicable. The proposed project is not located in an area with meter separation requirements. If applicable, the proposed project would comply.
9.1.3: Install low water use landscapes*	Complies. The proposed project would conform to the City’s WELO, which requires low water use landscape designs. ⁴
9.2.1: Minimize construction equipment idling time to 5 minutes or less*	Complies. The proposed project would ensure that construction equipment idling time is minimized to 5 minutes or less.
9.2.2: Maintain construction equipment per manufacturer’s specs*	Complies. The proposed project would maintain construction equipment per manufacturer’s specs.
9.2.3: Limit GHG construction equipment emissions by using electrified equipment or alternative fuels*	Not applicable. Emissions from construction equipment would be limited by MM AIR-1 and MM AIR-2 (see Impact 3, Air Quality).
Voluntary Measures	
2.1.3: Pre-wire and pre-plumb for solar thermal or PV systems	Complies. The proposed project would include solar photovoltaic systems.
3.1.2: Support implementation of station plans and corridor plans	Complies. The project site is located northwest of the North Santa Rosa Station Area Specific Plan (the project site is located approximately 1.23 miles northeast of the North Santa Rosa Station Area’s northwestern boundary). ⁵ The proposed project would not impede the implementation of this nearby plan or any other station

Table 20 (cont.): Consistency with Santa Rosa’s Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
	or corridor plan.
3.2.1: Provide on-site services such as ATMs or dry cleaning to site users	Not applicable. The proposed project is a residential development and would not include a commercial component.
3.2.2: Improve non-vehicular network to promote walking, biking	Complies. The proposed project would add sidewalks and planter strips to promote walking and connectivity to other land uses and the existing biking network.
3.2.3: Support mixed-use, higher-density development near services	Not proposed. This is a voluntary measure that is not proposed at this time. The proposed project complies with the applicable land use and zoning
3.3.1: Provide affordable housing near transit	Not proposed. This is a voluntary measure that is not proposed at this time.
3.5.1: Unbundle parking from property cost	Not proposed This is a voluntary measure that is not proposed at this time.
3.6.1: Install calming features to improve pedestrian/bike experience	Complies. The proposed project would install planters between traffic and pedestrians to provide traffic-calming features to improve pedestrian/bike experience.
4.1.1: Implement the Bicycle and Pedestrian Master Plan	Not proposed. This is a voluntary measure that is not proposed at this time.
4.1.3: Provide bicycle safety training to residents, employees, motorists	Not proposed. This is a voluntary measure that is not proposed at this time.
4.2.2: Provide safe spaces to wait for bus arrival	Not applicable. There is not a bus stop or public transit stop on the project site.
4.3.2: Work with large employers to provide rideshare programs	Not applicable. The proposed project is a residential development and would not have employees.
4.3.3: Consider expanding employee programs promoting transit use	
4.3.4: Provide awards for employee use of alternative commute options	
4.3.7: Provide space for additional park-and-ride lots	Not proposed. This is a voluntary measure that is not proposed at this time.
4.5.1: Include facilities for employees that promote telecommuting	Not applicable. The proposed project is a residential development and does not have employees.
5.1.2: Install electric vehicle charging equipment	Complies. The proposed project would install electric vehicle charging equipment.
8.1.3: Establish community gardens and urban farms	Not proposed. This is a voluntary measure that is not proposed at this time.
9.1.2: Provide outdoor electrical outlets for charging lawn equipment	Complies. The proposed project would provide electrical outlets for charging lawn equipment.

Table 20 (cont.): Consistency with Santa Rosa’s Climate Action Plan New Development Checklist

New Development Checklist Measures	Project Consistency
<p>Notes:</p> <p>* Measures denoted with an asterisk are required in all new development projects.</p> <p>Source of policy and project requirements:</p> <p>¹ California Energy Commission (CEC). 2019. Building Energy Efficiency Standards—Title 24. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards. Accessed December 6, 2019.</p> <p>² City of Santa Rosa. 2017. Santa Rosa City Code Sections 20-23.030. Website: https://srcity.org/DocumentCenter/View/16148/DRAFT-City-of-Santa-Rosa-Cannabis-Regulations-June-30-2017?bidId=. Accessed December 6, 2019.</p> <p>³ City of Santa Rosa. 2019. Santa Rosa Municipal Code, Chapter 19-08. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019.</p> <p>⁴ City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 14-30 Water Efficient Landscape. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019.</p> <p>⁵ City of Santa Rosa. 2019. 4.10 North Santa Rosa Station Area Specific Plan. Website: https://srcity.org/DocumentCenter/View/3047/Design-Guidelines-410-North-Santa-Rosa-Station-Area-Specific-Plan-PDF. Accessed December 6, 2019.</p> <p>City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan, Appendix B: CAP New Development Checklist. Website: https://srcity.org/DocumentCenter/View/10762. Accessed December 6, 2019.</p>	

According to the City of Santa Rosa’s Planning Department, an updated New Development Checklist is currently being developed;⁷⁶ however, because it has not yet been officially adopted by the City, this IS/MND evaluates the proposed project with respect to the existing New Development Checklist provided in the City’s June 5, 2012 CAP. MM GHG-1 would ensure the proposed project would incorporate measures applicable at the time building permits are issued. Therefore, with implementation of MM GHG-1, the proposed project would comply with a qualified GHG Reduction Strategy and would not result in a significant generation of GHG emissions after incorporation of mitigation.

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

Less than significant impact with mitigation incorporated. Significance for this impact is determined by project compliance with (1) the City’s CAP and (2) the ARB adopted 2017 Climate Change Scoping Plan Update. Project compliance with the policies and requirements included in the City’s CAP are presented in Table 21. As shown in the table, the proposed project would comply with all applicable requirements.

It is acknowledged that the City’s CAP’s planning horizon of 2020 has passed; however, as described under Impact 8(a), implementation of the measures included in the City’s CAP are expected to decrease GHG emissions to 2.3 MT CO₂e per person per year by year 2035,⁷⁷ and it can be concluded that emissions would be below 2.6 MT CO₂e per person per year (or a 40 percent reduction below 2020 thresholds) by year 2030. The actions and measures from the City’s CAP are still applicable to the proposed project and are evaluated below.

⁷⁶ Monet Sheikhal, City Planner, City of Santa Rosa and Susie Murray, Senior Planner, City of Santa Rosa. Personal communication (phone calls and emails) with Kimber Johnson, Air Quality Scientist, FirstCarbon Solutions. September 2019.

⁷⁷ City of Santa Rosa Community Development. 2012. Climate Action Plan: City of Santa Rosa. Website: <https://srcity.org/DocumentCenter/View/10762/Climate-Action-Plan-PDF?bidId=>. Accessed: May 26, 2020. June 5.

Table 21: Consistency with the City of Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
Energy Efficiency in Existing Buildings: Facilitate energy efficiency upgrades and retrofits in existing commercial, residential, and industrial buildings by connecting residents and businesses with technical and financial assistance.	Connect businesses and residents with voluntary programs that provide free or low-cost energy efficiency audits and financing assistance for energy efficient appliances.	Complies. The proposed project is a new development project, and therefore the voluntary programs that provide free or low-cost energy efficiency audits and financing assistance for energy efficient appliances in existing buildings would not be applicable. However, the proposed project would comply with the latest energy efficiency standards and incorporate applicable energy efficiency features designed to reduce project energy consumption. ¹
	Work with the Sonoma County Energy Independence Program to offer low-interest financing and technical assistance to property owners for energy efficiency retrofits.	Not applicable. The proposed project is a new development project and would not include retrofits.
Smart Meter Utilization: Encourage existing development and require new development to utilize PG&E's Smart Meter system to facilitate energy and cost savings.	Require new construction and major remodels to install real-time energy monitors that allow building users to track their current energy use.	Complies. The proposed project would be built to comply with all regulations.
Cool Roofs and Pavements: Require new sidewalks, crosswalks, and parking lots to be made of cool paving materials with a high solar reflectivity.	Adopt an ordinance that requires and specifies cool paving materials for new parking lots, sidewalks, roofs, and crosswalks and integrates Low Impact Development (LID) guidelines for new construction and Capital Improvement Projects.	Complies. The proposed project would be required to construct paved areas in accordance with General Plan Policy H-G-2. ²
	Ensure the cool roof and paving ordinance includes cool roof specifications which allow for green or living roofs and address energy installations on historic structures consistent with the Secretary of Interior's Rehabilitation Standards. Allow darker-color roofs when they meet cool roof standards.	Complies. The proposed project would comply with Title 24, which requires new buildings to be made of cool paving materials and be "solar ready." ¹ The 2019 Title 24 Energy Efficiency Standards are scheduled to go into effect on January 1, 2020. The 2019 Title 24 Standards also require solar panels to be included in all new single-family residential developments.

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
Tree Planting and Urban Forestry: Plant and maintain trees on private property, streets, and open space areas.	Require new development to supply an adequate number of street trees and private trees.	Complies. The landscape plan includes the planting of multiple trees, particularly along the project's proposed roadways. For the proposed tree, the proposed project would be required to comply with the Santa Rosa City Code, Title 17 (17-24.030) ³ for the proposed tree removal.
Energy-Efficient Appliances: Facilitate the efficient use of energy for appliances in residential, commercial, and industrial buildings.	Seek funding sources to develop a rebate program for residents and businesses to exchange inefficient appliances with Energy Star-certified models.	Complies. Implementation of the proposed project would not preclude future residents from exchanging any inefficient appliances with Energy Star verified models. Moreover, all appliances would meet the latest Title 24 efficiency requirements. ¹
Appliance Electrification: Encourage residents and businesses to switch natural-gas-powered appliances to electric power, where appropriate.	Utilize the energy-efficient appliance rebate program to facilitate the replacement of natural gas equipment with electric-powered equipment.	Complies. Implementation of the proposed project would not preclude future residents from exchanging any inefficient appliances with Energy Star verified models. Moreover, all appliances would meet the latest Title 24 efficiency requirements. ¹
	Identify opportunities to implement additional programs that will switch appliances from natural gas to electricity.	Not applicable. The proposed project is a new development.
Water Conservation: Continue to require and incentivize water conservation.	Require new development to reduce potable water use in accordance with the Tier 1 standards of CALGreen.	Complies. The proposed project would implement required green building strategies to comply with Tier 1 CALGreen standards. The proposed project includes sustainability design features (such as installing low-flow toilets and low-flow showers) that support the Green Building Strategy. ¹

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
	Continue and expand water conservation efforts including water-efficient landscaping, rainwater harvesting, and high-efficiency appliance and fixture installations.	Complies. The proposed project would conform to the City's Water Efficient Landscape Ordinance (WELO) ⁴ and the California Green Building Standards Code. ¹
	Replace water meters in Santa Rosa with meters that allow residents and businesses to track real-time water use through the City's online web application.	Complies. The proposed project would include water meters in accordance with City standards.
	Encourage existing development and require new development to utilize smart water meters to facilitate water and cost savings.	Complies. The proposed project would utilize smart meters.
Lawn and Garden Activity: Encourage the use of electrified and higher-efficiency lawn and garden equipment.	Support the BAAQMD's efforts to re-establish a voluntary exchange program for residential lawn mowers and backpack-style leaf blowers.	Not applicable. This measure applies to government agencies and not individual development projects.
	Encourage new buildings to provide electrical outlets on the exterior in an accessible location to charge electric-powered lawn and garden equipment.	Complies. The proposed project would provide electrical outlets in accessible areas to be used for landscaping equipment per the requirements of the City Code.
	Encourage the replacement of existing high-maintenance and high-water use landscapes with low water use vegetation to reduce the need for gas-powered lawn and garden equipment.	Complies. The proposed project would conform to the City's WELO and other outdoor water efficiency requirements. ⁴
Construction Emissions: Reduce emissions from heavy-duty construction equipment by limiting idling and utilizing cleaner fuels, equipment, and vehicles.	Minimize idling times either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes or less (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Provide clear signage at all access points to remind employees of idling restrictions.	Complies. As required by MM AIR-1, signage would be posted at the project site throughout the duration of the construction period to require employees to comply with idling restrictions.
	Construction equipment shall be maintained in accordance with manufacturer's specifications.	Complies. All project-related construction equipment shall be maintained in accordance with manufacturer's specifications and pursuant to BAAQMD requirements for all projects.
	Work with project applicants to limit GHG emissions from	Not proposed. As required by MM AIR-2, the

Table 21 (cont.): Consistency with the Santa Rosa Climate Action Plan

Measure	Action Item	Project Compliance
	<p>construction equipment by selecting one of the following measures, at a minimum, as appropriate to the construction project:</p> <ul style="list-style-type: none"> a. Substitute electrified equipment for diesel- and gasoline-powered equipment where practical. b. Use alternative fuels for construction equipment on-site, where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane, or biodiesel. c. Avoid the use of on-site generators by connecting to grid electricity or utilizing solar-powered equipment. 	<p>proposed project would implement measures to reduce potential exposure of DPM and PM_{2.5} emissions to sensitive receptors located near the project site. All project-related off-road construction equipment in excess of 50 horsepower used on-site by the developer or contractors during all phases of construction shall be equipped with engines meeting the EPA Tier IV Final off-road engine emission standards.</p>
<p>Source of policy and project requirements:</p> <p>¹ California Energy Commission (CEC). 2019. 2019 Building Energy Efficiency Standards. Website: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency. Accessed December 6, 2019.</p> <p>² City of Santa Rosa. 2009. Santa Rosa General Plan 2035. November 3. Website: https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019. Accessed December 6, 2019.</p> <p>³ City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 17-24 Trees. Website: https://qcode.us/codes/santarosa/view.php?topic=17-17_24-iii-17_24_030&frames=on. Accessed December 6, 2019.</p> <p>⁴ City of Santa Rosa. 2019. Santa Rosa City Code, Chapter 14-30 Water Efficient Landscape. Website: https://qcode.us/codes/santarosa/. Accessed December 6, 2019.</p> <p>City of Santa Rosa. 2012. City of Santa Rosa Climate Action Plan. Website: https://srcity.org/DocumentCenter/View/10762. Accessed December 6, 2019.</p>		

Santa Rosa Climate Action Plan New Development Checklist

To ensure new development projects comply with the Santa Rosa CAP, the City of Santa Rosa developed the New Development Checklist as described in Impact 8(a). As shown in Table 20, the proposed project would comply with all applicable requirements. As discussed in Impact 8(a), MM GHG-1 is required to ensure the proposed project would incorporate measures from the New Development Checklist that is in place at the time building permits are issued.

SB 32 2017 Scoping Plan Update

The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017.⁷⁸ Table 22 provides an analysis of the proposed project's consistency with the 2017 Scoping Plan Update measures. As shown in Table 22, these measures are more focused at the statewide implementation level and are not as applicable to local, project-level developments. Nevertheless, this analysis provides a description of each measure and if the measures are applicable to the proposed project.

Table 22: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350: 50 Percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	Not applicable. This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from PG&E subject to the SB 350 Renewable Mandate.
SB 350: Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	Not applicable. This measure applies to existing buildings. The proposed project proposes to demolish existing buildings on the project site and construct new residential buildings.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	Not applicable. This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the proposed building at the project site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million Zero Emission Vehicles (ZEVs) on the road by 2030 and increasing numbers of ZEV trucks and buses.	Not applicable. This measure is not applicable to the proposed project; however, vehicles accessing the single-family residences at the project site would benefit from the increased availability of cleaner technology and fuels.

⁷⁸ California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed March 10, 2020.

Table 22 (cont.): Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
Sustainable Freight Action Plan. The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	Not applicable. This measure applies to owners and operators of trucks and freight operations. The proposed project is residential and would not support truck and freight operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including deliveries that would be made to future residents.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	Complies. Consistent with BAAQMD Regulation 6, Rule 3, no wood-burning devices are proposed as part of the project. Natural gas hearths produce very little black carbon compared to wood-burning fireplace; therefore, the proposed project would not include major sources of black carbon.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita VMT.	Not applicable. The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	Not applicable. The proposed project is not a major source and is not targeted by the cap-and-trade system regulations. Therefore, this measure does not apply to the proposed project.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	Not applicable. The proposed project that is in an urbanized area and would not be considered natural or working lands. The East Parcel will remain undeveloped to support seasonal wetlands.
Source of ARB 2017 Scoping Plan Update Reduction Measures: California Air Resources Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf . Accessed December 6, 2019.	

Conclusion

Project consistency with the goals, policies, and actions set forth in the City's CAP ensures that the proposed project would not impede or interfere with the City's goals or the goal to achieve the AB 32 state-recommended reduction targets. The proposed project is consistent with the applicable local plans, policies, and regulations included in the City's CAP and would not conflict with the provisions of any other State or regional plan, policy or regulation of an agency adopted for the

purpose of reducing GHG emissions. Furthermore, as shown in Table 22, implementation of the proposed project would not conflict with the reduction measures proposed in SB 32. In addition, the applicable measures included in the City's CAP, as shown in Table 21, are included as part of the proposed project design and would reduce project-related GHG emissions. To ensure compliance and consistency with the City's CAP, MM GHG-1 requires that the project applicant submit a completed New Development Checklist prior to the issuance of building permits. Thus, with implementation of MM GHG-1, the proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHGs. Therefore, the GHG emissions reduction plan consistency impact would be less than significant with mitigation.

Mitigation Measures

- MM GHG-1** Prior to issuance of building permits, the applicant shall prepare and submit a CAP New Development Checklist for the proposed project to the City of Santa Rosa, to demonstrate to the City's satisfaction that the proposed project would be constructed and operated to be consistent with measures required in the applicable CAP Development Checklist in effect at that time.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Hazards and Hazardous Materials <i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

The analysis in this section is based on the site-specific Phase I Environmental Site Assessment (Phase I ESA) prepared by D.M. Jacobson and Sons, Inc. on March 21, 2019, which is provided in Appendix F.

Hazards analyzed in this section include hazardous materials, hazards related to proximity to airport and airstrip operations, and wildfires. Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or

future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic—causes human health effects
- Ignitable—has the ability to burn
- Corrosive—causes severe burns or damage to materials
- Reactive—causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. California Code of Regulations, Title 22, Sections 66261.20–24 contain technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

The Phase I ESA determined that the existing single-family and associated outbuildings were constructed prior to 1978 and as a result, asbestos-containing materials (ACMs) and lead-based paint could be present.

To address airport safety hazards, Sonoma County has prepared a Comprehensive Airport Land Use Plan that identifies the location of airports in the county, and established spheres of influence, where more stringent planning regulations and restrictions apply. The nearest airport to the project site is the Charles M. Shultz Sonoma County Airport, roughly 2.6 miles to the northwest.

The City of Santa Rosa has prepared an Emergency Operations Plan that identifies the City's emergency planning, organization and response policies, and procedures.⁷⁹ The City has also prepared a Local Hazard Mitigation Plan (LHMP) to address various types of hazards. The LHMP identifies the capabilities, resources, information, strategies for risk reduction, and critical facilities, and provides a set of strategies to reduce vulnerability to disaster through education and outreach programs, the development of partnerships, and implementation of actions to reduce the severity of impacts from a disaster.⁸⁰

The California Department of Forestry and Fire Protection (CAL FIRE) prepares maps of Fire Hazard Severity Zone Maps for State Responsibility Area (SRA) lands and separate Very High Fire Hazard Severity Zone Maps for Local Responsibility Area (LRA) lands that are used to develop recommendations for cities and planning. The project is not located within a CAL FIRE designated High Fire Hazard Severity Zone in an SRA or a Very High Fire Hazard Zone in an LRA.⁸¹ The project site

⁷⁹ City of Santa Rosa. 2017. City of Santa Rosa Emergency Operations Plan. Website: <https://srcity.org/DocumentCenter/View/16434/Emergency-Operation-Plan>. Accessed March 26, 2019.

⁸⁰ City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan. Website: <https://srcity.org/DocumentCenter/View/3982/Local-Hazard-Mitigation-Plan-Draft-PDF?bidId=>. Accessed March 26, 2019.

⁸¹ California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LRA. Website: http://frap.fire.ca.gov/webdata/maps/sonoma/fhszl_map.49.pdf. Accessed March 26, 2019.

is not within the Wildland-Urban Interface (WUI) Zone according to the Fire Hazard Zones figure in the General Plan. The WUI Zone encompasses four types of fire hazard zones: moderate, high, very high, and mutual threat. Approximately 30 percent of Santa Rosa is located within the WUI Zone.⁸²

Would the project:

- a) **Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Less than significant impact. Residential development typically does not involve the regular use, storage, transport, or disposal of significant amounts of hazardous materials. However, project construction and operation would involve the minor routine transport and handling of minimal quantities of hazardous substances such as diesel fuels, lubricants, aerosols, solvents, asphalt, pesticides, and fertilizers. Handling and transportation of these materials could result in the exposure of workers or residents to hazardous materials. However, the proposed project would not create a significant hazard to the public or the environment because hazardous substances would not be used, stored, or transported in sufficient quantities to create a significant hazard to the public. Furthermore, project construction and operation would comply with applicable federal, state, and local laws pertaining to the safe handling and transport of hazardous materials. Therefore, impacts would be less than significant.

- b) **Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

Less than significant impact with mitigation incorporated. As described in Impact 9(a), the proposed project would involve the minor use of hazardous materials typically required during construction, such as diesel fuel and other motor lubricants. Contractors would comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials, which would minimize potential spill occurrences. Spills that may occur during construction activities would likely be minimal and potential adverse effects would be localized. Plans and specifications typically require contractors to clean up any spills of hazardous materials immediately.

Based on historical references reviewed, the subject site has been listed as being occupied by agricultural grazing (early 1950s), private residences (1950-present), and Kane and Donald Plumbing (early 1980). The Phase I ESA determined that there was no evidence of the use of hazardous materials associated with the previous uses and it does not appear that pesticides were stored, mixed, or disposed of on-site. In addition, it did not appear that underground or aboveground fuel tanks, equipment storage, repair, or maintenance was located on-site. Because of the passage of more than 50 years since the subject site was utilized as agricultural land, the probability of pesticides or herbicides within the soil or groundwater is low. The Phase I ESA concluded that there was no obvious evidence of recognized environmental connection with the project site and no further investigation is warranted.

⁸² City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Figure 12-5.

The Phase I ESA determined that given the age of the existing structures on the property, it is possible that asbestos-containing materials and lead-based paint may exist within the structures. Removal of existing on-site buildings during construction could potentially create a significant hazard to the construction workers and nearby residents. This represents a potentially significant impact.

Implementation of MM HAZ-1 would require the applicant to conduct asbestos and lead paint surveys prior to demolition activities and would also require that any hazardous materials are safely removed and disposed of in accordance with State standards. Implementation of MM HAZ-1 would ensure impacts are reduced to a less-than-significant level.

c) 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 with mitigation incorporated. The project site is located 0.22 mile south of the Jack London Elementary School. As described in Impact 9(a), the proposed project would involve the minor use of hazardous materials typically required during construction, such as diesel fuel and other motor lubricants. As a result, the proposed project would involve the handling of small amounts of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

As described under Impacts 9(a) and 9(b), the proposed project would be required to comply with applicable federal, State, and local laws pertaining to the safe handling and transport of hazardous materials, which would minimize potential spill occurrences. Spills that may occur during construction activities would likely be minimal and potentially adverse effects would be localized. As described under Impact 9(b), demolition of the existing structures could release asbestos and lead into the local environment, which would be a potentially significant impact. MM HAZ-1 would require removal of these structures in accordance with regulations applicable to the abatement of asbestos-containing materials and lead-based paint. As such, a less than significant impact would occur with mitigation incorporated.

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?

No impact. The Phase I ESA prepared for the proposed project reviewed regulatory agency records and reviewed local, State, and federal regulatory agency lists, including the State Water Board GeoTracker and Department of Toxic Substances Control Envirostor websites, to determine the presence of on-site hazardous materials. The Phase I ESA determined the project site is not listed on a hazardous materials site compiled pursuant to Government Code Section 65962.5. As such, no impact would occur.

- e) **For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

No impact. The project site does not fall within the sphere of influence of the Sonoma County Airport or any other airport.⁸³ Given the distance of the project site from local airports and applicable air traffic and safety regulations, the proposed project would result in no impact with respect to air safety hazards.

- f) **Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Less than significant impact. The LHMP designates emergency evacuation routes, including U.S. 101, Sonoma Highway, and Fountaingrove Parkway-Mission Boulevard. The project site is located adjacent to Fulton Road and, as a result, would not interfere with evacuation along these routes. Additionally, the project does not propose permanent road closures or lane narrowing that would impact an emergency response plan or evacuation plan. As a result, the proposed project would not conflict with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts would be less than significant.

- g) **Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

Less than significant impact. As discussed previously, the project site is not located within a CAL FIRE designated High Fire Hazard Severity Zone in an SRA, a Very High Fire Hazard Zone in an LRA, or a WUI Zone as shown in the General Plan. The proposed project would be consistent with the most recent version of the California Fire Code and Building Code and all roadways would be a minimum of 20 feet wide to allow for fire apparatus access. In addition, as discussed in Impact 19(a), the proposed project would be served by adequate water supplies during normal, dry, and multiple dry years, which would provide sufficient water in the event that fire protection services are required. Impacts would be less than significant.

Mitigation Measures

MM HAZ-1 Conduct Asbestos Containing Materials and Lead Based Paint Surveys Prior to Demolition

Prior to the issuance of demolition permits for the existing residence and associated outbuildings, the project applicant shall retain a licensed abatement professional to conduct asbestos and lead paint surveys. These surveys shall be conducted prior to the disturbance or removal of any suspect asbestos-containing materials and lead-based paint, and these materials shall be characterized for asbestos and lead by a reliable method. All activities involving asbestos-containing materials and lead-based paint shall be conducted in accordance with governmental regulations, and all removal shall be conducted by properly licensed abatement professionals.

⁸³ Sonoma County Airport Land Use Commission. 2016. Sonoma County Airport Safety Zones, Exhibit C4.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
10. Hydrology and Water Quality <i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Surface Water Quality

Several regulations at various jurisdictional levels protect water resources and quality. At the federal level, the Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. The CWA establishes the National Pollutant Discharge Elimination System (NPDES)

permit program to regulate municipal and industrial discharge, including those from municipal storm sewer systems, which require Municipal Separate Storm Sewer System (MS4) permits.

At the State level, the Porter-Cologne Water Quality Control Act 1969 (Porter-Cologne Act) oversees California's water quality control. The Porter-Cologne Act is California's statutory authority for the protection of water quality. Under the Porter-Cologne Act, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegated to the nine RWQCBs.⁸⁴

At the regional level, the North Coast RWQCB serves Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity Counties. The City of Santa Rosa's current NPDES stormwater permit (Order No. R1-2009-0050) regulates both stormwater and non-stormwater discharges from public and private projects into the Santa Rosa municipal storm drain system. The permit requires a minimum set of BMPs to be implemented at all construction sites, as well as permanent stormwater Low Impact Development (LID) BMPs.⁸⁵

Stormwater Runoff

At the local level, the General Plan outlines strategies to reduce and manage stormwater runoff. The Storm Water Pollution Prevention Plan (SWPPP) includes a description of BMPs to prevent the discharge of silt and sediment from point and non-point sources into receiving waters. The SWPPP aims to minimize the discharge of pollutants during construction, which includes, but is not limited to activities such as: clearing, grading, demolition, excavation, construction of new structures, and reconstruction of existing facilities involving removal and replacement that results in soil disturbance. The City's Standard Urban Stormwater Mitigation Plan (SUSMP) requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.⁸⁶

Groundwater Supply/Recharge

The City of Santa Rosa is located within the Laguna de Santa Rosa Watershed, in the confluence of the Santa Rosa, Bennett, and Rincon Valleys. The City of Santa Rosa has three sources of water supply: entitlements from the Sonoma County Water Agency (Sonoma Water), six groundwater wells, and recycled water. Sonoma Water receives its water supply from the Russian River while groundwater wells extract from the Santa Rosa Plain Subbasin. The Santa Rosa Plain Subbasin is not adjudicated nor has it been identified by the California Department of Water Resources (DWR) as overdrafted nor anticipated to become overdrafted.⁸⁷ Table 23 summarizes the amount of groundwater that was pumped from the Santa Rosa Valley Basin between the 2011 and 2015. The Santa Rosa Subregional Water Reuse System produces recycled water for the City's residents and business.⁸⁸

⁸⁴ California Wetlands Information System. 2002. Summary of the Porter-Cologne Water Quality Control Act. Website: http://resources.ca.gov/wetlands/permitting/Porter_summary.html. Accessed January 22, 2020.

⁸⁵ California Regional Water Quality Control Board (RWQCB), North Coast Region. 2009. Order No. R1-2009-0050, Waste Discharge Requirements for the City of Santa Rosa. Website: https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2009/091014_09_0050_PERMIT_MS4_SRSONC_oSCWA.pdf. Accessed March 29, 2019.

⁸⁶ City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.

⁸⁷ California Department of Water Resources (DWR). Evaluation of Ground Water Resources in Sonoma County Volume 2: Santa Rosa Plain, DWR Bulletin 118-4, 1982.

⁸⁸ City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 29, 2019.

Table 23: Groundwater Volume Pumped (AFY)

Groundwater Type	Location or Basin Name	2011	2012	2013	2014	2015
Alluvial Basin	Santa Rosa Valley	1,255	792	1,129	1,135	1,198
Source: Santa Rosa 2015 Urban Water Management Plan (UWMP)						

Sonoma Water entitlement provides up to 29,041 acre-feet/year (AFY) of water while the groundwater wells provide up to 2,300 AFY. Gross total water usage for 2015 was 5,389 million gallons. Ninety percent of the City's water supply is from Sonoma Water, while the remainder comes from groundwater and recycled water.⁸⁹ The General Plan determined that in the year 2035, 38,486 acre-feet/year of water would be available, and demand would be 37,226 acre-feet/year (36,186 + 1,040). The Water Supply Assessment prepared for the General Plan concluded that the City would have adequate water supply.⁹⁰

Dam Inundation and Flooding

Dam inundation occurs when a flood control dam/water reservoir is damaged severely enough to compromise its ability to hold back water. These events pose a high risk to the community but have low occurrence. This damage can occur as a result of earthquakes or other seismic activity, erosion of the dam face or foundation, or rapidly rising floodwaters that weaken the dam or overwhelm its capacity to drain excess water. When a dam fails, sudden fast-moving floods migrate throughout the inundation zone. The speed and volume of these floodwaters can damage or destroy property, cause injury or loss of life, and displace large numbers of residents in the flood's path.⁹¹ Other hazards include seiches, oscillations of water in an enclosed body of water caused by strong winds, and rapid changes in atmospheric pressure. The General Plan also identifies that landslide hazards, including mudflows, increase with steep slopes located close to the Rodgers Creek Fault Zone.⁹²

Would the project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

Less than significant impact. The proposed project has the potential to release water pollutants during both construction and operation that may violate water quality standards and degrade surface or groundwater quality. During construction activity, runoff carrying eroded soils and pollutants could enter storm drainage systems and enter the Russian River and other nearby waterbodies, increasing sedimentation and degrading downstream water quality. These sediments could be carried downstream and discharge into the Pacific Ocean and could degrade surface water quality. The sediments could also seep into the associated groundwater table. This would represent a potentially significant construction impact related to surface and groundwater quality.

⁸⁹ City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page ES-1. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

⁹⁰ City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4-G-12.

⁹¹ City of Santa Rosa. 2016. City of Santa Rosa Local Hazard Mitigation Plan, page 38.

⁹² City of Santa Rosa. 2009. Santa Rosa General, Plan 2035. Page 12-3.

Under the NPDES General Construction Permit (Order No. R1-2009-0050), projects that disturb one or more acres of land are required to obtain a permit before the start of construction activity. Accordingly, the proposed project would be required to prepare and implement a SWPPP (as outlined within City Municipal Code Section 17-12.170) during construction in accordance with federal and State requirements. The SWPPP would identify structural and non-structural BMPs intended to prevent erosion during construction. Although construction activities have the potential to generate increased sedimentation, compliance with applicable policies and regulations would minimize the potential to degrade water quality in downstream water bodies to the maximum extent possible. As a result, construction-related project impacts related to surface and groundwater quality would be less than significant.

Under existing conditions, the site is almost entirely composed of pervious surfaces (aside from the existing buildings). The proposed project would develop single-family homes with associated paved surfaces. As a result, the proposed project would increase impervious surface area on the project site compared to existing conditions and the stormwater runoff generated from the proposed project could carry pollutant such as motor oil, sediment, and trash into downstream waterways, which could degrade surface or groundwater quality, a potentially significant impact.

The project would include an on-site storm drainage system consisting of a stormwater treatment facility (located on Parcel A, see Exhibit 6), catch basins, and underground pipes that would treat the stormwater and remove pollutants before releasing it to storm drain pipes that would connect to the existing pipes within Fulton Road consistent with Municipal Code Section 17-12.170. In addition, implementation of permanent stormwater quality features as required under the SUSMP, and implementation of post-construction BMPs as required under the NPDES permit would ensure that no stormwater discharge requirements are violated. Therefore, the proposed project would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and impacts would be less than significant.

b) 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. As previously mentioned, 90 percent of the City's water supply is from Sonoma Water entitlements, which takes water from the Russian River. Although the City maintains six municipal groundwater wells, groundwater use represents less than 1 percent of the overall City of Santa Rosa water supply. Additionally, the proposed project would connect to existing City water lines contained in Fulton Road, similar to the existing residential uses nearby and would not include a new groundwater well. The proposed project would not significantly increase population (see Impact 14(a) for population increase analysis) such that groundwater use would drastically increase resulting in substantially decreased groundwater supplies. The project site is within the City's UGB and is designated for residential use by the General Plan; as such, its water demand is accounted for in the Urban Water Management Plan (UWMP) projections. The UWMP forecasts a surplus of water under 2040 conditions and, therefore, adequate water supply would be available, and the proposed project would not significantly decrease groundwater supplies.

The proposed project would increase impervious surfaces on the site compared to existing conditions. However, pursuant to the SUSMP, the proposed project would be required to include stormwater BMPs that limit the volume and flow rate of stormwater on-site by providing opportunities for groundwater infiltration. In addition, the proposed project would maintain and improve wetlands on the East Parcel, which would provide further opportunity for groundwater infiltration. As such, the proposed project would not significantly interfere with groundwater recharge. Therefore, impacts would be less than significant.

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;

Less than significant impact. No streams or rivers are located on or immediately adjacent to the project site. Although the proposed project would not alter the course of any streams or rivers, the project would substantially alter the existing natural drainage pattern on-site. As part of construction, the entire West Parcel would be graded and a stormwater system (including a stormwater treatment facility) would be installed. As described in Impact 10(a), the proposed project would be required to implement a SWPPP as part of its Construction General Permit. The SWPPP is designed to ensure that erosion and siltation are prevented or minimized to the maximum extent feasible during construction. Grading and construction may temporarily alter stormwater flow patterns; however, compliance with Final Stormwater LID, NPDES permit conditions, and the applicable provisions of the Municipal Code would lessen impacts related to erosion or siltation during construction.

At operation, the on-site stormwater system would be composed of catch basins and underground pipes that would convey stormwater underground to a 19,557-square-foot stormwater treatment facility located in the northwest corner of the project site. The proposed project would be required to submit a Stormwater LID Determination Worksheet and Stormwater LID to the City, which would determine the need for BMPs. These BMPs would be designed to prevent stormwater related erosion and siltation impacts on- or off-site. Therefore, impacts related to alteration of drainage patterns resulting in erosion or siltation would be less than significant.

(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. As discussed in Impact 10(a), the existing site is almost completely composed of pervious surfaces. The proposed project would develop impervious surfaces on the West Parcel resulting in an increase in impervious surface compared to existing conditions that could increase the rate or amount of surface runoff in a manner that could result in flooding. However, the proposed project would include a storm drainage system, including a 19,557-square-foot stormwater treatment facility, which would be designed to detain and meter the release of peak runoff in order to avoid inundating downstream waterways in a manner that creates substantial flooding. In addition, the proposed project would be required to submit a Stormwater LID Determination Worksheet and

Stormwater LID to the City, which would determine the need for BMPs. These BMPs would be designed to mimic the stormwater benefits of the natural environment by reducing peak stormwater runoff rates so that runoff can soak into the ground. Alterations to existing on-site drainage in the East Parcel would be minimal and would modify drainage only so far as to create intentional on-site wetlands. As result, the proposed project would not significantly increase the rate or amount of surface runoff that would result in flooding on- or off-site. Therefore, impacts would be less than significant.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than significant impact. The proposed project would increase the amount of surface runoff generated on the project site because of an increase in impervious surfaces compared to existing conditions. Consistent with the Construction General Permit, the proposed project would implement a SWPPP during construction, as outlined in the Municipal Code Section 17-12.170, which would identify structural and non-structural BMPs intended to prevent significant polluted runoff during construction. Compliance with these guidelines would prevent the discharge of pollutants to stormwater during construction.

As discussed previously, the proposed project would include a storm drainage system consisting of a stormwater treatment facility, catch basins, and underground piping that would be designed to detain and meter the release of peak runoff in order to avoid inundating downstream waterways in a manner that creates substantial flooding. In addition, consistent with the Santa Rosa LID Manual, the proposed project would include BMPs that would prevent significant additional sources of polluted runoff. These BMPs would include swales and natural landscaping that slow runoff and prevent pollutants from entering the stormwater system and ultimately the Russian River. As a result, the proposed project would not create or contribute significant stormwater runoff or additional sources of polluted runoff. Therefore, impacts would be less than significant.

(iv) impede or redirect flood flows?

No impact. As shown in Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06097C0707E, the project site is located within an “Area of Minimal Flood Hazard—Zone X,” and would not be located in an area prone to flooding or within a designated flood hazard zone.⁹³ As described in further detail under Impact 10(d), the project site is not susceptible to inundation from flood hazards, tsunamis, or seiches. As a result, the proposed project would not impede or redirect flood flows. Therefore, there would be no impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No impact. As discussed previously, the project site is located in Zone X—Area of Minimal Flood Hazard. In addition, the project site is not located in a flood prone area. Seiches and tsunamis are short duration earthquake-generated water waves in large enclosed bodies of water and the open ocean. The project site is not near any large inland bodies of water and is approximately 20 miles

⁹³ Federal Emergency Management Agency (FEMA) Flood Map Service Center: Search by Address. 2019. Website: <https://msc.fema.gov/portal/search?AddressQuery=2220%20Fulton%20Road%2C%20Santa%20Rosa%2C%20CA#searchresultsanch> or. Accessed January 22, 2020.

east of the Pacific Ocean and over 6 miles northwest of Spring Lake, a condition that precludes inundation by tsunami or seiche. Therefore, no impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than significant impact. Given that proposed construction would disturb more than 1 acre of land, the project would be required to comply with the terms of the City's Construction General Permit, which requires the preparation and implementation of a SWPPP that includes BMPs to ensure reduction of pollutants from construction activities potentially entering surface waters or groundwater basins and would not obstruct the implementation of a water quality control plan or sustainable groundwater management plan.

As discussed under Impact 10(b), the City maintains six municipal groundwater wells, but groundwater uses represent less than 1 percent of the overall City of Santa Rosa water supply. In addition, the project does not propose the use of groundwater as a significant source of water supply. Developments that create or replace a combined total of 1 acre or more of impervious surface are also subject to follow the City's SUSMP. The SUSMP requires implementation of LID BMPs that aim to decentralize stormwater treatment and to integrate it into the overall site design. The LID Technical Design Manual encourages the use of LID techniques to both retain and treat runoff water from impervious surfaces. As a result, during operation, the proposed project would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
11. Land Use and Planning <i>Would the project:</i>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

The General Plan envisions a community featuring a diverse range of housing and employment opportunities. The General Plan includes policies to focus development within the UGB in a way that maintains the local quality of life through compatibility with adjacent land uses, provision of parks and open spaces, and connection between neighborhoods and activity centers. The General Plan also includes policies (Policies H-A-1, H-A-2, H-C-1, H-C-2, H-C-4, H-C-5, H-C-6, H-C-8, H-C-9, H-C-10, H-C-12, H-F-2, and H-F-3) that encourage the development of affordable housing units.⁹⁴ The General Plan Land Use Map designates areas of the City for different uses. The Zoning Code establishes development standards for each land use, including regulations regarding building heights, lot coverage and front, side and rear setbacks. The City's Municipal Code also includes provisions for the removal of trees and the protection of trees during construction activities; stormwater pollution prevention; and erosion control.

Would the project:

a) Physically divide an established community?

No impact. The physical division of an established community would occur if construction of a large linear feature such as a railroad or interstate highway separated an existing community or if a feature that connects a community is removed, such as a bridge. The proposed project does not involve any such features and would not remove any means of access in the surrounding area. No linear features would be constructed and no connecting features would be removed. No impact would occur.

⁹⁴ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 4-55.

- b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Zoning and Planning Land Use Compatibility

Less than significant impact. As described in the Environmental Setting, the project site is designated Low Density Residential by the General Plan (Exhibit 4) and Planned Development (PD 04-007-SR) by the Santa Rosa Zoning Map (Exhibit 5).

The Low Density Residential designation is intended for detached single-family residential development at a density between 2.0 to 8.0 DU per gross acre.⁹⁵ The proposed project would develop 105 single-family homes on a 28.6-acre site, which is 3.7 DU/acre.⁹⁶ As a result, the proposed project would be consistent with the Low-Density Residential designation. The 105 residential units would include five pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98. Attached single-family units are permitted within this designation.⁹⁷

The project site is zoned PD 04-007-SR, and compliance with the applicable Policy Statement and Development Plan, including basic development considerations regarding treatment of the land, architectural controls, and density, is required. The applicable Policy Statement is North Village and Woodbridge (NWSR 3-97), adopted on August 24, 2004. The permitted and accessory uses are provided below.

Principal Permitted Uses:

- One single-family unit (detached or duet) per lot;
- One second dwelling unit per lot
- One duplex, triplex, or fourplex lot (if such units are shown or referenced on an approved Development Plan or Tentative Subdivision Map);
- Temporary subdivision sales offices;
- Public schools; or
- Public parks.

Accessory Uses:

- Private garage accessory to a principal residence;
- Private swimming pool accessory to a principal residence;
- The accommodation of not more than two roomers or boarders per dwelling units;
- Other accessory structures and uses incidental and appurtenant to the principal permitted use.

The proposed project is consistent with the principal and accessory permitted uses outlined in the Policy Statement. The project site falls within the “Woodbridge” Land Use Area, which lays out regulations for development, and the proposed project would adhere to these requirements. Similar

⁹⁵ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 2-9. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>. Accessed March 10, 2020.

⁹⁶ Calculation: 105 units/28.6 acres = 3.7 units/acre

⁹⁷ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, pages 2-9 and 2-10. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>. Accessed March 10, 2020

to and consistent with the General Plan land use designation's allowable density, the zoning, PD 04-007-SR, allows up to 8.0 units per gross acre, and, therefore, the proposed project is within the permitted zoning density.

The proposed project qualifies as a residential small lot subdivision pursuant to the Santa Rosa City Code (Chapter 20-42.140). The residential small lot subdivisions "[a]re intended to provide opportunities to increase the supply of smaller dwelling units and rental housing units by allowing the creation of subdivisions with smaller lots and dwellings . . ." ⁹⁸ Chapter 20-42.140 Sections (C) and (D) require a CUP for all residential small lot subdivisions and Section (F) sets forth site planning and project design standards for these developments. The project applicant is applying for a CUP and the proposed project would adhere to all site planning and project design standards as set forth in Chapter 20-42.140 Section (F). ⁹⁹

As described in Impact 4(e), there are no designated protected trees or street trees on the project site. Therefore, the proposed project would not conflict with the applicable land use designation or zoning policies adopted for the purpose of avoiding or mitigating and environmental effect, and impacts would be less than significant.

Noise Land Use Compatibility

For a discussion of the characteristics of noise and further information regarding the applicable noise regulatory framework, refer to the Noise impact discussion in Impact 13, Noise.

Less than significant impact with mitigation incorporated. A significant impact would occur if the proposed project would introduce new land uses to an existing ambient noise environment that is in conflict with the City's established noise land use compatibility guidelines. As discussed below, the proposed project would result in a potential conflict with the City's adopted noise land use compatibility standards, and mitigation would be required.

For the proposed project, the closest comparable land use designation of the City's land use compatibility guidelines is single-family residential land use. The following are the General Plan noise policies applicable to that land use designation:

- Noise environments of up to 60 A-weighted decibel (dBA) day/night average sound level (L_{dn}) are considered "normally acceptable" based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.
- Noise environments of 55 dBA to 70 dBA L_{dn} are "conditionally acceptable" where new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

⁹⁸ City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Section (A). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.

⁹⁹ City of Santa Rosa. no date. Santa Rosa City Code, Chapter 20-42.140 Residential small lot subdivisions, Sections (C), (D), and (F). Website: http://qcode.us/codes/santarosa/view.php?topic=20-4-20_42-20_42_140&frames=on. Accessed October 3, 2018.

- Noise environments of 70 dBA to 75 dBA L_{dn} are “normally unacceptable” where new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
- Noise environments of 75 dBA L_{dn} and higher are “clearly unacceptable” where new construction or development should generally not be undertaken.

The ambient noise environment of the project site has been documented through traffic noise modeling. The Federal Highway Administration (FHWA) highway traffic noise prediction model (FHWA RD-77-108) was used to evaluate existing and future traffic noise conditions in the vicinity of the project site. The projected future traffic noise levels adjacent to the project site were analyzed to determine compliance with the City’s noise and land use compatibility standards. The daily traffic volumes were obtained from the TIS.¹⁰⁰ The resultant noise levels were weighed and summed over a 24-hour period in order to determine the L_{dn} values. The traffic noise modeling input and output files are included in Appendix G of this document. Table 24 shows a summary of the traffic noise levels for existing background traffic noise levels without and with the proposed project as measured at 50 feet from the centerline of the outermost travel lane.

Table 24: Traffic Noise Model Results Summary

Roadway Segment	Existing ADT	Existing (dBA) L_{dn}	Existing Plus Project ADT	Existing Plus Project (dBA) L_{dn}	Increase over Existing No Project (dBA)
Fulton Road—North Village Drive to Tedeschi Drive	25,800	69.0	25,900	69.0	0.0
Fulton Road—Tedeschi Drive to Street A	26,900	69.2	27,500	69.3	0.1
Fulton Road—Street A to San Miguel Road	27,100	69.2	28,100	69.4	0.2
Fulton Road—San Miguel Road to Piner Road	26,500	69.1	27,200	69.3	0.2
<p>Notes: ADT = Average Daily Traffic dBA = A-weighted decibel L_{dn} = day/night average sound level ADT is calculated by the FHWA model based on PM peak-hour traffic volumes from the traffic study prepared for the project. FHWA model ADT assumptions are lower than ADT derived from the ITE methodology used in the traffic report; however, even if all 250 average daily trips forecast using ITE methodology traveled along any of the modeled roadway segments, they would still not result in even a 1 dBA increase in traffic noise levels that would exist without the project. L_{dn} (dBA) is stated as measured at 50 feet from the centerline of the outermost travel lane. Source: FirstCarbon Solutions (FCS) 2019.</p>					

Based on the modeled traffic noise results, existing traffic noise levels along the modeled roadway segment of Fulton Road, adjacent to the project site, would range up to 69.2 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane. The nearest façade of the proposed single-

¹⁰⁰ W-Trans. 2019. Traffic Impact Study for the 2220 Fulton Road Project. October 22.

family residential home would be located approximately 45 feet from the centerline of the outermost travel lane of this roadway segment. At this distance, traffic noise levels along this roadway segment would range up to approximately 71 dBA L_{dn} . These traffic noise levels are within the City's "normally unacceptable" land use compatibility threshold, between 70 and 75 dBA L_{dn} for new single-family residential land use development. Therefore, mitigation would be required to reduce traffic noise levels for receiving outdoor active use areas to meet the City's "conditionally acceptable" noise land use compatibility threshold.

Implementation of minimum 6-foot high sound walls would reduce traffic noise levels by a minimum of 6 dBA. The sound walls would be located as shown in Exhibit 12. This would reduce traffic noise levels to below 65 dBA community noise equivalent level (CNEL) as measured at the proposed outdoor active use areas (backyards). These noise levels would be within the City's "conditionally acceptable" range of 55 dBA to 70 dBA L_{dn} . The City's guidelines state that for environments with "conditionally acceptable" noise levels new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. The City's guidelines further note that conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice to ensure that interior noise levels meet the City's interior noise performance standard of 45 dBA L_{dn} .

Based on the EPA's Protective Noise Levels,¹⁰¹ with a combination of walls, doors, and windows, standard construction in accordance with building code requirements for single-family residential developments would provide 25 dBA in exterior-to-interior noise reduction (with windows closed) and 15 dBA or more (with windows open). With windows open, the interior noise levels of the proposed units nearest to Fulton Road would not meet the State's interior noise standard of 45 dBA CNEL for indoor sleeping areas (i.e., 65 dBA–15 dBA = 50 dBA). However, inclusion of alternate ventilation systems such as mechanical air conditioning would allow windows to remain closed for prolonged periods of time, sufficiently reducing traffic noise levels to meet the interior noise level standard of 45 dBA CNEL (i.e., 65 dBA–25 dBA = 45 dBA). Air conditioning units would give an occupant the option of controlling noise by keeping the windows shut. Therefore, implementation of MM LAND-1 would ensure the proposed project would not result in a conflict with the City's adopted land use-noise compatibility guidelines and policy and would reduce combined traffic noise impacts to the proposed project to be less than significant.

Therefore, implementation of MM LAND-1 would ensure that traffic noise impacts to the proposed project would not exceed the City's land use compatibility or the applicable interior noise standards for the proposed single-family residential land uses.

Mitigation Measures

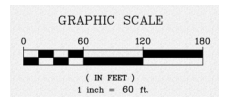
MM LAND-1 The proposed project shall include a minimum 6-foot high sound wall along all residential project property lines adjacent to Fulton Road (Lots 1, 39, and 40), or along the nearest receiving lot lines located within 290 feet of the centerline of Fulton Road (Lots 105 and 103), as shown in Exhibit 12 of this Draft Initial Study/Mitigated Negative Declaration. The sound walls shall block the line of site

¹⁰¹ United States Environmental Protection Agency (EPA). 1978. National Service Center for Environmental Publications (NSCEP). Protective Noise Levels: Condensed Version of EPA Levels Document, EPA 550/9-79-100, November.

from the roadway to the proposed outdoor use areas of the nearest residential lots. Furthermore, to meet the interior noise level standard of 45 A-weighted decibel (dBA) community noise equivalent level (CNEL), all proposed residential units shall be supplied with an alternative form of ventilation, such as air conditioning or noise-attenuated passive ventilation systems, that would allow an occupant the option of controlling noise by keeping the windows shut (as the interior noise standard would not be met with open windows).

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Sound Walls



Source: Ripley Design Landscape Architecture Land Planning, June 2019.

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Exhibit 12 Sound Wall Location Map

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Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
12. Mineral Resources <i>Would the project:</i>				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Setting

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary state law concerning mineral resources, including sand, gravel, and building stone which are important for commercial purposes. Because of the economic importance of mineral resources, SMARA limits new development in areas with significant mineral deposits. SMARA also requires State Geologists to classify specified areas into Mineral Resource Zones (MRZs). According to the California Geologic Survey Mineral Land Classification studies of Sonoma County, the project site is in an MRZ-3b area, containing inferred mineral occurrences of undetermined mineral resource significance.¹⁰²

There are no mineral resource recovery sites on or in the vicinity of the project site.¹⁰³ The nearest active mine is the Canyon Rock Co., Inc., located approximately 7.7 miles to the west of the site.

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?**

No impact. The project site does not currently support any mineral recovery efforts, and no known significant mineral resources exist there.¹⁰⁴ The proposed project would not result in the loss of availability of a known mineral resource, and there would be no impact.

¹⁰² Miller, R.V., Kohler, S.L. Busch, L.L., Dupras, D.L., and Clinkenbened, J.P. 2005. Special Report 175. Website: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_175/. Accessed January 13, 2020.

¹⁰³ Division of Mine Recreation, California Department of Conservation. 2016. Mines Online. Website: maps.conserv.ca.gov/mol/index.html. Accessed July 15, 2019.

¹⁰⁴ Division of Mine Recreation, California Department of Conservation. 2016. Mines Online. Website: maps.conserv.ca.gov/mol/index.html. Accessed July 15, 2019.

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?

No impact. There are no mineral resource recovery sites within or near the project site.¹⁰⁵ In addition, the project site is not designated or zoned as a mineral recovery site by the General Plan or zoning code. The proposed project would not impact any mineral resource recovery site, and no impact would occur.

Mitigation Measures

None.

¹⁰⁵ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Environmental Impact Report. March. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>. Accessed March 10, 2020.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
13. Noise <i>Would the project result in:</i>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Evaluation

Based on the CEQA Appendix G checklist questions, the noise land use compatibility discussion is now contained within the Land Use and Planning discussion, Impact 11(b), of this Draft IS/MND.

Setting

Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments. While a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the L_{dn} and the CNEL, both of which represent

how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and maximum noise/sound level (L_{max}) is the maximum instantaneous noise level occurring over a sample period.

Regulatory Framework

The City of Santa Rosa has established Noise Compatibility Standards for residential and non-residential land uses in the Noise and Safety Element of the General Plan¹⁰⁶ and in the Municipal Code.¹⁰⁷

General Plan

Applicable noise goals and policies of the General Plan are summarized as follows:

- Require new projects in the following categories to submit an acoustical study, prepared by a qualified acoustical consultant:
 - All new projects proposed for areas with existing noise above 60 dBA L_{dn} . Mitigation shall be sufficient to reduce noise levels below 45 dBA L_{dn} in habitable rooms and 60 dBA L_{dn} in private and shared recreational facilities. Additions to existing housing units are exempt.
 - All new projects that could generate noise whose impacts on other existing uses would be greater than those normally acceptable (as specified in the Land Use Compatibility Standards).
- Do not permit existing uses to generate new noises exceeding normally acceptable levels unless:
 - Those noises are mitigated to acceptable levels; or
 - The activities are specifically exempted by the City Council on the basis of community health, safety, and welfare.
- Adopt mitigations, including reduced speed limits, improved paving texture, and traffic controls, to reduce noise to normally acceptable levels in areas where noise standards may be exceeded (e.g., where homes front regional/arterial streets and in areas of mixed use development.)
- Encourage developers to incorporate acoustical site planning into their projects.
Recommended measures include:
 - Incorporating buffers and/or landscaped earth berms;
 - Orienting windows and outdoor living areas away from unacceptable noise exposure;
 - Using reduced-noise pavement (rubberized-asphalt);
 - Incorporating traffic calming measures, alternative intersection designs, and lower speed limits; and
 - Incorporating state-of-the-art structural sound attenuation and setbacks.
 - Discourage new projects that have potential to create ambient noise levels more than 5 dBA L_{dn} above existing background, within 250 feet of sensitive receptors.

Municipal Code

The City of Santa Rosa also addresses noise in the ordinances of the Municipal Code. Municipal Code Section 17-16.120, Machinery and Equipment, states that “it is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in

¹⁰⁶ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. November 3. Website: <https://srcity.org/DocumentCenter/View/24327/Santa-Rosa-General-Plan-2035-PDF---July-2019>.

¹⁰⁷ City of Santa Rosa. 2019. Santa Rosa City Code. June. Website: <http://qcode.us/codes/santarosa/?view=desktop>.

any manner so as to create any noise, which would cause the noise level at the property line of any property to exceed the ambient base noise level by more than five decibels.”

Standard city conditions of project approval limit the hours of construction to 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays. No construction is permitted on Sundays and holidays.

Would the project result in:

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

Short Term Construction Impacts

Less than significant impact with mitigation incorporated. For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City’s permissible hours for construction (7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays) that would result in annoyance or sleep disturbance of nearby sensitive receptors.

Construction-related Traffic Noise

Noise impacts from construction activities associated with the project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impacts that could occur during project construction would result from the increase in traffic flow on local streets, associated with the transport of workers, equipment, and materials to and from the project site.

The transport of workers, construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the Average Daily Traffic (ADT) hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly traffic volumes along any roadway segment in the project vicinity. For these reasons, short-term intermittent noise from trucks would be minor when averaged over a longer time-period. Therefore, short-term construction-related noise impacts associated with worker commute and equipment transport to the project site would not exceed applicable significance thresholds and would be less than significant.

Construction Activity Noise

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction noise levels are rarely steady in nature and, often fluctuate depending on the type and number of equipment being used at any given time. In addition, there could be times where large equipment is not operating and noise would be at or near normal ambient levels.

Construction is completed in discrete steps, each of which has its own mix of equipment and its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site 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.

The site preparation phase, which includes excavation and grading activities, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project is expected to require the use of front-end loaders, excavators, haul trucks, water trucks, concrete mixer trucks, and pickup trucks. The maximum noise level generated by each concrete mixing truck is assumed to be 85 dBA L_{max} at 50 feet from this equipment.¹⁰⁸ Each front-end loader would also generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by excavators is approximately 85 dBA L_{max} at 50 feet. Each doubling of sound sources with equal strength increases the noise level by 3 dBA.

A conservative but reasonable assumption is that this equipment would operate simultaneously and continuously over at least a 1-hour period in the vicinity of the closest existing residential receptors but would move linearly over the project site as they perform their earth moving operations, spending a relatively short amount of time adjacent to any one receptor. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. The acoustical center reference is used because construction equipment must operate at some distance from one another on a project site, and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. These operations would be expected to result in a reasonable worst-case hourly average of 86 dBA L_{eq} at a distance of 50 feet from the acoustic center of a construction area.

The closest sensitive receptors to proposed areas of construction are the multi-family residences on Orleans Street, at the southwest corner of the project site. The façade of the closest residence would be located approximately 60 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate at the project site. At this distance, reasonable worst-case construction noise levels could range up to approximately 88 dBA L_{max} , intermittently and could have an hourly average of up to 84 dBA L_{eq} , at the façade of the nearest multi-family residential home when multiple pieces of equipment operate simultaneously at the nearest center of construction activity. These noise levels would occur for only a short period during the site preparation phase of construction, as noise levels would drop off at a rate of 6 dBs per doubling of distance as construction equipment moves across the site.

¹⁰⁸ Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.

Although there could be a relatively high single event noise exposure potential causing an intermittent noise nuisance, the effect of construction activities on longer-term (hourly or daily) ambient noise levels would be small but could result in a temporary increase in ambient noise levels in the project vicinity that could result in annoyance or sleep disturbance of nearby sensitive receptors. However, restricting the permissible hours of construction to daytime hours would reduce the effects of construction activities on longer-term (hourly or daily) ambient noise levels, and it would reduce potential impacts that could result in annoyance or sleep disturbances at nearby sensitive receptors. Noise producing construction activities would be restricted to the daytime hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturdays; and no construction is permitted on Sundays and holidays per standard conditions of project approval. Compulsory restriction of construction activities to these stated time-periods, as well as implementing the best management noise reduction techniques and practices outlined in MM NOI-1, would ensure that construction noise would not result in a substantial temporary increase in ambient noise levels that would result in annoyance or sleep disturbance of nearby sensitive receptors. Therefore, the impact would be less than significant.

Operational/Stationary Source Noise Impacts

Less than significant impact. A significant impact would occur if operational noise levels generated by stationary noise sources at the project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. According to Municipal Code Section 17-16.120, it is unlawful for any person to operate any machinery, equipment, pump, fan, air-conditioning apparatus or similar mechanical device in any manner so as to create any noise that would cause the noise level at the property line of any property to exceed the ambient base noise level by more than 5 dBA. Therefore, for purposes of this analysis, an increase of more than 5 dBA above the applicable noise performance thresholds would be considered a substantial permanent increase in ambient noise levels.

Ambient noise levels in the project vicinity are dominated by traffic noise on Fulton Road. As shown in Table 25, existing traffic noise levels along Fulton Road in the project vicinity range up to approximately 69 dBA L_{dn} as measured at 50 feet from the centerline of the outermost travel lane.

Mechanical Equipment Operations

At the time of preparation of this analysis, details were not available pertaining to proposed mechanical ventilation systems for the project. Therefore, a reference noise level for typical residential mechanical ventilation systems was used. Noise levels from typical residential mechanical ventilation equipment are sound rated from 45 dBA to 60 dBA L_{eq} as measured at approximately 3 feet from the operating unit.

Mechanical ventilation systems could be located as close as 15 feet from the nearest off-site residential receptor. At this distance, noise generated by mechanical ventilation equipment would attenuate to less than 46 dBA L_{eq} at the nearest residential property line, which is well below the documented existing ambient noise levels in the project vicinity. As noted previously, existing 24-hour average traffic noise levels in the project vicinity range up to approximately 69 dBA L_{dn} . In addition, mechanical ventilation noise is typical of surrounding residential land uses and would be no louder

than the ambient noise levels at receiving residences. Therefore, mechanical ventilation equipment operational noise levels, as measured at the nearest off-site sensitive receptors, would not exceed existing ambient noise levels more than 5 dBA.

Operational/Mobile Source Noise Impacts

Less than significant impact. A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the project. The City does not define “substantial increase,” therefore, for purpose of this analysis; a substantial increase is based on the following criteria. A characteristic of noise is that audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for purposes of this analysis, a significant impact would occur if project-related traffic would cause the L_{dn} along roadway segments in the project vicinity to increase by any of the following:

- 5 dBA or more even if the L_{dn} would remain below normally acceptable levels for a receiving land use.
- 3 dBA or more, thereby causing the L_{dn} in the project vicinity to exceed normally acceptable levels and result in noise levels that would be considered conditionally acceptable for a receiving land use.
- 1.5 dBA or more where the L_{dn} currently exceeds conditionally acceptable levels.

Table 25 shows a summary of the traffic noise levels for Existing, Existing Plus Project, Baseline, and Baseline Plus Project conditions as measured at 50 feet from the centerline of the outermost travel lane.

Table 25: Traffic Noise Increase Summary

Roadway Segment	Existing (dBA) L_{dn}	Existing Plus Project (dBA) L_{dn}	Increase over Existing (dBA)	Baseline (dBA) L_{dn}	Baseline Plus Project (dBA) L_{dn}	Increase over Baseline (dBA)
Fulton Road—North Village Drive to Tedeschi Drive	69.0	69.0	0.0	69.2	69.2	0.0
Fulton Road—Tedeschi Drive to Street A	69.2	69.3	0.1	69.4	69.5	0.1
Fulton Road—Street A to San Miguel Road	69.2	69.4	0.2	69.4	69.6	0.2
Fulton Road—San Miguel Road to Piner Road	69.1	69.3	0.2	69.3	69.4	0.1
Source: FCS 2019.						

As shown in Table 25, the highest traffic noise level increase with implementation of the project would occur along Fulton Road between the Street A and San Miguel Road, under Baseline Plus Project conditions. Along this roadway segment, the project would result in traffic noise levels

ranging up to 69.6 dBA L_{dn} as measured at 50 feet from the centerline of the nearest travel lane, representing an increase of 0.2 dBA over baseline conditions for this roadway segment. The resulting noise levels are within the conditionally acceptable threshold for receiving land uses adjacent to this roadway segment. The project-related increase of 0.2 dBA is well below the 3 dBA increase that would be considered a substantial permanent increase in noise levels for ambient noise environments that are considered conditionally acceptable for the receiving land use. Therefore, project-related traffic noise levels would not result in a substantial permanent increase in traffic noise levels in excess of applicable standards and would represent a less than significant impact.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than significant. A significant impact would occur if the project would generate groundborne vibration or groundborne noise levels in excess of established standards. For determining construction-related vibration impacts, the Federal Transit Administration's (FTA's) Construction Vibration Impact Criteria are utilized. The FTA has established industry accepted standards for vibration impact assessment in its Transit Noise and Vibration Impact Assessment Manual, dated September 2018.¹⁰⁹

Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves. In general, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

In extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Common sources of groundborne vibration include construction activities such as blasting, pile driving, and operating heavy earthmoving equipment. However, construction vibration impacts on building structures are generally assessed in terms of peak particle velocity (PPV). For purposes of this analysis, project related impacts are expressed in terms of PPV.

Short-term Construction Vibration Impacts

A significant impact would occur if project construction activities would generate groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the receiving type of structure.

Of the variety of equipment used during construction, the small vibratory rollers that are anticipated to be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment.

¹⁰⁹ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. Website: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed January 13, 2020.

The nearest off-site structures to the project site are the multi-family residences located south of the project site. The façade of the closest building would be located approximately 35 feet from the nearest construction footprint where the heaviest construction equipment would potentially operate (the extension of Andre Lane). At this distance, groundborne vibration levels would range up to 0.061 PPV from operation of the types of equipment that would produce the highest vibration levels. This is well below the FTA's Construction Vibration Impact Criteria of 0.2 PPV for this type of structure, a building of non-engineered timber and masonry.

Other equipment that could operate adjacent to off-site receptors would be small bulldozers ranging up to 0.003 in/sec PPV at 25 feet from the operating equipment. The nearest off-site structure to the project site where small bulldozers are anticipated to be used is the multi-family residence located 11 feet south of the project site. At this distance, groundborne vibration levels would range up to 0.010 PPV from small bulldozers. This is well below the FTA's Construction Vibration Impact Criteria of 0.2 PPV for this type of structure, a building of non-engineered timber and masonry. Therefore, project construction activities would not generate groundborne vibration or groundborne noise levels in excess of established standards and impacts to off-site receptors would be less than significant.

Operational Vibration Impacts

A significant impact would occur if project operations would generate excessive groundborne vibration levels at sensitive receptors in the project vicinity.

Implementation of the project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity. Therefore, operational groundborne vibration impacts would be less than significant.

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

No impact. A significant impact would occur if the project would expose people residing or working in the project area to excessive noise levels 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 2 miles of a public airport or public use airport.

The project site is not located within the vicinity of a private airstrip. The nearest public airport to the project site is the Charles M. Shultz Sonoma County Airport, located approximately 2.6 miles northwest of the project site. The project site is located outside of the 55 dBA CNEL airport noise contours of this closest airport. While aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. Therefore, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

MM NOI-1 Implementation of the following multi-part mitigation measure is required to reduce potential construction period noise impacts:

- The construction contractor shall ensure that all equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment.
- The construction contractor shall ensure that unnecessary idling of internal combustion engines (i.e., idling in excess of 5 minutes) is prohibited.
- The construction contractor shall utilize “quiet” models of air compressors and other stationary noise sources where technology exists.
- At all times during project grading and construction, the construction contractor shall ensure that stationary noise-generating equipment shall be located as far as practicable from sensitive receptors and placed so that emitted noise is directed away from adjacent residences.
- The construction contractor shall ensure that the construction staging areas shall be located to create the greatest feasible distance between the staging area and noise-sensitive receptors nearest the project site.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
14. Population and Housing <i>Would the project:</i>				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

According to the California Department of Finance, the City of Santa Rosa had a population of 167,815 as of January 1, 2010, and a population of 177,017 as of January 1, 2018,¹¹⁰ totaling a 5.5 percent increase in population from 2010 to 2018.¹¹¹ The General Plan projects that the City of Santa Rosa would increase by 89,405 people by 2035 and would add 25,225 new housing units for a total of 96,295 units.¹¹² The City of Santa Rosa projected regional housing needs in its General Plan Housing Element. The City of Santa Rosa's share of the 2015-2023 Regional Housing Needs Assessment (RHNA) is 5,083 housing units.¹¹³ The unemployment rate of the Santa Rosa Metropolitan Statistical Area (Santa Rosa MSA), which includes the City of Santa Rosa, in June 2019 was 2.8 percent, down from 2.9 percent in June 2018.¹¹⁴

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)?**

Less than significant impact. Unplanned direct population growth would occur if the proposed project produces a population growth not anticipated and evaluated by the City of Santa Rosa in its General Plan. The proposed project would develop 105 residential units. Using the California Department of Finance's 2019 person per household of 2.65 for the City of Santa Rosa,¹¹⁵ the project

¹¹⁰ California Department of Finance. 2018. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.

¹¹¹ Calculation: $[(177,017 - 167,815) / 167,815] * 100 = 5.5$.

¹¹² City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Land Use and Livability Element, page 2-15.

¹¹³ Association of Bay Area Governments (ABAG). Regional Housing Need Plan San Francisco Bay Area 2015-2023. December 2013.

¹¹⁴ California Employment Development Department. Immediate Release Santa Rosa Metropolitan Statistical Area (Santa Rosa MSA). July 19, 2019.

¹¹⁵ California Department of Finance. 2019. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.

could directly increase population by as much as 278¹¹⁶ people, representing a 0.16 percent increase¹¹⁷ from the City's 2018 population of 177,017.¹¹⁸

The General Plan Housing Element projected a City population of 201,800 by 2030.¹¹⁹ The proposed project would represent approximately 0.14 percent of the projected population growth from 2018 to 2030. The project site lies within the City's UGB and Sphere of Influence and is currently designated for low density residential use. The proposed project does not represent a significant portion of the projected population growth and the resulting slight population increase is included in the General Plan Housing Element projections.

In addition, the City of Santa Rosa's share of the 2015-2023 RHNA totals 5,083 units. The project would provide 105 new housing units (10 affordable units in the 5 pairs of attached single-family units on lots 32/33, 34/35, 68/69, 70/71, and 97/98, which would be restricted to affordable to moderate-income households), with an anticipated full build-out to occur between in 2023-2028. The proposed project would contribute to the City of Santa Rosa's housing needs established by ABAG in the RHNA.

Because the proposed project would represent a small portion of the anticipated population growth and would provide needed housing, the proposed project would not induce substantial unplanned direct population growth in the City of Santa Rosa.

Unplanned indirect population growth would occur if the proposed project creates employment opportunities and/or removes barriers to growth not accounted for in the General Plan or considered as part of the project. For example, a project could create thousands of jobs and result in a substantial number of people moving to the area permanently to pursue employment. In addition, barriers to growth include lack of roads, water and wastewater services, and public services such as fire and police protection, schools, and hospitals.

The proposed project would generate temporary employment opportunities during construction. These employees would be temporary and limited to the project construction period. As of 2009, approximately 7 percent of the Santa Rosa labor force consisted of construction jobs, employing 5,493 people.¹²⁰ As previously described, in 2019 the unemployment rate of the Santa Rosa MSA encompassing Sonoma County was 2.8 percent. Given the relatively short construction period, the local labor pool would be expected to satisfy labor demands of the project. As a result, construction workers would not require permanent relocation contributing to population growth over time and for the period of construction the project would not contribute substantially to new employment.

The area surrounding the project site is composed of undeveloped, single and multi-family residential, and rural residential land. The area around the project site currently contains utility infrastructure such as roads, water, wastewater, and stormwater facilities to which the project could connect. Fulton Road (an existing street) would connect to Street A allowing direct access into the

¹¹⁶ Calculation: 105 units x 2.65 persons/household = 278.

¹¹⁷ Calculation: $[(177,295 - 177,017) / 177,017] * 100 = 0.16$.

¹¹⁸ California Department of Finance. 2018. Report E-5, Population and Housing Estimates for Cities, Counties, and the State.

¹¹⁹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Housing Element, Table 4-2.

¹²⁰ Association of Bay Area Governments (ABAG). City of Santa Rosa General Plan Housing Element, Table 4-6. 2009.

project site. Andre Lane (an existing street) would extend from the northern neighboring residential subdivision through the project site and connect to the residential subdivision to the south of the project site at Orleans Street. Extension of infrastructure to the project site would serve the site alone and would not remove barriers of growth.

Overall, the proposed project would result in direct population increase, however, the population increase is consistent with expected growth and land use planning and the proposed project would not induce indirect population growth. As such, impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less than significant impact. There is one existing home on the project site, which would be demolished for construction of the project. Using the California Department of Finance persons per household figure of 2.65, the demolition of one existing residence would displace approximately three people. Although one dwelling would be demolished, the proposed project would result in the construction of 105 units, and a net increase of 104 housing units on undeveloped land. Thus, while the proposed project would displace one existing dwelling unit, it would not necessitate the construction of replacement housing elsewhere not already anticipated in the General Plan.

Therefore, the proposed project would not require the construction of replacement housing elsewhere due to the displacement of housing or people. This would represent a less than significant impact related to population and housing displacement.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
15. Public Services <i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Public services provided by the City include fire protection, police protection, education, recreation and parks, and libraries.

Santa Rosa Fire Department

Santa Rosa Fire Department (SRFD) provides fire protection services in the City of Santa Rosa. The SRFD responds to all fires, hazardous materials incidents, and medical emergencies (including injury accidents) in the City. The senior command structure consists of a Fire Chief, an Emergency Preparedness Coordinator, a Deputy Fire Chief, an Administrative Services Officer, and a Division Chief Fire Marshal. The SRFD consists of three Bureaus—Operations, Administration, and Prevention—and two divisions—Training and Safety Division and Support Services Division. Ten fire engines and two truck companies respond to emergencies.¹²¹ The SRFD has 138 dedicated employees. The General Plan establishes a response time goal for first resource arrival within 5 minutes of dispatch 90 percent of the time. A secondary goal, pertaining to larger incidents, is to provide a full assignment within 8 minutes 90 percent of the time. For calendar year 2017, the SRFD responded to all incidents within 6 minutes or less 72.68 percent of the time and Engine 5 responded to all incidents within 6 minutes or less 77.88 percent of the time.^{122,123}

The General Plan EIR projected buildout over 25 years and determined the need to move the fire station on Parker Hill Road to a new location near Fountaingrove Parkway to serve the future residents of the area. Fire Station No. 5, constructed in 2015, was located at 2201 Newgate Court.

¹²¹ City of Santa Rosa. Fire Department About Us. Website: <https://srcity.org/395/About-Us>. Accessed July 18, 2019.

¹²² City of Santa Rosa. Fire Department About Us. Website: <http://srcity.org/395/About-US>. Accessed March 29, 2019.

¹²³ Ian Hardage, Assistant Fire Marshall, Santa Rosa Fire Department. Personal Communication with City of Santa Rosa, email. June 14, 2019.

However, it was destroyed by the 2017 Tubbs Fire. Station 5 is temporarily located at the Parker Hill Road site until the Newgate Court facility is rebuilt.

Santa Rosa Police Department

Santa Rosa Police Department (SRPD) provides police protection services throughout the City.¹²⁴ The SRPD consists of four divisions (Administration, Field Services, Special Services, and Technical Services) consisting of seven Bureaus: Patrol, Investigations, Communications, Records, Technology, Traffic, and Support Services. There is one police station located at 965 Sonoma Avenue. The SRPD has 255.5 personnel, with the majority being sworn personnel. Recently, budget cuts resulted in the release of six officers despite Santa Rosa's growing population. However, this is a trend in most cities. The SRPD keeps track of officer time spent with a goal of half time spent answering calls for service and half time engaging with the community. Currently, the SRPD is not meeting this target, as more time is spent responding to calls than engaging with the community. Police officers respond from assigned patrol areas at an average response time of 6 minutes and 26 seconds.¹²⁵

Santa Rosa City Schools

The project site is located in the Piner-Olivet and Santa Rosa City High School Districts, two of 10 districts serving the City of Santa Rosa. Within the Piner-Olivet School District, there is one elementary school and three charter and alternative schools.¹²⁶ Within the Santa Rosa City High School District, there are seven middle schools, six high schools, and one alternative high school.¹²⁷ The nearest elementary school is Jack London Elementary School located at 2707 Francisco Avenue, approximately 0.22 mile north of the project site. The nearest middle school is Hilliard Comstock Middle School located at 2750 West Steele Lane, approximately 1.47 miles southeast of the project site. The nearest high school is Piner High School, located at 1700 Fulton Road, approximately 0.84 mile south of the project site.

Santa Rosa Recreation and Parks Department

The closest park to the project site is Jack London School Park located at Jack London Elementary School at 2707 San Francisco Avenue, approximately 0.22 mile north of the project site. Jack London School Park is approximately 4.5-acres in size, with amenities that include a baseball field, a playground, and a soccer field. Another nearby park is the 4.5-acre Pioneer Park, located approximately 0.35 mile southeast of the project site. Pioneer Park amenities include picnic tables, a playground, a basketball court, horseshoe pits, barbecues, and an open grass area.

General Plan Policy PSF-A-2 and the City Code establish a City standard of 3.5 acres of city park land per 1,000 residents.¹²⁸ The General Plan 2035 EIR determined the City would have 864.15 acres of parks and recreational facilities with development of all undeveloped and proposed park facilities by 2035. Based on an expected population of 233,520 by 2035 at full buildout of the General Plan 2035,

¹²⁴ City of Santa Rosa. Police Department About Us. Website: <https://srcity.org/243/About-Us>. Accessed July 18, 2019.
<http://www.srcity.org/departments/police/Pages/default.aspx>.

¹²⁵ Jodi Frost, Administrative Services Officer, Santa Rosa Police Department (SRPD). Personal Communication with FirstCarbon Solutions. Email (co) Email. July 29, 2019.

¹²⁶ Santa Rosa City Schools. Our Schools. Website: <https://www.srscschools.org/Domain/94>. Accessed July 18, 2019.

¹²⁷ Sonoma County Office of Education. 2019. Find A School. Website: <https://www.scoe.org/pub/htdocs/findschool.html>. Accessed July 22, 2019.

¹²⁸ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 6-14.

with 864.15 acres of parkland, the City of Santa Rosa will have 3.7 acres of city parks per 1,000 residents.¹²⁹

The Quimby Act, codified in 1975 under California Government Code Section 66477, authorizes California cities and counties to pass ordinances requiring developers set aside land, donate conservation easements, or pay fees for park acquisition to help ensure the adequate provision of parkland and preserve open space through a series of policy provisions.

Sonoma County Library System

The Sonoma County Library System operates five libraries in Santa Rosa, including the Central Library and four branch libraries. The Northwest Regional Library is the closest library to the project site, and is located at 150 Coddington Center, approximately 2.05 miles southeast of the project site. Library amenities include computer loan (with internet), wireless internet, a research station with access to the library database, a copy machine, and a public printer.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

Less than significant impact. Fire Station No. 3 is located at 3311 Coffey Lane, approximately 2.1 miles from the project site. Construction of 105 residential units on the project site is consistent with the General Plan land use designation and, at 3.7 DU/acre, is at the lower end of the allowable 2.0 to 8.0 DU per gross acre. Development of this project site for residential purposes was considered in the General Plan EIR, which concluded that impacts related to the need for additional fire protection facilities would be less than significant with the implementation of General Plan policies as laid out in Chapter 6, Public Services and Facilities. Furthermore, the proposed project would be required to comply with City of Santa Rosa Special Tax Financing Code provisions, including Section 4-56.240 and would, therefore, be required to make a fair-share contribution to reserve funds for the replacement of public facilities, including fire protection and suppression services. As such, new or expanded fire facilities would not be required to serve the proposed project. Therefore, impacts would be less than significant.

b) Police protection?

Less than significant impact. With a projected population increase of 278 residents, a 0.16 percent increase from the current population, the project would likely have a negligible effect on demand for police services. Police officers respond from assigned patrol areas at an average response time of 6 minutes and 26 seconds.¹³⁰ The project is consistent with the General Plan's projected population growth, and therefore, the increase in police services was accounted for in the General Plan planning

¹²⁹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.P-7.

¹³⁰ Jodi Frost, Administrative Services Officer, Santa Rosa Police Department (SRPD). Personal Communication with FirstCarbon Solutions. Email. July 29, 2019.

process. Section 21-02.090 of the Santa Rosa City Code establishes a housing impact fee for residential housing developments, which will account for any increased demand in public services, including police services.¹³¹ As such, the SRPD would adequately serve the proposed project. Therefore, impacts would be less than significant.

c) Schools?

Less than significant impact. The Santa Rosa City Schools includes the Piner-Olivet and Santa Rosa City High School Districts. FCS reached out to the Santa Rosa City School System superintendent in July 2019, but as of the time of this Draft IS/MND has not received a response. The proposed project would generate additional elementary, middle, and high school students. In order to help offset the construction or expansion of facilities, the procurement of equipment, and the hiring and training of additional personnel, the developer would pay a mandatory housing impact fee.¹³² Therefore, as part of the project entitlement process, the project applicant would pay for its fair share of school facility fees in accordance with applicable laws. As such, while the proposed project would result in additional school-age children, the mandatory housing and development fees would help offset potential impacts related to capacity and budget. Therefore, impacts would be less than significant.

d) Parks?

Less than significant impact. Using the City's city park ratio of 3.5 acres per 1,000 residents, the proposed project's 278 residents would create a demand for 0.97-acre of city parks. As previously indicated, the City currently exceeds its established ratio of 3.5 acres of City park land to 1,000 residents and is projected to continue to exceed it with buildout of the General Plan. Furthermore, according to Section 19-70.090 of the Santa Rosa City Code, the project applicant would provide the City in lieu-of fees for the development of parkland elsewhere.¹³³ As such, the proposed project would not directly result in a need for new or expanded park facilities. Therefore, impacts would be less than significant.

e) Other public facilities?

Less than significant impact. The proposed project's future residents would create a demand for library services. However, 278 new residents represent a small proportion of the total population growth expected in Santa Rosa and Sonoma County through 2035. In 2016, the Sonoma County Library System prepared a Facilities Master Plan to guide facilities planning and improvements for the next 10 years. The Facilities Master Plan classified the Northwest Regional Library, the closest library branch to the project site, as in good condition, but a high priority for update.¹³⁴ Section 21-02.090 of the Santa Rosa City Code establishes a housing impact fee for residential housing developments, which will

¹³¹ City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: <http://qcode.us/codes/santarosa/?view=desktop>. Accessed July 18, 2019.

¹³² City of Santa Rosa. 2009. Santa Rosa General Plan. November. Website: <https://www.srcity.org/392/General-Plan>. Accessed July 18, 2019.

¹³³ City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: <http://qcode.us/codes/santarosa/?view=desktop>. Accessed July 18, 2019.

¹³⁴ Sonoma County Library. 2016. Sonoma County Library—Facilities Master Plan Report. Website: https://sonomalibrary.org/sites/default/files/attachments/facilities/161214_Facilities%20Master%20Plan%20FINAL.pdf. Accessed July 18, 2019.

account for any increased demand in library services.¹³⁵ As a result, payment of housing development fees would ensure the project offsets any potential increase in library usage. Therefore, impacts would be less than significant.

Mitigation Measures

None.

¹³⁵ City of Santa Rosa. 2012. Santa Rosa City Code. November. Website: <http://qcode.us/codes/santarosa/?view=desktop>. Accessed July 18, 2019.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
16. Recreation				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

General Plan Policy PSF-A-2 and the City Code establish a City standard of 3.5 acres of city park land per 1,000 residents.¹³⁶ The General Plan 2035 EIR determined the City would have 864.15 acres of parks and recreational facilities with development of all undeveloped and proposed park facilities by 2035. Based on an expected population of 233,520 by 2035 at full buildout of the General Plan 2035, with 864.15 acres of parkland, the City of Santa Rosa will have 3.7 acres of city parks per 1,000 residents.¹³⁷ Additionally, the City of Santa Rosa has Spring Lake County Park (320 acres) and Annadel State Park (5,000 acres) located within its UGB.

- 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?**

Less than significant impact. The closest accessible neighborhood park to the project site is Jack London School Park, approximately 0.22 mile north of the project site. It is an approximately 4.5-acre neighborhood park consisting of recreation equipment, children's play equipment, an open grass field, and picnic facilities.¹³⁸ The nearest community park to the project, with substantial recreational facilities, is the 73.8-acre Youth Community Park located approximately 0.82 mile south of the site. This community park features picnic facilities, recreation areas and equipment, children's play areas, a skate park, and large grass area.¹³⁹ Spring Lake County Park is located approximately 6.56 mile east of the project site.

¹³⁶ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 6-14.

¹³⁷ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Draft Environmental Impact Report, page 4.P-7.

¹³⁸ City of Santa Rosa. Recreation and Parks. Website: <https://srcity.org/Facilities/Facility/Details/Pioneer-Park-94>. Accessed August 8, 2019.

¹³⁹ City of Santa Rosa. Recreation and Parks. Website: <https://srcity.org/Facilities/Facility/Details/Youth-Community-Park-98>. Accessed August 8, 2019.

The proposed project would increase park use because it would generate new residents. However, this increase in population and their related park use is not likely to result in accelerated substantial physical deterioration. Santa Rosa Municipal Code Section 11.46.050 establishes park user fees and Section 19.70.090 requires the project developer to pay a park impact fee. This park impact fee would contribute to funding parks and recreation facilities, or dedication of parklands to the City of Santa Rosa. The proposed project would not develop the East Parcel of the project site in order to preserve wetland habitats. Although the proposed project would set aside the East Parcel for habitat preservation, it would not be considered active recreation space because it would not contain trails, recreation facilities, or allow public or resident access. As a result, the proposed project would be required to pay the park impact fee in accordance with Santa Rosa Municipal Codes Section 19.70.090. Therefore, impacts would be less than significant.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less than significant impact. The proposed project would increase demand and use of existing recreational facilities. As described in Impact 14(a), the proposed project would not result in a substantial unplanned increase in population. As a result, the proposed project would not substantially increase recreational facility use because of population growth. As stated previously, the proposed project would not develop or designate land for active recreation or parkland, so the project would be required to pay park impact fees to the City of Santa Rosa consistent with Municipal Code Section 19.70.090. Payment of fees would ensure Santa Rosa Recreation and Parks could provide recreational services to new development and maintain existing recreational facilities. In addition, the proposed project would be within 0.82 mile of existing parklands (Youth Community Park) and 0.22 mile of recreational facilities (Jack London School Park). The combination of payment of park impact fees and proximity to existing parklands and recreation facilities would ensure the proposed project would not result in the construction of new recreation facilities or expansion of existing recreational facilities. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
17. Transportation <i>Would the project:</i>				
a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	The City of Santa Rosa has not established a threshold with regard to VMT impact significance consistent with CEQA Guidelines Section 15064.3, subdivision (b). Beginning on July 1, 2020, Section 15064.3 shall apply prospectively, only. As a result, this question does not serve as a threshold for determining impacts.			
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

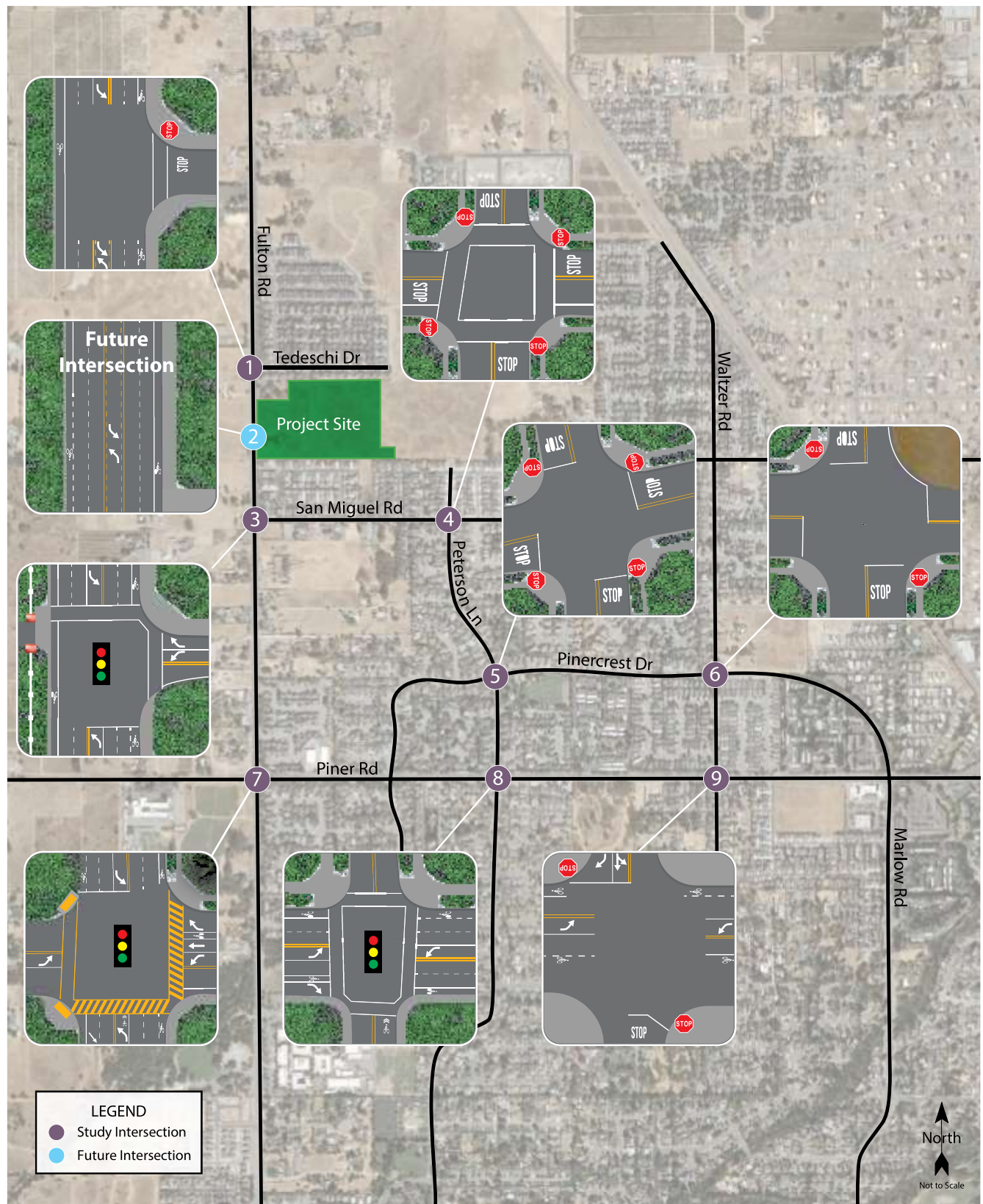
The transportation analysis in this section is based on the TIS prepared by W-Trans, dated October 22, 2019, provided in Appendix H. The TIS analyzed 120 single-family units (as opposed to 105 units), and thus represents a conservative analysis.

Traffic impacts are evaluated by determining the number of new trips that the proposed project would be expected to generate, distributing these trips to the surrounding street system based on existing or anticipated travel patterns specific to the project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. In addition, impacts to access for pedestrians, bicyclists, and transit are also addressed.

Study Area and Periods

The study area consists of the following intersections (Exhibit 13).

- Fulton Road/Tedeschi Drive
- Fulton Road/Street A
- Fulton Road/San Miguel Road
- Peterson Lane/San Miguel Road
- Peterson Lane/Pinecrest Drive
- Waltzer Road/Pinecrest Drive
- Fulton Road/Piner Road
- Peterson Lane/Piner Road
- Waltzer Road/Piner Road



Source: W-Trans, October 2019.

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Operating conditions during the weekday AM and PM peak periods were evaluated to capture the highest potential impacts for the project as well as the highest volumes on the local transportation network. The AM peak-hour occurs between 7:00 a.m. and 9:00 a.m. and reflects conditions during the home to work or school commute, while the PM peak-hour occurs between 4:00 p.m. and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersections

Fulton Road/Tedeschi Drive is a stop-controlled tee-intersection, with a stop control at the westbound Tedeschi Drive approach. There are bicycle lanes along Fulton Road and a crosswalk on the east leg.

Fulton Road/Street A would be a new intersection constructed with the proposed project approximately 0.10 mile north of Fulton Road/San Miguel Road. As proposed, Street A would form the eastern leg of the intersection. There are bicycle lanes along Fulton Road at the proposed Street A.

Fulton Road/San Miguel Road is a signalized four-legged intersection with protected left-turn phasing on the northbound, southbound, and westbound approaches. However, the west leg is a driveway to a single-family dwelling. Crosswalks and associated pedestrian signal heads are present on the north and east legs.

Peterson Lane/San Miguel Road is an all-way stop-controlled four-legged intersection. Crosswalks and curb ramps are present on all legs of the intersection.

Peterson Lane/Pinercrest Drive is a four-legged all-way stop-controlled intersection. While curb ramps are present on all four curbs, there are no associated crosswalks on any leg of the intersection.

Waltzer Road/Pinercrest Drive is an all-way stop-controlled four-legged intersection. Curb ramps are present on three of the four curbs, with no associated crosswalks on any of the legs.

Fulton Road/Piner Road is a signalized four-legged intersection, with protected left-turn phasing on all four approaches. Crosswalks, as well as associated pedestrian signal heads and phasing, are present on the south, east, and west legs of the intersection. Bicycle lanes exist along Fulton Road and along Piner Road east of the intersection.

Peterson Lane/Piner Road is a four-legged, signalized intersection. Left-turn protected-permitted phasing is present on the eastbound and westbound approaches of Piner Road. Bicycle lanes exist along Piner Road, and crosswalks are present on all four legs with associated pedestrian signal phasing.

Waltzer Road/Piner Road is a four-legged, two-way stop-controlled intersection with stop controls at the northbound and southbound Waltzer Road approaches. Bicycle lanes exist along Piner Road, and there are curb ramps at all four legs but no associated crosswalks.

Exhibit 13 shows the locations of the study intersections and the existing lane configurations and controls. Exhibit 14 provides existing traffic volumes.

Collision History

W-Trans reviewed collision history for the study area to determine trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The most current 5-year period available is October 1, 2013, through September 30, 2018.

Average collision rates for intersections differ based on whether the intersection is controlled by a traffic signal, all-way stop signs, or is uncontrolled, as well as the number of approaches. As presented in Table 26, all nine intersections had lower collision rates than Statewide averages within the most recent 5-year period. The collision rate calculation output is provided in Appendix H.

Table 26: Collision Rates at the Study Intersections

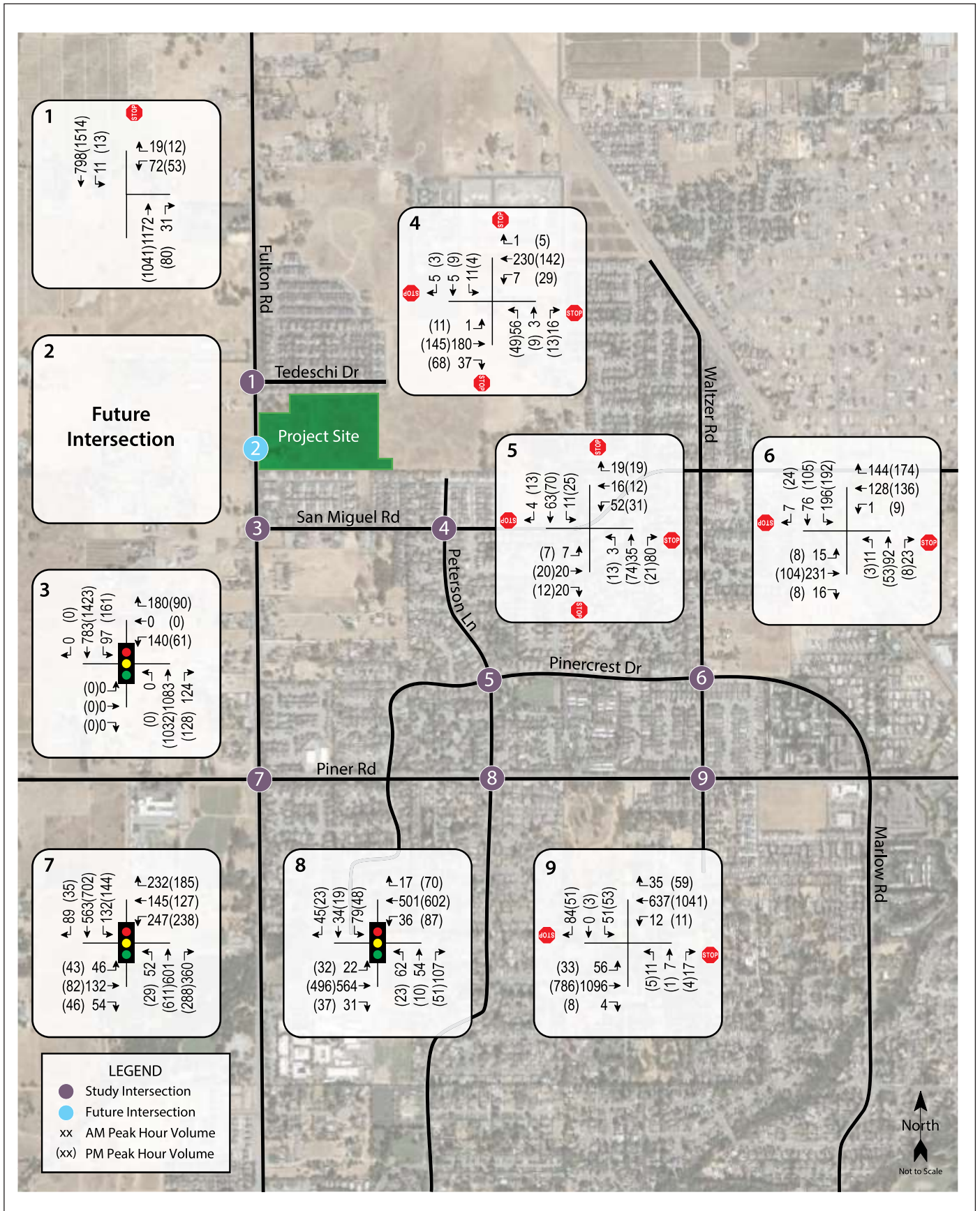
Study Intersection	Number of Collisions (2013–2018)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Fulton Road/Tedeschi Drive	2	0.05	0.14
3. Fulton Road/San Miguel Road	4	0.12	0.43
4. Peterson Lane/San Miguel Road	0	0.00	0.14
5. Peterson Lane/Pinercrest Drive	1	0.23	0.32
6. Waltzer Road/Pinercrest Drive	0	0.00	0.32
7. Fulton Road/Piner Road	9	0.19	0.43
8. Peterson Lane/Piner Road	7	0.25	0.43
9. Waltzer Road/Piner Road	3	0.11	0.26
Note: c/mve = collisions per million vehicles entering Source: W-Trans 2019.			

Transit Facilities

Santa Rosa CityBus provides fixed route bus service in the City. CityBus Route 6 provides services to destinations throughout western Santa Rosa between the Santa Rosa Transit Mall and Coddington Transit Hub via Fulton Road 7 days a week.¹⁴⁰

There are no public transit service or facilities within 0.25 mile of the project site. CityBus Route 6 serves the nearest transit service stop, located south of the Fulton Road/Piner Road intersection, approximately 0.5 mile from the project site.

¹⁴⁰ City of Santa Rosa, Department of Transportation and Public Works. 2019. Route 6: Fulton Road. April 22.



Source: W-Trans, October 2019.

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Bicycle Facilities

The 2018 Caltrans Highway Design Manual classifies bikeways into four categories:¹⁴¹

- **Class I Multi-Use Path**—a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane**—a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route**—signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- **Class IV Bikeway**—also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Fronting the proposed project, there are Class II bike lanes on Fulton Road between the Santa Rosa north city limits and Sebastopol Road. There are also Class II bicycle lanes on Piner Road between Fulton Road and Marlow Road. Bicyclists ride in the roadway and/or on sidewalks along all other streets within the project study area. According to the City of Santa Rosa Bicycle and Pedestrian Master Plan Update 2018, a Class I Shared-Use Path is planned along the eastern boundary of the East Parcel. Table 27 summarizes existing and planned bicycle facilities in the project vicinity, as contained in the City of Santa Rosa Bicycle and Pedestrian Master Plan Update 2018.¹⁴²

Table 27: Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
Fulton Road	II	3.95	City Limits North	Sebastopol Road
Piner Road	II	1.00	Fulton Road	Marlow Road
Planned				
Trail	I	0.44	Village Drive	Orleans Street
San Miguel Ave	II	0.50	Fulton Road	Francisco Avenue
Francisco Ave	II	1.00	City Limits North	San Miguel Avenue
Source: W-Trans 2019.				

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of

¹⁴¹ California Department of Transportation (Caltrans). 2018. Highway Design Manual, 6th Edition.

¹⁴² City of Santa Rosa. 2019. City of Santa Rosa Bicycle & Pedestrian Master Plan: Update 2018. Website: <https://srcity.org/2711/Bicycle-and-Pedestrian-Master-Plan>. Accessed January 22, 2020.

sidewalks, crosswalks, and curb ramps provide access for pedestrians in the residential areas near the project site. Currently there are sidewalks along Fulton Road and plans for a connected sidewalk network throughout the project site.

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

The study intersections were analyzed using methodologies published in the Highway Capacity Manual (HCM), Transportation Research Board.¹⁴³ This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The LOS for the intersections with side street stop controls, or those that are unsignalized and have one or two approaches stop controlled, were analyzed using the “Two-Way Stop-Controlled” intersection capacity method from the HCM. This methodology determines a LOS for each minor turning movement by estimating the level of average delay in seconds per vehicle. Results are presented for individual movements together with the weighted overall average delay for the intersection.

The study intersections with stop signs on all approaches were analyzed using the “All-Way Stop-Controlled” Intersection methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and then related to a LOS.

The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from the HCM. This methodology is based on factors including traffic volumes, green time for each movement, phasing, whether the signals are coordinated or not, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using signal timing obtained from the City of Santa Rosa.

The ranges of delay associated with the various levels of service are indicated in Table 28.

¹⁴³ Transportation Research Board. 2010. Highway Capacity Manual.

Table 28: Intersection Level of Service Criteria

LOS	Two-way Stop-controlled	All-Way-Stop-Controlled	Signalized
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach and wait for vehicle to clear from one or more approaches prior to entering the intersection.	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop, and drivers consider the delay excessive.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 50 seconds. Drivers enter long queues on all approaches.	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Source: Transportation Research Board. 2010. Highway Capacity Manual.

City of Santa Rosa Operations Standards

The City of Santa Rosa's adopted LOS Standard is contained in the General Plan. Standard TD-1 states that the City will try to maintain a LOS D or better along all major corridors. Exceptions to meeting this standard are allowed where attainment would result in significant environmental degradation;

where topography or environmental impacts make the improvement impossible; or where attainment would ensure loss of an area's unique character.

While a corridor LOS is applied by the City in its analysis of the entire City as part of the environmental documentation supporting the General Plan, this type of analysis only provides relevant data when performed on a much longer segment than the ones included within the study area for the project. Therefore, although the City's standard does not specify criteria for intersections, for the purposes of this study, as is standard practice for such studies, a minimum operation of LOS D for the overall operation of signalized intersections was applied.

Because delay on a stop-controlled side-street does not impact operation of the through corridor on which the City's service level standard is based, delay indicative of LOS E or F on a side-street approach was considered acceptable as long as the average for the intersection as a whole is LOS D or better.

Access and Circulation

Sight Distance

The recommended sight distance at intersections of public streets is based on corner sight distances, with approach travel speeds used as the basis for determining the recommended sight distance. Additionally, the stopping sight distance needed for a following driver to stop if there is a vehicle waiting to turn into a side street or driveway is evaluated based on stopping sight distance criterion and the approach speed on the major street.

Would the project:

- a) **Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Less than significant impact. Table 29 summarize the associated trip generation of the proposed project and Table 30 summarizes the trip distribution. The proposed project is expected to generate 1,124 new trips with 88 in the AM peak-hour and 118 in the PM peak-hour.

Table 29: Trip Generation Summary

Land Use	Units	Daily		AM Peak-hour				PM Peak-hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Existing											
Single-family Detached Housing	-1 DU	9.44	-9	0.74	-1	0	-1	0.99	-1	-1	0
Proposed											
Single-family Detached Housing	120 DU	9.44	1,133	0.74	89	22	67	0.99	119	75	44
Total (net new trips)		—	1,124	—	88	22	66	—	118	74	44
Note: DU = dwelling unit Source: W-Trans, 2019.											

The pattern used to allocate new project trips to the street network was based on data from the 2000 Census for home-to-work trips. It should be noted that of the 5 percent of trips anticipated to travel to and from the north via Fulton Road, 1 percent of the trips were allocated to travel via Andre Lane to the intersection of Fulton Road/Tedeschi Drive to account for the 25 units (approximately 20 percent of the total proposed dwelling units) on the northern section of the project site that might use this route rather than directly onto Fulton Road via Street A. It was conservatively assumed that all the project trips going south on Fulton Road would use the Street A, resulting in the maximum potential for improvements to be warranted at this location. The proposed project is expected to result in a nominal number of trips through the adjacent neighborhoods because few destinations are to the north and the most direct route would be to exit via Street A. Therefore, the proposed project is expected to generate only one new trip during each peak period through the neighborhood to the north to reach Tedeschi Drive and connect to Fulton Road. Exhibit 15 illustrates project trip generation and distribution.

Table 30: Trip Distribution Assumptions

Route	Percent	Daily Trips	AM Trips	PM Trips
To/from the north on Fulton Road via Tedeschi Drive	1%	11	1	1
To/from the north on Fulton Road via Street A	4%	45	4	5
To/from the east on San Miguel Road	15%	169	13	18
To/from the east on Piner Road via Peterson Lane	10%	112	9	12
To/from the east on Piner Road via Pinercrest Drive	10%	112	9	12
To/from the east on Piner Road	40%	450	35	47
To/from the south on Fulton Road	20%	225	18	24
Total	100%	1,124	89*	119*
Note: * Trips do not add up to the calculated trip generation due to rounding Source: W-Trans 2019.				

Intersection Level of Service

SB 743, codified at Public Resources Code Section 21099, mandated a transition away from LOS as a way of measuring the significance of traffic impacts under CEQA. Section 21099(b)(2) provides that “[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, **shall not be considered a significant impact on the environment pursuant to this division**, except in locations specifically identified in the guidelines, if any.”¹⁴⁴ (emphasis added). SB 743 also requires agencies to transition to a metric known as VMT by July 1, 2020, which focuses on whether a proposed project will require people to drive more or less and is far more favorable to transit-oriented development. At the time of this publication of the Draft

¹⁴⁴ FindLaw. No date. Public Resources Code Section 21099. Website: <https://codes.findlaw.com/ca/public-resources-code/prc-sect-21099.html>. Accessed May 13, 2020.

IS/MND, the City has not adopted VMT metrics. As indicated in State CEQA Guidelines Section 15064.3, the requirement to use VMT applies prospectively only. Consistent with the Public Resources Code, no significant impact is found with respect to LOS.

Existing Plus Project

The Existing Plus Project scenario evaluates the addition of project traffic to the existing volumes during peak periods at study area intersections. Table 31 summarizes the LOS and Exhibit 16 shows Existing Plus Project traffic volumes. The City of Santa Rosa's adopted LOS Standard is D or better along all major corridors. It is noted that while some stop-controlled approaches are projected to operate at LOS F, this is considered acceptable as these intersections would be expected to operate at LOS A or B overall. The proposed project's impact under Existing Plus Project conditions is therefore less than significant.

Table 31: Existing and Existing Plus Project Peak-hour Intersection Level of Service

Study Intersection Approach	Existing Conditions				Existing Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Fulton Road/Tedeschi Drive <i>Westbound (Tedeschi Drive) Approach</i>	4.9 <i>110.9</i>	A <i>F</i>	4.0 <i>**</i>	A <i>F</i>	4.9 <i>111.6</i>	A <i>F</i>	4.1 <i>**</i>	A <i>F</i>
2. Fulton Road/Street A <i>Westbound (Street A) Approach</i>	— <i>—</i>	— <i>—</i>	— <i>—</i>	— <i>—</i>	1.5 <i>82.0</i>	A <i>F</i>	1.2 <i>118.7</i>	A <i>F</i>
3. Fulton Road/San Miguel Road	13.9	B	13.9	B	13.9	B	13.9	B
4. Peterson Lane/San Miguel Road	9.0	A	8.6	A	9.1	A	8.8	A
5. Peterson Lane/Pinercrest Drive	7.7	A	7.8	A	7.8	A	7.9	A
6. Waltzer Road/Pinercrest Drive	12.2	B	11.6	B	12.4	B	11.7	B
7. Fulton Road/Piner Road	33.3	C	30.1	C	34.1	C	30.8	C
8. Peterson Lane/Piner Road	9.9	A	9.0	A	10.4	B	9.1	A
9. Waltzer Road/Piner Road <i>Northbound (Waltzer Road) Approach</i> <i>Southbound (Waltzer Road) Approach</i>	11.6 <i>78.1</i> <i>**</i>	B <i>F</i> <i>F</i>	10.8 <i>75.7</i> <i>**</i>	B <i>F</i> <i>F</i>	12.9 <i>86.7</i> <i>**</i>	B <i>F</i> <i>F</i>	12.4 <i>85.2</i> <i>**</i>	B <i>F</i> <i>F</i>

Notes:

Delay is measured in average seconds per vehicle

LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in *italics*;

** = delay greater than 120 seconds

Source: W-Trans 2019.

Baseline Plus Project

The Baseline Plus Project Conditions scenario provides an evaluation of operation with traffic added from approved or pending projects in the study area that could be operational within the next two to three years. The following three approved projects were included in the Baseline Conditions.

- Kerry Ranch (Phase 1-3)—95 detached single-family dwelling units at 2181 Francisco Avenue
- Francisco Billage—77 single-family dwelling unit development at 2601 Francisco Avenue
- North Village II—164 multi-family dwelling units at 2406 Fulton Road

Underestimated baseline volumes, study intersections would be expected to continue operating at the same LOS as under existing volumes, except for Peterson Lane/Piner Road. This intersection would be anticipated to continue operating acceptably but experience a change in LOS during the AM peak-hour from LOS A to B. Baseline traffic volumes are shown in Exhibit 17. Table 32 summarizes the LOS calculations under this scenario and with the addition of project related traffic. Baseline Plus Project traffic volumes are shown in Exhibit 18. As shown, with the addition of project related traffic, study intersections would continue to operate acceptably overall and impacts would be less than significant.

Table 32: Baseline and Baseline Plus Project Peak-hour Intersection Level of Service

Study Intersection Approach	Existing Conditions				Existing Plus Project			
	AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Fulton Road/Tedeschi Drive <i>Westbound (Tedeschi Drive) Approach</i>	5.6 **	A <i>F</i>	5.0 **	A <i>F</i>	5.7 **	A <i>F</i>	5.1 **	A <i>F</i>
2. Fulton Road/Street A <i>Westbound (Street A) Approach</i>	— —	— —	— —	— —	1.7 93.3	A <i>F</i>	1.5 **	A <i>F</i>
3. Fulton Road/San Miguel Road	14.1	B	14.4	B	14.1	B	14.6	B
4. Peterson Lane/San Miguel Road	9.4	A	9.1	A	9.6	A	9.3	A
5. Peterson Lane/Pinercrest Drive	7.7	A	7.8	A	7.8	A	7.9	A
6. Waltzer Road/Pinercrest Drive	12.2	B	11.6	B	12.4	B	11.7	B
7. Fulton Road/Piner Road	34.0	C	30.7	C	34.8	C	31.4	C
8. Peterson Lane/Piner Road	10.5	B	9.1	A	11.0	B	9.4	A
9. Waltzer Road/Piner Road <i>Northbound (Waltzer Road) Approach</i> <i>Southbound (Waltzer Road) Approach</i>	12.9 86.4 **	B <i>F</i> <i>F</i>	12.3 85.1 **	B <i>F</i> <i>F</i>	14.4 96.3 **	B <i>F</i> <i>F</i>	14.0 96.3 **	B <i>F</i> <i>F</i>
Notes: Delay is measured in average seconds per vehicle LOS = Level of Service; Results for minor approaches to two-way stop-controlled intersections are indicated in <i>italics</i> ; ** = delay greater than 120 seconds Source: W-Trans 2019.								

Future (Cumulative) Conditions

The City of Santa Rosa is in the process of updating the transportation element for the General Plan, as well as their Traffic Impact Study Guidelines. Since the proposed project is consistent with its zoning and General Plan land use designation, its traffic would be included in volumes projected for analysis of the General Plan, so analysis of a future scenario is not necessary under the policies contained in the draft traffic study guidelines.

Signal Warrants

A signal warrant analysis was performed to determine need for a traffic signal at Fulton Road/Street A. Chapter 4C of the California Manual on Uniform Traffic Control Devices (CA-MUTCD) provides guidance on when a traffic signal should be considered.¹⁴⁵

Warrant 3, peak-hour volumes, which is often the first warrant to be met, is based on the volumes during the highest-volume hour of the day. Under the Peak-hour Warrant, the need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:

- a) If all three of the following conditions exist for the same one hour (any four consecutive 15-minute periods) of an average day:
 - a. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a stop sign equals or exceeds: four vehicle-hours for a one-lane approach; or five vehicle-hours for a two-lane approach, and
 - b. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes, and
 - c. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.
- b) The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 (of the CA-MUTCD) for the existing combination of approach lanes.

The intersection of Fulton Road/Street A would not warrant a traffic signal under volumes for either the Existing or Baseline Plus Project scenarios during the AM or PM peak-hour. Copies of the Signal Warrant Spreadsheets are provided in Appendix H.

Transit Facilities

There are no existing transit routes or stops within an acceptable walking distance of the site; however, based on the distance between the project site and employment centers, it is reasonable to expect that some residents would want to travel using transit if it were available. The nearest bus stop is less than 1 mile from the project site and CityBus Route 6 connects a large portion of Fulton

¹⁴⁵ California Department of Transportation (Caltrans). 2014 (Revision 4 [March 29, 2019]). California Manual on Uniform Traffic Control Devices (CA-MUTCD).

Road to transit hubs in the City. The TIS notes that the transit facilities serving the project site are inadequate. However, this is an existing condition, and the project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit facilities. Therefore, impacts would be less than significant.

Policy T-A-7 of the General Plan directs the City to “expand non-motorized and bus infrastructure throughout the City such that greater amenities exist for cyclists, pedestrians, and transit users...”¹⁴⁶

Santa Rosa CityBus is initiating an update to their Short Ranch Transit Plan. The project applicant is coordinating with Santa Rosa CityBus to include an evaluation of a potential expansion of service on Fulton Road north of Piner Road and east of Fulton Road as part of the update to the Short Ranch Transit Plan, which would provide more convenient access to transit services for residents of the proposed project.

Bicycle Facilities

The existing and planned bike lanes, as shown in Table 27, as well as minor streets, would provide adequate access for bicyclists in the project vicinity. In addition, all units would have a garage where bicycles could be stored, so no additional bicycle storage facilities are necessary. Therefore, the proposed project would not conflict with a program plan, ordinance, or policy regarding bicycle facilities and impacts would be less than significant.

Pedestrian Facilities

The proposed project would provide sidewalks along all streets within the project site, and the TIS concluded that pedestrian facilities serving the project site would be adequate upon completion of proposed project improvements. Furthermore, all curb ramps would be required to be Americans with Disabilities Act (ADA) compliant. As a result, the proposed project would not conflict with a program plan, ordinance, or policy regarding pedestrian facilities and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

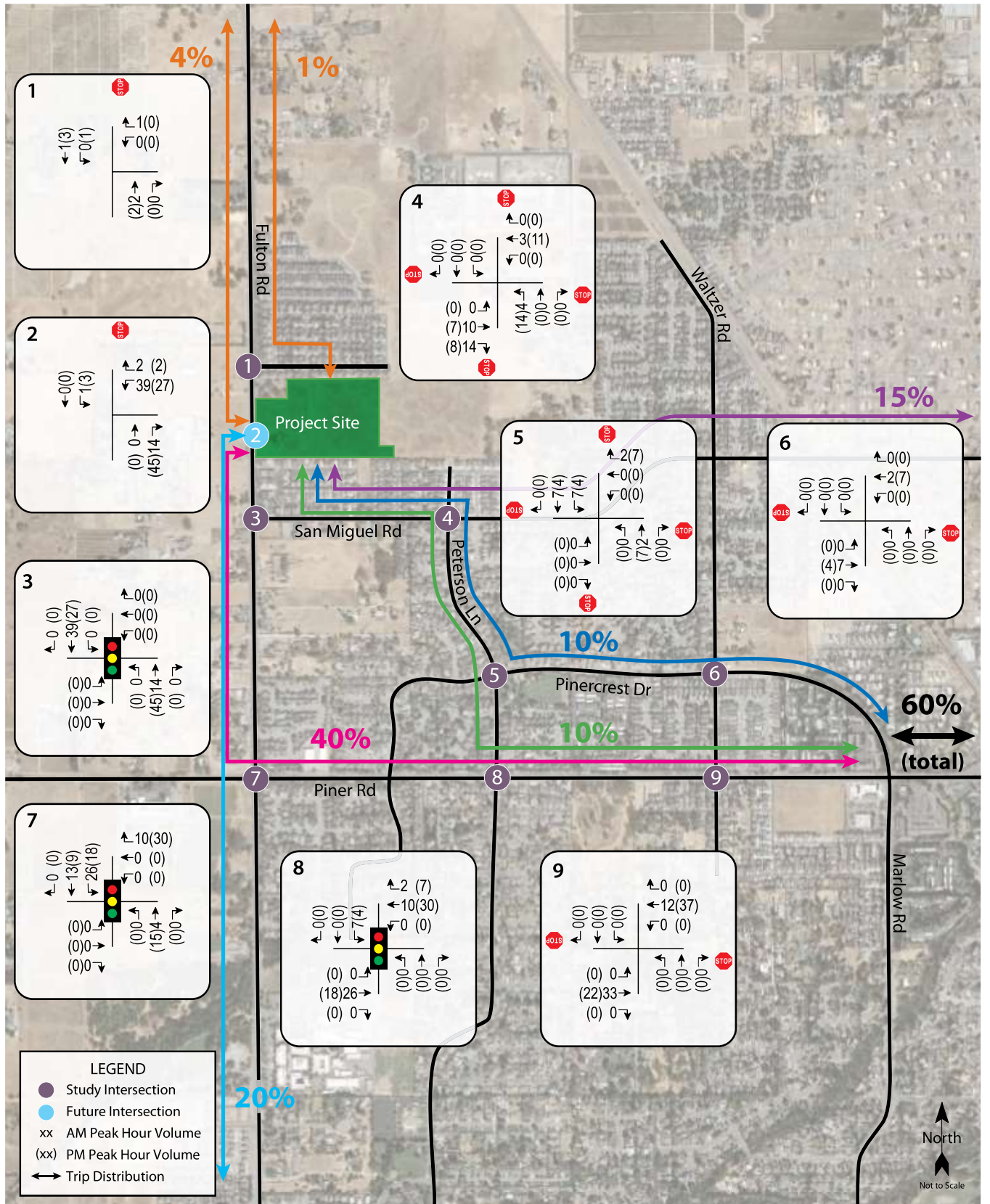
Not applicable. Currently, the provisions of Section 15064.3 apply beginning on July 1, 2020, unless a lead agency elects to be governed by the Guideline before that date. Moreover, Section 15064.3 provisions apply prospectively from that effective date, and do not apply to steps in the CEQA process completed before the effective date or to CEQA documents that were circulated for public review prior to July 1, 2020.

The City has not elected to be governed by the requirements of Section 15064.3 prior to its effective date. Additionally, the City has not finalized the adoption of VMT thresholds or identified the appropriate metrics for analyzing VMT.

Because the City has not yet adopted thresholds and this Draft IS/MND has been completed and released for public review prior to July 1, 2020, Guidelines Section 15064.3 does not apply, no VMT analysis is required, and the project is not inconsistent with Section 15064.3, subdivision (b). Accordingly, no determination on the significance of VMT impacts is made in this document since none is legally required.

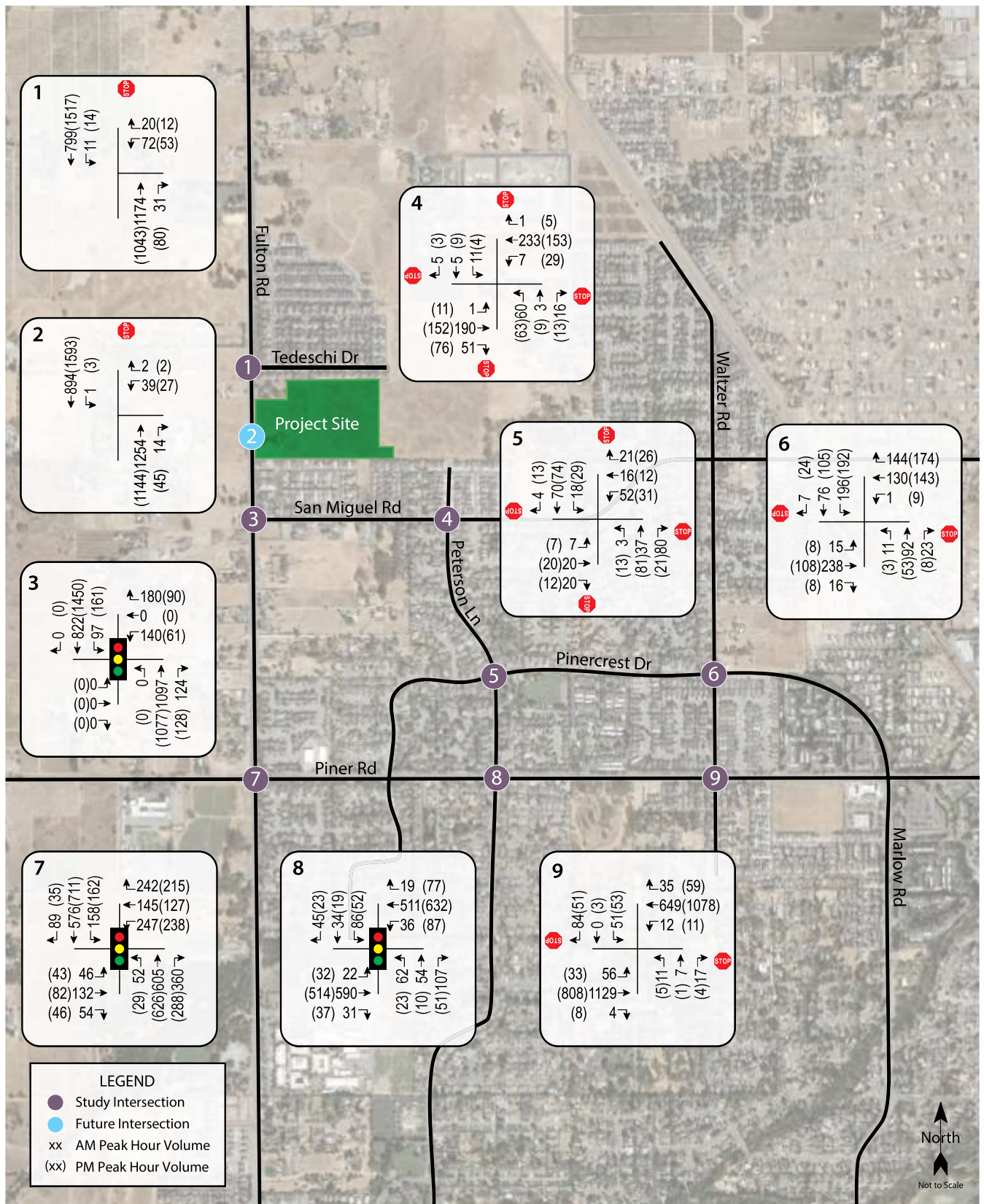
¹⁴⁶ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, page 5-14.

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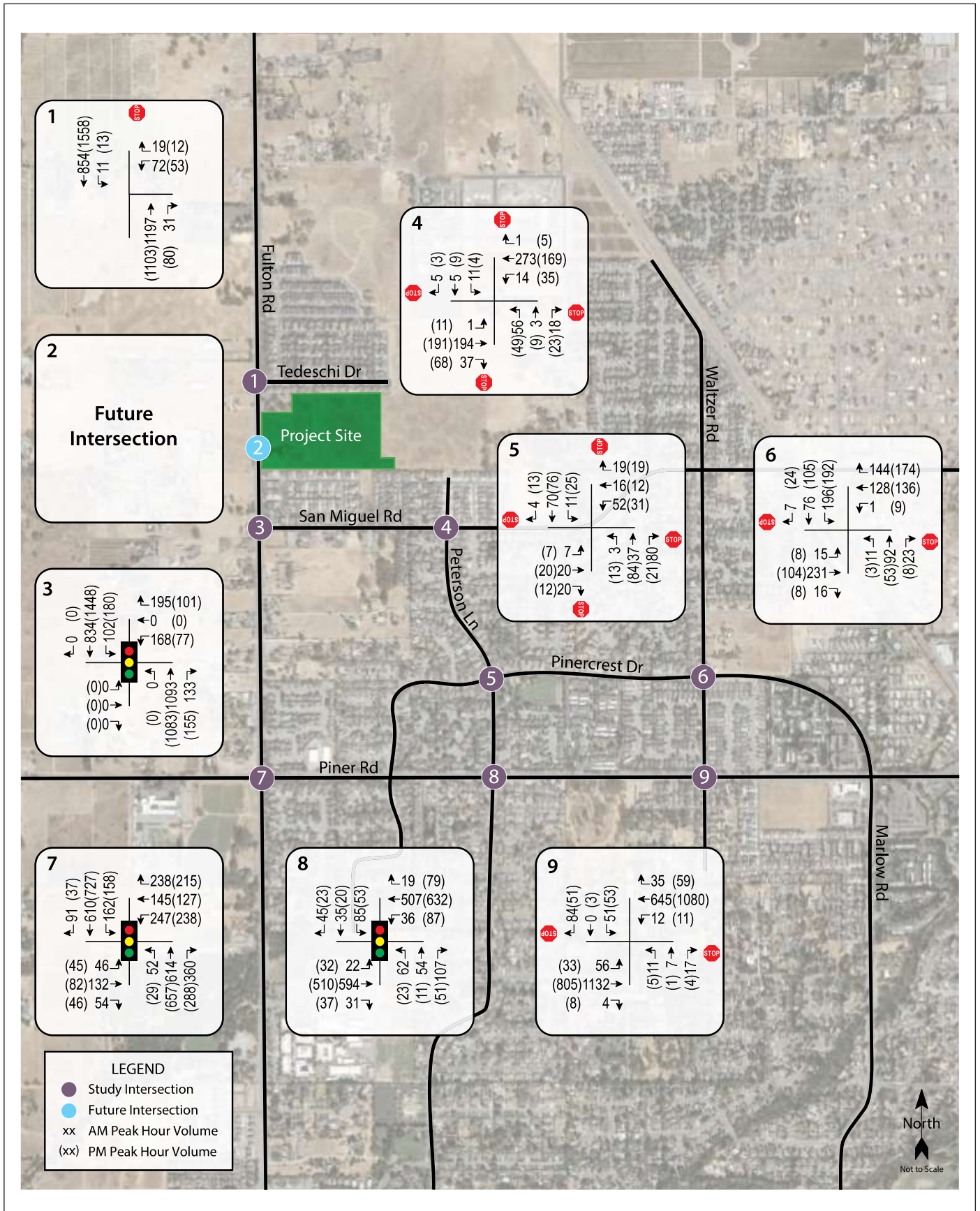
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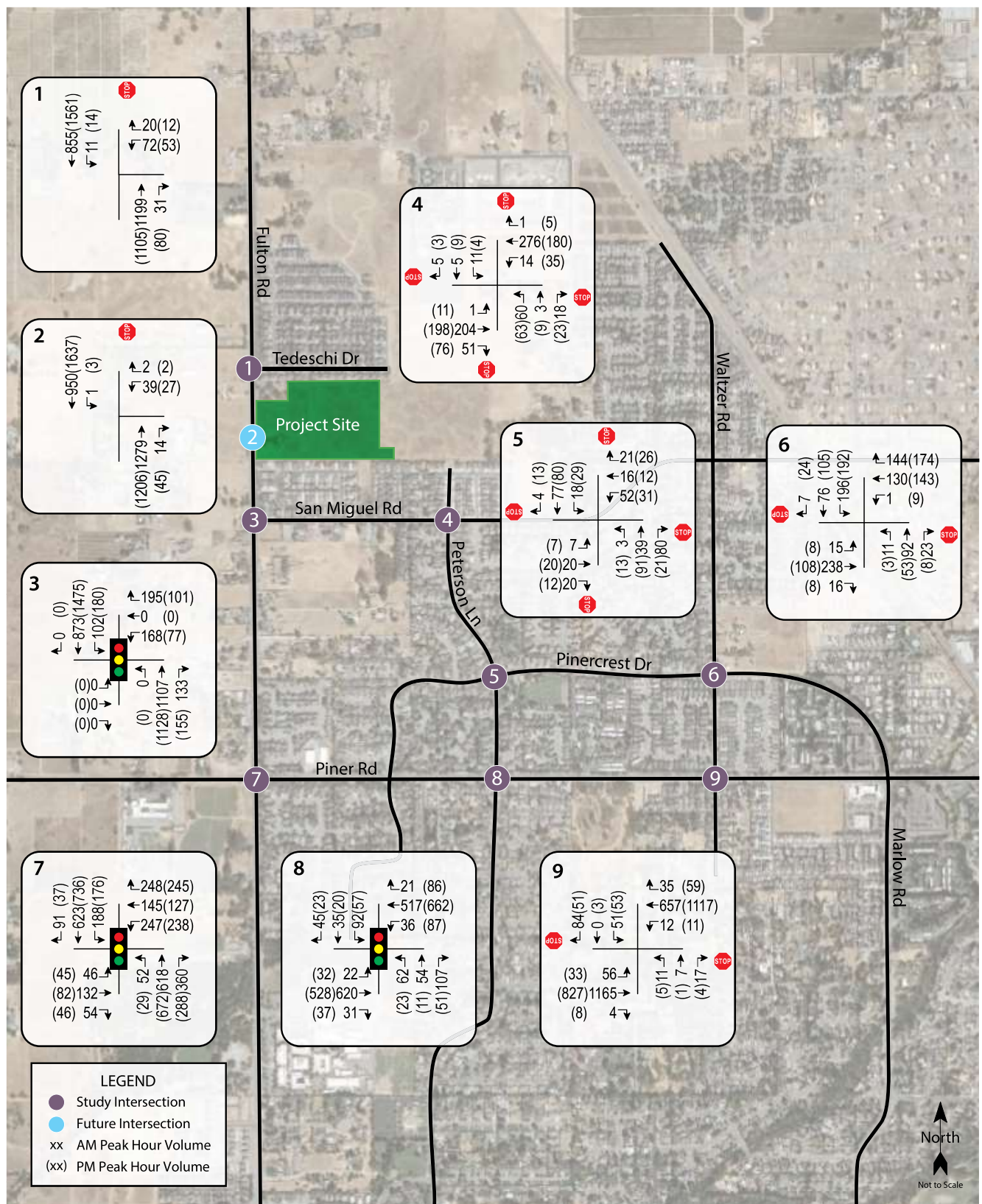
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c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than significant impact with mitigation incorporated. Sight distance at the proposed Street A driveway was field measured. Based on a design speed of 45 miles per hour (mph), the minimum corner sight distance needed is 495 feet. Based on observations during a field visit, there is more than adequate sight lines in both directions at the project driveway along Fulton Road.

The TIS concluded that the two-way left turn lane on Fulton Road at Street A should be converted to a dedicated left-turn lane in the southbound direction, which is included as MM TRANS-1. MM TRANS-1 would eliminate the potential for a head-on crash if a southbound driver pulls into the turn lane and a driver simultaneously uses the center lane to turn left from a driveway on the west side of Fulton Road. It is noted that while there is not currently a driveway opposite the proposed street location, it is standard practice to re-stripe two-way left-turn lanes to dedicated left-turn lanes to serve new streets. In addition, this recommendation is consistent with the City's standard practice and this change would eliminate the potential for a future safety conflict. Impacts would be less than significant with implementation of MM TRANS-1.

d) Result in inadequate emergency access?

Less than significant. The proposed project would provide at least two full access points (a primary vehicular access point from Fulton Road and two secondary points of access via an extension of Andre Lane) and at least two points of access consistent with California Fire Code standards. Based on a standard-sized fire truck and the proposed site plan, on-site circulation would be adequate to accommodate emergency vehicle turning-movements.¹⁴⁷ W-Trans also reviewed the site plan for compliance with the City of Santa Rosa neighborhood street design features. All streets widths are adequate to meet City standards. Therefore, impacts would be less than significant.

Mitigation Measures

MM TRANS-1 Prior to issuance of building permits, the project applicant shall prepare and submit plans to the City of Santa Rosa Transportation and Public Works Department depicting a dedicated left-turn lane in the southbound direction on Fulton Road at Street A. The plans shall be approved by the Traffic Engineering Department Traffic Engineer.

¹⁴⁷ AutoTURN (AutoCAD vehicle swept path analysis software) output for emergency vehicle access is provided in the TIS which is included in Appendix H.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
18. Tribal Cultural Resources <i>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i>				
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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Native American Heritage Commission Sacred Lands File Record Search and Tribal Consultation

Tom Origer & Associates sent a request to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File within the project area and the names of Native American individuals and groups that would be appropriate to contact regarding the proposed project. Letters were also sent to the following groups:

- Cloverdale Rancheria of Pomo Indians of California
- Dry Creek Rancheria of Pomo Indians
- Federated Indians of Graton Rancheria
- Kashia Band of Pomo Indians of the Stewarts Point Rancheria
- Lytton Rancheria of California
- Middletown Rancheria of Pomo Indians of California
- Mishewal-Wappo Tribe of Alexander Valley

A letter was received via email from Ryan Peterson, Administrative Assistant for the Middletown Rancheria Tribal Historic Preservation Department, on March 12, 2019. The Middletown Rancheria of Pomo Indians of California had no comment at this time, but if evidence of human habitation is found they request that work stop immediately and that they be notified.

A response was received on March 12, 2019, from Brenda Tomaras of Tomaras & Ogas, LLP, representative of the Lytton Rancheria of California. Ms. Tomaras stated that the Tribe has no specific information about the project, but that the land does fall within their traditional Pomo territory. Ms. Tomaras further stated that artifacts and sites may be encountered during project construction and they will be consulting with the appropriate lead agency.

A response was received on March 12, 2019, from Dino Franklin, Chairman of the Kashia Band of Pomo Indians of the Stewarts Point Rancheria. Chairman Franklin stated that he was unable to comment on the proposed project and deferred to Lytton Rancheria of California or the Federated Indians of Graton Rancheria.

A response was received on March 25, 2019, from Buffy McQuillen, Tribal Historic Preservation Officer for the Federated Indians of Graton Rancheria. Ms. McQuillen stated that the project area is within the Tribe's ancestral territory and there may be tribal cultural resource impacts. Ms. McQuillen requested the results of the cultural resources study and the recommendations made based on those results.

Pursuant to AB 52, the City of Santa Rosa reached out to Brenda Tomaras and Buffy McQuillen with a letter providing a project description, project location map, and offer to engage in consultation on February 18, 2020. The City did not receive any responses and no other responses have been received to date. The NAHC and tribal contact efforts are available in Appendix C.

Northwest Information Center

Julia Franco of Tom Origer & Associates reviewed the archaeological site base maps and records, survey reports, and other materials on file at the NWIC on February 25, 2019 (NWIC File 18-1609). The library and project files at Tom Origer & Associates and various on-line databases were also reviewed. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, and historic maps and evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project area.

Results from the NWIC indicate that 30 resources are on file within a 0.5-mile radius of the project area and three of these studies were conducted adjacent to the project site. Six resources have been recorded within 0.5 mile of the project site. All six of the resources recorded within 0.5 mile of the project site are historic-era resources and would not extend into the project site. There are no resources located on the project site. A records search map, identifying the project boundaries and 0.5-mile search radius along with relevant records search results may be found in Appendix C.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) **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**

Less than significant impact. A review of the CRHR, local registers of historic resources, a records search conducted at the NWIC failed to identify any listed Tribal Cultural Resources (TCRs) that may be adversely affected by the proposed project. A search of the NAHC Sacred Lands File failed to identify any listed TCRs that may be adversely affected by the proposed project. As such, no eligible or potentially eligible TCRs will be adversely affected by the proposed project and impacts are less than significant.

- 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.**

Less than significant impact with mitigation incorporated. Pursuant to AB 52, the City of Santa Rosa sent letters to Ms. Tomaras and MS. McQuillen, two tribal representatives that initially requested consultation through outreach conducted by Tom Origer & Associates. The letters were sent on February 18, 2020 and provided a project description, project location map, and offer to engage in consultation. The City did not receive any responses, and no additional comments or requests for consultation were received (Appendix C). Should any undiscovered TCRs be encountered during project construction, implementation of MM CUL-1 and MM CUL-2 would reduce potential impacts to a less than significant level.

Mitigation Measures

Implement MM CUL-1 and MM CUL-2.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
19. Utilities and Service Systems <i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

Water Supply

A majority of the City's water supply is derived from the Russian River watershed and is delivered under contractual agreement by Sonoma Water. Sonoma Water holds water rights to divert 92 million gallons of water per day (mgd) with an annual maximum of 75,000 AFY from the Russian River. Sonoma Water also has three groundwater wells in the Santa Rosa Plain, which provide an average additional supply of 3,870 AFY.¹⁴⁸ The City of Santa Rosa utilized 16,679 acre-feet in 2015 and expected the demand to rise to 28,840 acre-feet by 2040.¹⁴⁹ Table 33 summarizes the projected Sonoma Water water supply and demand during dry years.

¹⁴⁸ City of Santa Rosa. 2009. Santa Rosa General Plan 2035, Public Services and Facilities Element, page 6-8.

¹⁴⁹ City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page ES-2. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

Table 33: Projected Water Supply and Demand Dry Water Year Comparison

Multiple Dry Years Supply and Demand Comparison (AFY)		2020	2025	2030	2035	2040
First Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Second Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Third Year	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Fourth Year (Optional)	Supply Totals	24,289	25,730	26,946	28,243	28,280
	Demand Totals	24,289	25,730	26,946	28,243	24,280
	Difference	0	0	0	0	0
Note: AFY = acre-feet/year Source: City of Santa Rosa 2015 UWMP.						

Stormwater

Stormwater generated in Santa Rosa drains through six drainage basins to the Laguna de Santa Rosa. The largest drainage basin includes Santa Rosa Creek, which drains the northern Santa Rosa area by six major creeks and various tributaries. Four creeks (Brush, Austin, Spring, and Matanzas) primarily drain the easterly portion, while Paulin and Piner Creeks drain the westerly portion. Santa Rosa Creek also drains stormwater runoff generated downtown and in surrounding neighborhoods. The number and location of creeks in northern Santa Rosa result in adequate stormwater drainage capacity in the northern area.¹⁵⁰ The City's SUSMP requires projects to design and implement post-development measures to reduce the potential stormwater impacts to local drainages.¹⁵¹

Wastewater

The City's existing water distribution system is divided into 18 major pressure zones and several smaller sub-zones that are served by pipelines ranging in diameter from 4 to 24 inches. The majority of services are provided via 6-inch to 12-inch diameter mains.¹⁵² The City's Utilities Department is responsible for the operation and management of the Santa Rosa Subregional Water Reclamation System, which operates the Laguna Wastewater Treatment Plant (WWTP). The Laguna WWTP is a tertiary level treatment facility that has an average daily dry weather flow of 16.5 mgd and is

¹⁵⁰ City of Santa Rosa. 2009. Santa Rosa General Plan 2035. Public Services and Facilities Element, page 6-13

¹⁵¹ City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Draft EIR, page 4.H-6.

¹⁵² City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3-4. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

permitted for 21.34 mgd average daily dry weather flow.¹⁵³ The Laguna WWTP serves the cities of Santa Rosa, Rohnert Park, Sebastopol, and Cotati. In 2015, the Laguna WWTP treated an estimated 11.7 mgd.^{154,155} The primary point of discharge is via Delta Pond at the confluence of Santa Rosa Creek and Laguna de Santa Rosa. The North Coast RWQCB regulates wastewater discharges, which cannot exceed 5 percent of the Russian River flow.¹⁵⁶

Solid Waste

For solid waste, within the City of Santa Rosa, Recology provides solid waste and recycling collection services to commercial and residential customers. The City of Santa Rosa and Recology maintain an exclusive franchise agreement for the collection of solid waste, organic waste, and recyclable materials in the City pursuant to Chapter 9-12 of the Santa Rosa City Code. Sonoma County disposes of solid waste to Redwood Sanitary Landfill, Potrero Hills Landfill, Vasco Road Landfill, and Keller Canyon Landfill, because the Central Disposal Facility that previously served the County is no longer operational. According to Table 34, the closest landfill to the project site, Redwood Sanitary Landfill in Novato, has a permitted daily capacity of 2,300 tons and a total remaining permitted capacity of 26 million tons through 2039.¹⁵⁷

The State of California has mandated a 50 percent waste diversion rate that must be met by all counties. The waste diversion rate is expected to rise, due to continued waste reduction programs such as composting, special waste, and household toxics. The County has also adopted several waste reduction initiatives, including the Carryout Bags Ordinance and Sonoma Green Business Program, to promote and divert the amount of waste away from landfills.¹⁵⁸

Table 34: Landfill Facility Detail

Landfill	Distance from Project Site	Remaining Capacity	Daily Permitted Capacity
Potrero Hills Landfill	94 miles	13,872,000 cubic yards	4,330 tons/day
Redwood Landfill	28 miles	26,000,000 cubic yards	2,300 tons/day
Keller Canyon Landfill	99 miles	63,408,410 cubic yards	3,500 tons/day
Source: California Department of Resources Recycling and Recovery (CalRecycle). Solid Waste Information System (SWIS) Facility Detail. 2019.			

Electricity and Natural Gas

PG&E would provide natural gas to the proposed project. The proposed project would be served with electricity generated by Sonoma Clean Power and delivered by PG&E. The existing single-family

¹⁵³ City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 6-12. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

¹⁵⁴ City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 6-14. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

¹⁵⁵ 4,274,840,000 gallons annually = 11,711,890 gallons per day = 11.7 mgd

¹⁵⁶ Ibid.

¹⁵⁷ CalRecycle. 2017. Redwood Landfill. Website: <http://www.calrecycle.ca.gov/SWFacilities/Directory/21-AA-0001/Detail/>. Accessed April 15, 2019.

¹⁵⁸ Sonoma County Waste Management Agency. Sonoma County 2018 Recycling Guide. Website: <http://www.recyclenow.org/pdf/2018-Recycling-Guide-Condensed-English-Rev25-for-web.pdf>. Accessed March 27, 2019.

home currently connects to electric power lines on the west side of Fulton Road. No natural gas facilities are known to exist on-site.

Telecommunications

Local telephone service would be provided by AT&T and cable television would be provided by Comcast. No telecommunications facilities are known to exist on-site.

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

Less than significant impact. As part of construction, any existing water or sewer lines connecting to the existing single-family home would be removed. In addition, the proposed project would provide new water and wastewater lines throughout all streets within the project site that would connect to the existing connections in Fulton Road. Removal of existing connections and construction of new connections would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact. As described further in Impact 18(b), the proposed project would be served by sufficient water supply and would not require new or expanded water distribution facilities. As described in Impact 18(c), the proposed project would be served by sufficient wastewater treatment capacity and would not require new or expanded wastewater treatment facilities.

In order to reduce the release of pollutants into stormwater from construction and development, the City implements a LID program to treat stormwater on-site and reduce peak stormwater flows. As described further in Impact 10(c), the proposed project would include a 19,557-square-foot stormwater treatment facility located in the northwest corner of the project site. In addition, the proposed project would be required to submit a Stormwater LID to the City, which would determine the need for BMPs. Construction of project stormwater infrastructure would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact. As discussed in Impact 10(c), the stormwater system has been designed and sized to appropriately handle stormwater flows generated on the project site and would not require new or expanded off-site stormwater facilities.

The proposed project would remove existing power lines on the project site, include new underground connections, and would not include new above-ground power lines. The proposed project would not remove or replace natural gas or telecommunications facilities because none currently are known to exist on-site. The proposed project would connect to electricity, natural gas, and telecommunication facilities located in the immediate proximity of the project site. Electricity and natural gas connections would be coordinated with PG&E. Construction of these connections would be required to abide by applicable federal, State, and local regulations, as well as mitigation measures outlined in this document, to avoid significant environmental impact.

In summary, the proposed project would not require the relocation or construction of new water, wastewater, storm drainage, electrical power, natural gas, or telecommunications facilities outside of those proposed on-site and considered within this Draft IS/MND. Therefore, impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than significant impact. It is estimated that the proposed project's 278 new residents would use 23,630¹⁵⁹ gallons per day (GPD) or 26.5 AFY.¹⁶⁰ According to Santa Rosa's UWMP, the project's 26.5 AFY represents less than one percent of the City's total projected water supply for 2040, which is about 10 billion gallons (31,540 acre-feet), assuming it is a normal year.¹⁶¹ As shown in Table 33, the City of Santa Rosa anticipates sufficient capacity would be available to accommodate water demand for the entire City during normal, dry, and multiple dry years through 2040. As a result, there would be sufficient water supplies to serve the project during normal, dry, and multiple dry years, and impacts would be less than significant.

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?

Less than significant impact. Wastewater generated in the City of Santa Rosa is treated at the Laguna WWTP. The facility has an average daily dry weather flow of 16.5 mgd and is permitted to treat 21.34 mgd,¹⁶² leaving 4.84 mgd available for treatment to accommodate future growth in the City of Santa Rosa.¹⁶³

For planning purposes, the City uses a residential wastewater generation rate of 50 gallons per capita per day (GPCD). As a result, the proposed project would generate an estimated 13,900 gallons of wastewater per day or 0.0001 mgd. The projected sewage generation is less than .01 percent of the Laguna WWTP capacity allocated to Santa Rosa. As a result, the Laguna WWTP would contain sufficient capacity to serve the expected wastewater demand of the proposed project. Therefore, impacts would be less than significant.

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?

Less than significant impact. During construction, the proposed project would remove all existing structures including the 1,832-square-foot single-family home. The closest landfills would contain sufficient capacity to handle construction waste. In addition, construction waste would be temporary and therefore, would not result in a significant impact.

¹⁵⁹ Calculation: 85 gallons per capita per day x 278 residents = 23,630 GPD.

¹⁶⁰ 85 gallons per capita per day from: City of Santa Rosa. 2015 Urban Water Management Plan (UWMP), page 3-4. Website: <https://srcity.org/DocumentCenter/View/13875/Urban-Water---2015-Management-Plan-Without-Appendices>. Accessed March 27, 2019.

¹⁶¹ City of Santa Rosa. 2016. 2015 Urban Water Management Plan (UWMP). June. Website: <https://www.srcity.org/1172/Planning-Documents>. Accessed July 23, 2019.

¹⁶² City of Santa Rosa. 2009. Santa Rosa General Plan 2035 Environmental Impact Report. March.

¹⁶³ Ibid.

The proposed addition of 105 new housing units and associated population increase would result in an increased demand for solid waste services. The California Department of Resources Recycling estimates that the average single-family home produces 11.4-pounds of solid waste per day.¹⁶⁴ Therefore, the proposed project would generate an estimated 1,197¹⁶⁵ pounds of solid waste per day (0.6 tons per day) and 436,905¹⁶⁶ pounds of solid waste per year (218 tons per year). As shown in Table 34, Redwood Landfill in Marin County, Keller Canyon Landfill in Contra Costa County, or Potrero Hills Landfill in Solano County contain sufficient maximum capacity to serve the project. In addition, the proposed project would represent less than .001 percent of the landfills' daily permitted capacity.

Consistent with California AB 341 and AB 1826, the proposed project would be required to provide a recycling program that would divert recyclables and organic recyclable materials, such as yard trimmings, from landfills. Project waste diversion measures would contribute toward achieving a 50 percent waste diversion as mandated by the California Integrated Waste Management Act. As a result, the proposed project would not generate solid waste in excess of State or local standards or exceed the capacity of local infrastructure. Therefore, impacts would be less than significant.

e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?

Less than significant impact. Recology is the City of Santa Rosa's franchise waste hauler and provides solid waste, organic, and recyclable material pick-up to residential and non-residential customers within the city limits. Solid waste disposal would follow the requirements of Recology, which must adhere to federal, state, and local statutes and regulations related to the collection and management of solid waste. Recology provides separate collection containers to its customers for organic and recyclable materials, thereby allowing them to be separated from the solid waste stream. Recology would provide the proposed project with dumpsters (or other containers) for organics and recycling. In addition, as described in Impact 19(d), the proposed project would comply with AB 341 and AB 1826. Because solid waste disposal and management would be compliant with federal, State, and local statutes and regulation, impacts would be less than significant.

Mitigation Measures

None.

¹⁶⁴ California Department of Resources Recycling and Recovery (CalRecycle). 2019. Estimated Solid Waste Generation Rates. Website: <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>. Accessed January 22, 2020.

¹⁶⁵ Calculation: $[(11.4 \text{ pounds of solid waste per household per day}) \times (105 \text{ housing units})] = 1,197 \text{ pounds of solid waste per day}$.

¹⁶⁶ Calculation: $[(1,197 \text{ pounds of solid waste per day}) \times (365 \text{ days per year})] = 436,905 \text{ pounds of solid waste per year}$.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
20. Wildfire <i>If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

Setting

An SRA is an area of the State in which the financial responsibility of preventing and suppressing fires has been determined by the California Board of Forestry and Fire Protection pursuant to Public Resources Code Section 4125, to be primarily the responsibility of the State. The proposed project is not located in an SRA.¹⁶⁷ An LRA is an area designated by CAL FIRE pursuant to Government Code Section 51178 that is not within an SRA and is managed at the local level. The project site is not located in a designated “Very High Fire Hazard Severity Zone.”¹⁶⁸

The United States Forest Service defines the WUI Zone qualitatively as a place where “humans and their development meet or intermix with wildland fuel.”¹⁶⁹ The project site is not located in a WUI Zone.¹⁷⁰

¹⁶⁷ California Department of Forestry and Fire Protection (CAL FIRE). 2019. California State Responsibility Area (SRA). Website: <https://www.arccgis.com/home/webmap/viewer.html?layers=5ac1dae3cb2544629a845d9a19e83991>. Accessed January 16, 2020.

¹⁶⁸ California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LIRA (as recommended by CAL FIRE), Santa Rosa. Website: https://osfm.fire.ca.gov/media/6005/santa_rosa.pdf. Accessed January 16, 2020.

¹⁶⁹ Stein, Susan M. et al. 2008. Wildfire, Wildlands, and People: Understanding and Preparing for Wildfire in the Wildland-Urban Interface. United States Department of Agriculture (USDA), Forest Service. May 8.

¹⁷⁰ City of Santa Rosa. 2009. City of Santa Rosa General Plan 2035.

The City of Santa Rosa was significantly impacted by the Tubbs and Nuns fires in October 2017. The Tubbs fire burned 36,432 acres in Napa and Sonoma counties, destroyed 5,300 structures, and killed 22 civilians. The Nuns fire burned 54,382 acres, destroyed more than 1,200 structures, and killed 3 people.¹⁷¹ The project site was not impacted by the Tubbs or Nuns fires.

Would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than significant impact. Primary vehicular access to the project site would be provided from Fulton Road. Two secondary points of access would be provided via an extension of Andre Lane. One access point would be provided from the Woodbridge subdivision to the north and the second access point would be provided via Orleans Street from the Montage II subdivision to the south (see Exhibit 6). As discussed in Impact 9(f), the proposed project would not conflict or obstruct an adopted emergency response plan. In compliance with the Santa Rosa City Code and the California Fire Code, all project roadways would be a minimum of 20 feet wide. Therefore, impacts 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. The project site contains mostly flat, level, and undeveloped land at approximately 138 to 142 feet above MSL. As a result, the proposed project would not exacerbate wildfire risks due to development on a severe slope. The BAAQMD collects wind speed data from the City of Napa, which is approximately 25 miles southeast of Santa Rosa. The area is located in a similar climate as Santa Rosa and as such, has similar average wind speeds. The BAAQMD data demonstrates an average wind speed of 5.67 mph from August 2018 to July 2019. The project site would be expected to experience similar wind speed conditions as experienced in Napa and would not be susceptible to significantly high wind speeds that could exacerbate risk of spreading wildfires. Given that the project site is not located in or near an area of steep terrain nor experiences consistent high winds, the project site would not be prone to greater wildfire risk than other properties in the vicinity. Therefore, impacts would be less than significant.

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. As stated previously, the project site would extend Andre Lane and Orleans Street to access the project site at internal minor streets built within the project site. All new roads would be at least 20 feet wide and consistent with California Fire Code and City of Santa Rosa construction standard requirements. The proposed project would not include the installation of overhead power lines. Additionally, the proposed project would not require emergency water

¹⁷¹ SFGATE. 2017. Tubbs Fire in Sonoma County is most destructive in State history. October. Website: <https://www.sfgate.com/bayarea/article/Little-tears-of-joy-falling-from-the-skies-12293647.php>. Accessed July 31, 2019.

sources, because sufficient water supplies would be provided by the City of Santa Rosa, as discussed under Impact 19(b). Therefore, impacts 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. The project site and surrounding area is flat and does not contain steep slopes. Although the City of Santa Rosa has experienced significant damage from recent wildfires, the project site has not previously been directly damaged. Additionally, the project site does not contain post-fire slope instability nor is it directly downslope from affected areas. As a result, it would not expose people to significant risks of downslope or downstream flooding. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
21. Mandatory Findings of Significance				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Evaluation

- 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. The proposed project may result in impacts associated with air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, land use and planning, noise, and transportation that would be significant if left unmitigated. Implementation of mitigation measures as outlined in the respective sections of this Draft IS/MND would mitigate all potential impacts on these resources to levels that are less than significant.

- 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 with mitigation incorporated. Implementation of mitigation as outlined in this Draft IS/MND would reduce all potentially significant impacts to less than significant. Given that all impacts to a less than significant level with mitigation and given the project’s size, the incremental effects of this project are not considerable relative to the effects of past, current, and probable future projects. Therefore, the project would not result in cumulatively considerable impacts, and impacts would be less than significant with mitigation incorporated.

- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than significant impact with mitigation incorporated. As described throughout the preceding checklist portion of this Draft IS/MND, the proposed project would not have any substantial environmental effects on human beings, either directly or indirectly. All impacts identified throughout this document either do not require mitigation or would be mitigated to levels that are less than significant. In addition, the proposed project would be required to comply with existing regulations as discussed throughout the Draft IS/MND. The proposed mitigation measures, once implemented, and compliance with existing regulations would ensure that no substantial adverse effects on human beings would result from the proposed project. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Implement MM AIR-1, MM AIR-2, MM BIO-1a, MM BIO-1b, MM BIO-1c, MM BIO-1d, MM CUL-1, MM CUL-2, MM GEO-1, MM GEO-2, MM GHG-1, MM HAZ-1, MM LAND-1, MM NOI-1, and MM TRANS-1.

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SECTION 3: LIST OF PREPARERS

FirstCarbon Solutions
1350 Treat Boulevard, Suite 380
Walnut Creek, CA 94597
Phone: 925.357.2562
Fax: 925.357.2572

Project Director Mary Bean
Project Manager Liza Baskir
Legal Review Megan Starr, JD
Senior Air Quality Project Manager George Lu
Senior Archaeologist Dana DePietro, PhD
Senior Biologist Kevin Derby
Senior Noise Scientist Philip Ault
Biologist Robert Carroll
Air Quality Analyst Kimberly Johnson
Air Quality Analyst Anjanee Patel
Associate Biologist Alec Villanueva
Archaeologist Stefanie Griffin
Environmental Analyst Kathleen McCully
Environmental Analyst Spencer Pignotti
Environmental Analyst Eric Soycher
Senior Editor Susie Harris
GIS/Graphics Karlee McCracken
Reprographics Octavio Perez

Monk & Associates, Inc.—Biological Resources Analysis

1336 Saranap Avenue, Suite Q
Walnut Creek, CA 94595
Phone: 925.947.4867
Fax: 925.947.1165

Horticultural Associates—Tree Preservation and Mitigation Report

PO Box 1261
Glen Ellen, CA 95442
Phone: 707.935.3911
Fax: 707.935.7103

Tom Origer & Associates—Archaeological Resources Study

PO Box 1531
Rohnert Park, CA 94927
Phone: 707.584.8200

Daly & Associates—Historic Resources Evaluation

2242 El Capitan Drive
Riverside, CA 92506
Phone: 951.369.1366

Kenneth L. Finger, PhD—Paleontological Records Search

18208 Judy Street
Castro Valley, CA 94546
Phone: 510.305.1080
Email: klfpaleo@comcast.net

Basics Environmental—Phase I Environmental Assessment

655 12th Street No. 126
Oakland, CA 94607
Phone: 510.834.9099
Fax: 510.834.9098

W-Trans—Traffic Impact Study

490 Mendocino Avenue, Suite 201
Santa Rosa, CA 94501
Phone: 707.542.9500
Email: dwhitlock@w-trans.com