



Notice of Intent to Adopt a Mitigated Negative Declaration

To: Public Agencies, Interested Parties, and Sonoma County Clerk

Project Title: Cobblestone Drive Zone R2-R4 Water Main Connection

Lead Agency: City of Santa Rosa, Transportation and Public Works Department
69 Stony Circle, Santa Rosa, CA 95401

Contact: Andy Wilt
Tel: (707) 543-4519, E: AWilt@srcity.org

Review Period: June 21, 2019 to July 22, 2019

In accordance with the State CEQA Guidelines, the City of Santa Rosa has prepared this notice to inform agencies and interested parties that it is releasing an Initial Study and Proposed Mitigated Negative Declaration (IS/MND) for the City's Cobblestone Drive Zone R2-R4 Water Main Connection Project.

Project Description and Location

The project will intertie the City's existing water system Pressure Zone R2 and Pressure Zone R4 to improve fire flows on Cobblestone Drive by installing an approximately 1,100 foot eight-inch intertie pipeline between Tillmont Way and Cobblestone Drive across a portion of the Keysight Technologies site.

Providing Comments

A 30-day public review period will extend from June 21, 2019 to July 22, 2019. The IS/MND will be available for public review online at <http://cippublic.srcity.org/CIPList.html> under Project CIP Number 1999 and at the following location:

- Transportation and Public Works, 69 Stony Circle, Santa Rosa

Agencies and interested parties may provide written comments on the IS/MND for the project. Comments may be directed to the attention of Andy Wilt, 69 Stony Circle, Santa Rosa, CA 95401, AWilt@srcity.org.

After the review period closes, the Santa Rosa Board of Public Utilities will consider a recommendation to adopt the IS/MND for the project during a regularly scheduled public meeting. We encourage you to check the Board of Public Utilities webpage to confirm the date and time of the Board of Public Utilities meeting at the following website address: <https://srcity.org/686/Board-of-Public-Utilities>

MITIGATED NEGATIVE DECLARATION

PROJECT NAME: COBBLESTONE DRIVE ZONE R2-R4
WATER MAIN CONNECTION



Date of Preparation: June 21, 2019

Lead Agency: City of Santa Rosa, Transportation and Public Works Department

Project Description: The project will intertie the City's existing water system Pressure Zone R2 and Pressure Zone R4 to improve fire flows on Cobblestone Drive by installing an approximately 1,100 foot eight-inch intertie pipeline between Tillmont Way and Cobblestone Drive across a portion of the Keysight Technologies site.

Project Location: Between 3600 Tillmont Way, across Keysight Technologies to Cobblestone Drive

General Plan: Very Low Residential, Low Residential, Light Industry

Zoning: PD, R1-15

Findings:

1. With the incorporation of mitigation measures, this project does not have the potential to degrade the quality of the environment, nor to curtail the diversity of the environment.
2. This project will not have a detrimental effect upon either short-term or long-term environmental goals.
3. This project will not have impacts that are cumulatively considerable.
4. This project will not have environmental impacts that will cause substantial adverse effects on human beings, either directly or indirectly.
 - The proposed project could not have a significant effect on the environment and a **Negative Declaration** will be prepared.
 - 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** has been prepared, including a Mitigation Monitoring Reporting Program (MMRP), which will be adopted as part of the project.

Public Review Period: June 21, 2019 to July 22, 2019

Mitigation Measures: See Initial Study

Where to Submit Comments: City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

Contact Person: Andy Wilt
(707) 543-4519
AWilt@srcity.org

Attachment: Initial Study

**COBBLESTONE DRIVE ZONE R2-R4
WATER MAIN CONNECTION PROJECT**

Santa Rosa, California

Initial Study

June 2019

Prepared for:

City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

Prepared by:

Brelje & Race Engineers
475 Aviation Blvd., Suite 120
Santa Rosa CA 95403
707/576-1322

Contents

Project Data.....	9
Introduction.....	11
Project Setting.....	11
Policy Setting.....	15
Project Purpose.....	15
Project Description.....	15
Growth Inducement Potential.....	16
Other Public Agency Approvals.....	16
Environmental Significance Checklist:.....	17
I AESTHETICS.....	18
II AGRICULTURAL & FOREST RESOURCES.....	20
III AIR QUALITY.....	24
IV BIOLOGICAL RESOURCES.....	29
V CULTURAL RESOURCES.....	49
VI GEOLOGY & SOILS.....	54
VII GREENHOUSE GAS EMISSIONS.....	62
VIII HAZARDS & HAZARDOUS MATERIALS.....	65
IX HYDROLOGY & WATER QUALITY.....	69
X LAND USE & PLANNING.....	74
XI MINERAL RESOURCES.....	76
XII NOISE.....	77
XIII POPULATION & HOUSING.....	81
XIV PUBLIC SERVICES.....	82
XV RECREATION.....	84
XVI TRANSPORTATION/TRAFFIC.....	85
XVII TRIBAL CULTURAL RESOURCES.....	88
XVIII UTILITIES & SERVICE SYSTEMS.....	91
XIV MANDATORY FINDINGS OF SIGNIFICANCE.....	93
Determination.....	94
Document Preparation and Sources.....	95

FIGURES

Figure 1: Regional Location Map.....	12
Figure 2: Overall Project.....	13
Figure 3: Project Site Plan.....	14
Figure 4: Important Farmland.....	22
Figure 5: Special Status Plant Species.....	34
Figure 6: Special Status Animal Species.....	38
Figure 7: Biological Communities.....	43
Figure 8: Tree Survey.....	47
Figure 9: Alquist Priolo Zones.....	56
Figure 10: Earthquake Fault Zones.....	57
Figure 11: Hazardous Materials Sites.....	67

APPENDICES

Appendix A: Mitigation Monitoring & Reporting Plan

PROJECT DATA

Project Title: Cobblestone Drive Zone R2-R4 Water Main Connection

Lead Agency: City of Santa Rosa
Transportation and Public Works Department
69 Stony Circle
Santa Rosa, CA 95401

Contact Person: Andy Wilt
(707) 543-4519
AWilt@srcity.org

Project Location: See project location map

General Plan Designation: Very Low Residential, Low Residential, Light Industry

Zoning: PD, R1-15

INTRODUCTION

The purpose of this Initial Study is to provide the Lead Agency, the City of Santa Rosa (City), with an assessment of relevant environmental information associated with implementation of the proposed project in order to determine whether a Negative Declaration, Mitigated Negative Declaration or an Environmental Impact Report (EIR) will be required for the Cobblestone Drive Zone R2-R4 Water Main Connection Project. This environmental evaluation is intended to fully inform the Lead Agency, other interested agencies and the public of the proposed plan and associated environmental impacts. This Initial Study has been prepared in conformance with the requirements of §15063 of the California Environmental Quality Act (CEQA) Guidelines.

If the Lead Agency determines that there is no substantial evidence that the project may cause a significant effect on the environment, then a Negative Declaration may be prepared. A Negative Declaration may include conditions of approval to avoid or reduce potential impacts. However, if the Initial Study determines that the project may cause an unavoidable or unknown significant effect on the environment, the Lead Agency must prepare an EIR.

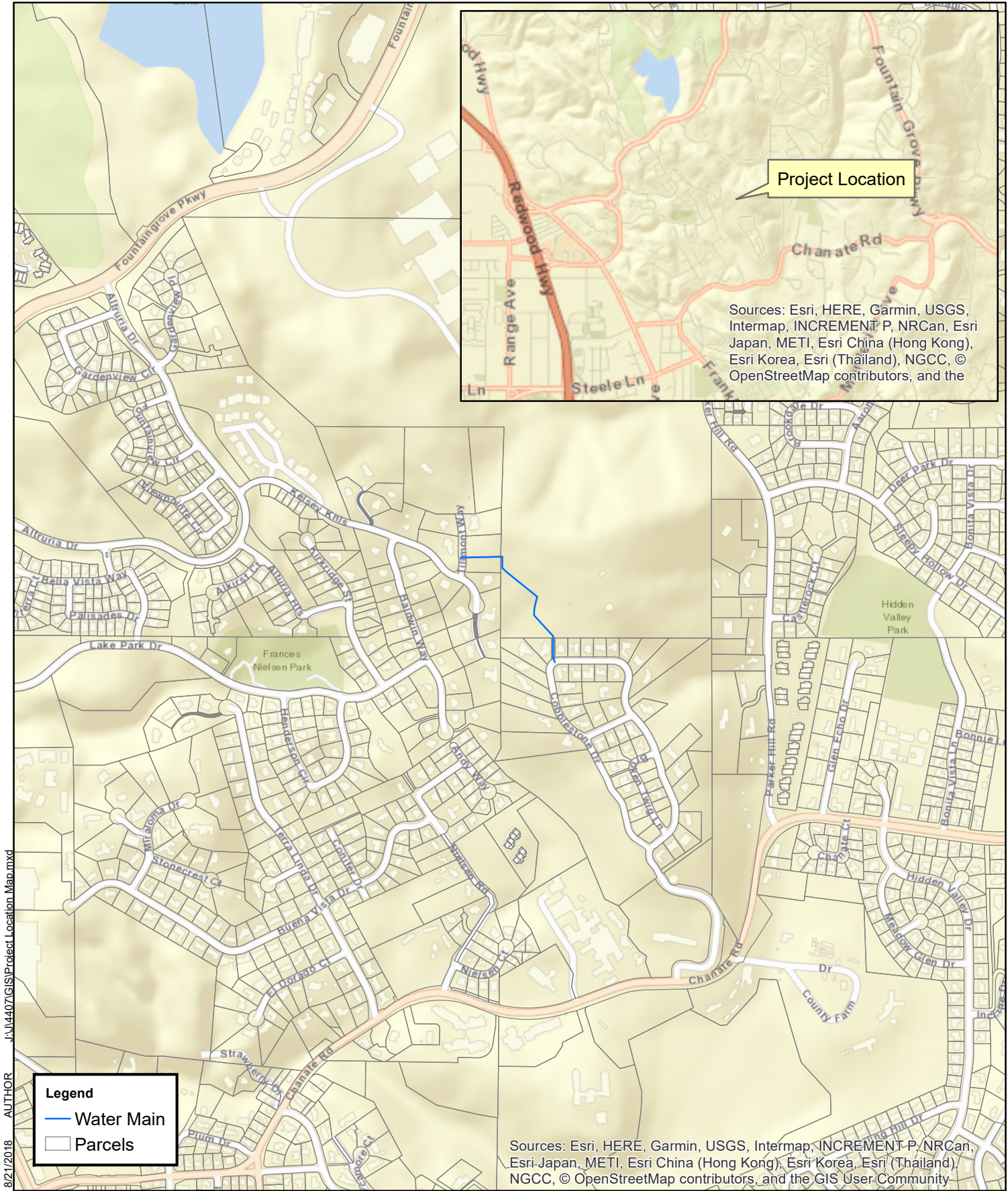
The Initial Study process also enables the Lead Agency to modify a project, mitigating adverse effects before an EIR is prepared, thereby enabling the project to move forward under a Mitigated Negative Declaration. This facilitates the environmental evaluation portion of the project development process and eliminates unnecessary EIRs.

PROJECT SETTING

The project is generally located in the developed areas of Tillmont Way and Cobblestone Drive in northern Santa Rosa. The project area is predominantly developed with residential units with a network of roadways and utilities to support residential development. The southern portion of the Keysight Technologies parcel is generally undeveloped and supports a mixture of nonnative grasslands and oak woodland.

The proposed water main connection between Tillmont Way (Pressure Zone R2) and Cobblestone Drive (Pressure Zone R4) follows along the northern property boundary of 3600 Tillmont Way (APN 173-290-032), along the west boundary of a Keysight Technologies parcel (APN 173-010-001), southeast across the property to the southern property boundary, and then south through an emergency fire access parcel (APN 173-150-042) to Cobblestone Drive.

The project is regionally located on Figure 1. An aerial view of the overall project is shown on Figure 2 and the site plan is shown on Figure 3.



Project Location

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the

Legend
 — Water Main
 □ Parcels

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

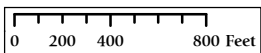


FIGURE 1

Project Location

**Cobblestone Drive
 Zone R2-R4 Water Main Connection
 August 2018**

8/21/2018 AUTHOR J:\4407\GIS\Project Location Map.mxd



8/21/2018 AUTHOR J:\M4407\GIS\Aerial.mxd

Legend

- Water Main
- Utility Easement
- Parcels

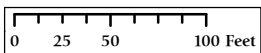


FIGURE 2

Project Aerial View

**Cobblestone Drive
Zone R2-R4 Water Main Connection
August 2018**

TAB: CSDA-Figure 3

09-06-18 aedna \4407.dwg\4407 00\4407.00-Exhibit-Proposed Alignment.dwg

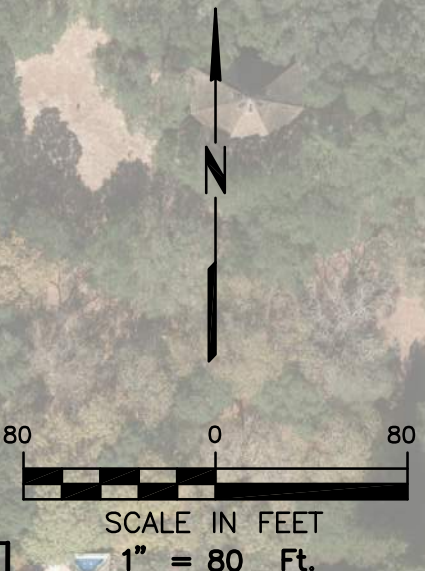


FIGURE 3
PROJECT SITE PLAN
 COBBLESTONE DR. ZONE R2-R4
 WATER MAIN CONNECTION
 SEPTEMBER 2018

POLICY SETTING

Development in the project area and Santa Rosa in general is guided by the City's General Plan¹ and zoning ordinance. The City's current General Plan anticipates and plans for growth until 2035. The General Plan includes infrastructure planning to accommodate orderly development associated with growth projections to 2035, including water services. The General Plan has projected that development within the City's urban growth boundary (UGB) is expected to reach a total population of 237,000 by 2035 and approximately 25,225 new housing units will be developed within the UGB. The proposed project occurs within an existing developed area. The project is consistent with zoning in the project area. Zoning of the three parcels impacted by the project are as follows:

- 3600 Tillmont Way (APN 173-290-032): PD 98-002-RC (not designated as hillside)
- Keysight Technologies (APN 173-010-001): PD 72-001-RC (not designated as hillside)
- Emergency Access parcel (APN173-150-042): R-1-15, Hillside

PROJECT PURPOSE

The project is intended to intertie Pressure Zone R2 and Pressure Zone R4 to improve City-identified fire flows on Cobblestone Drive, an area that serves approximately 32 homes. Adequate fire flows are critical to the City's ability to provide fire protection. No new development is proposed or enabled by the Project.

PROJECT DESCRIPTION

The City conducted a lifecycle cost analysis on two potential solutions to the pressure deficiencies, one near the Chanate Hospital site and one on the currently proposed Keysight property. The lifecycle cost analysis resulted in selection of the Keysight location. Within the Keysight property, the City evaluated two alternative intertie pipeline routes and selected the proposed project based on its lower potential for impacts to trees and existing drainages, constructability and long-term maintenance access. The proposed intertie would be installed along the north side of the currently undeveloped residential lot located at 3600 Tillmont Way where the pipeline and 15-foot public water easement would not require modifications to site drainage or restrict the building envelope. The pipeline would then follow a path through the Keysight Technologies parcel southeast across the property to the southern property boundary, and then south through an emergency fire access parcel to Cobblestone Drive, as shown on Figure 3.

Staying within the current interior side yard setbacks across 3600 Tillmont Way is desired to minimize easement acquisition and to not impact future development of the undeveloped residential lot.

The eight-inch intertie pipe will be approximately 1,100 feet long. The pipeline will be installed at a maximum depth of approximately four feet in a trench approximately two feet wide. A 15-foot public utility easement would be centered over the pipeline for maintenance access. A temporary five-foot construction easement will be obtained on either side of the public utility easement.

¹ Santa Rosa General Plan 2035. City of Santa Rosa. November 3, 2009.

Construction

Construction is anticipated to take approximately 20 working days over one month and begin in spring 2020. Construction will be conducted by approximately five equipment operators and laborers utilizing the following equipment:

- One track excavator medium to large size
- One earth compactor
- One roller
- One backhoe/loader
- One wheel loader (two yard bucket)
- One water truck
- One crane truck
- One or two ten wheel dump trucks
- Rock hammer or rock wheel

A total import of approximately 128 cubic yards and export of approximately 132 cubic yards of backfill material will be required for removing trench spoils and importing backfill materials for pipe bedding. Exported materials will be stockpiled or disposed of according to regulations by the City or the contractor. Stockpiling will occur within the construction easement. A rock hammer or rock wheel attached to the excavator may be used where cobbles or boulders are encountered within the trench. Use would be limited to those areas and be limited in duration during excavation. It is expected that between 100 and 150 feet of pipeline will be installed per day.

GROWTH INDUCEMENT POTENTIAL

The proposed project does not induce growth. The project responds to existing pressure deficiency identified by the City along Cobblestone Drive.

OTHER PUBLIC AGENCY APPROVALS

The project is under City review authority. Due to the nature of the project, it is expected that the following additional agencies may have review or permit authority over the project:

- Regional Water Quality Control Board for potential impacts to an ephemeral drainage.

ENVIRONMENTAL SIGNIFICANCE CHECKLIST:

The following list of questions is provided by Appendix G of the CEQA Guidelines, in order to determine a project's environmental impacts.

Based on the project description, answers to the questions fall into one of four categories:

- Potentially Significant Impact (**PS**)
- Less Than Significant Impact with Mitigation Incorporation (**LSM**)
- Less Than Significant Impact (**LS**)
- No Impact (**NI**)

With regard to the checklist, a “No Impact” response indicates that no impact would result from implementation of the project. A “Less Than Significant Impact” response indicates that an impact would occur, but the level of impact would be less than significant. A “Less Than Significant with Mitigation Incorporation” response indicates that an impact is involved, and, with implementation of the identified mitigation measure, such impact would be less than significant. A “Potentially Significant Impact” response indicates that there is substantial evidence that impacts may be significant if mitigation measures are unknown, infeasible, or not proposed. Each response is discussed at a level of detail commensurate with the potential for adverse environmental effect.

The discussion following each checklist item consists of an *Analysis* section, a *Cumulative Impacts* discussion, and a section for identification of *Mitigation Measures*, as necessary. The *Analysis* section includes a discussion addressing whether the project would result in potential adverse environmental impacts. All potential impacts have been considered, including on-site and off-site impacts, direct and indirect impacts, construction and operation-related effects, as well as cumulative effects. The recently updated CEQA Guidelines contain revised regulations relative to the project's potential for contributing to cumulative effects². The *Cumulative Impacts* section presents information regarding the project's potential cumulative impacts and is included in this section. If an impact(s) has been identified and mitigation is identified to reduce the impact to a less than significant level, then such measures are contained in the *Mitigation Measures* section.

² California Environmental Quality Act Guidelines, §15064(i).

I AESTHETICS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Would the project 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

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

NI A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. Although the project site is not considered to be a scenic vista for the purposes of this environmental analysis, the intertie alignment does have characteristics (i.e., naturally growing vegetation) that most people would consider aesthetically pleasing and a positive visual resource, although the open area (the Keysight Technologies parcel) with such scenic qualities is largely obscured by homes. The proposed project would not result in the disturbance or elimination of open space area or remove an object of aesthetic value. The project would not result in long-term physical adverse changes to the height or bulk of structures or view blockages along the view shed of the intertie alignment. The project involves a below-ground water intertie and obstruction of scenic views will be avoided.

Some areas surrounding the project are designated Hillside by the City and would typically require a hillside development permit. Specifically, the City-owned emergency access parcel at the south end of the project is within a Hillside designation. While the City is not required to obtain a hillside development permit for its own projects, the project is consistent with hillside development requirements in that it would not interrupt the view of the skyline from a major public viewpoint or alter a slope that is greater than 25 percent.

Construction activities would create dust, disturb roadways, expose soil from grading, and create soil piles from trenching and excavation. However, these activities would not block views of scenic vistas. Therefore, short-term construction impacts associated with the project would not have a significant impact on any scenic vista.

The project would not result in long-term impacts since the water intertie would be buried. The project will not have any significant impact on a scenic vista.

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

NI The closest state-designated scenic highway is Highway 12 approximately 2.5 miles southeast of the project. The project will not be visible from a state scenic highway³.

Chanate Road and Fountaingrove Parkway are designated as scenic roads by the General Plan in the project area. The project is located between the two roadways, approximately 0.5 mile from either, and is not visible from them.

One tree will be removed for construction of the intertie (see the Biological Resources section) but such removal will not be visible from beyond the project vicinity due to surrounding trees, residential development and topography.

- c. Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

LS Because the intertie will be installed below grade with surfaces restored, the project will not alter the long-term visual character of the alignment or its surroundings in any appreciable way. Visual impacts to the area and its surroundings would be less than significant.

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

NI The project will not create a new substantial source of light or glare. No lighting is proposed associated with the project.

Cumulative Impacts

There are no adverse cumulative environmental impacts to aesthetic resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to aesthetics have been identified; therefore, no mitigation is required.

³ http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm

II AGRICULTURAL & FOREST RESOURCES

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 Department 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.

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	■
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"/>	■
e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Analysis

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

NI Agricultural lands within the state of California are rated according to soil quality and irrigation status by the Farmland Mapping and Monitoring Program (FMMP). The FMMP produces maps and statistical data used for analyzing impacts on California's agricultural resources. The project site is designated as Urban and Built-up Land by the Farmland Mapping and

Monitoring Program⁴ as shown on Figure 4. The project will not convert Farmland to non-agricultural uses.

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

NI The Williamson Act enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments that are lower than normal because they are based on farming and open space uses as opposed to full market value.

The project area is not designated for or in agricultural use and the project is not located on any parcels with a Williamson Act contract. The project area occurs within developed Santa Rosa.

- 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))?

NI The project area is generally developed as part of Santa Rosa, is not zoned for and does not currently support timberland. The project will not result in any impact to timberland.

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

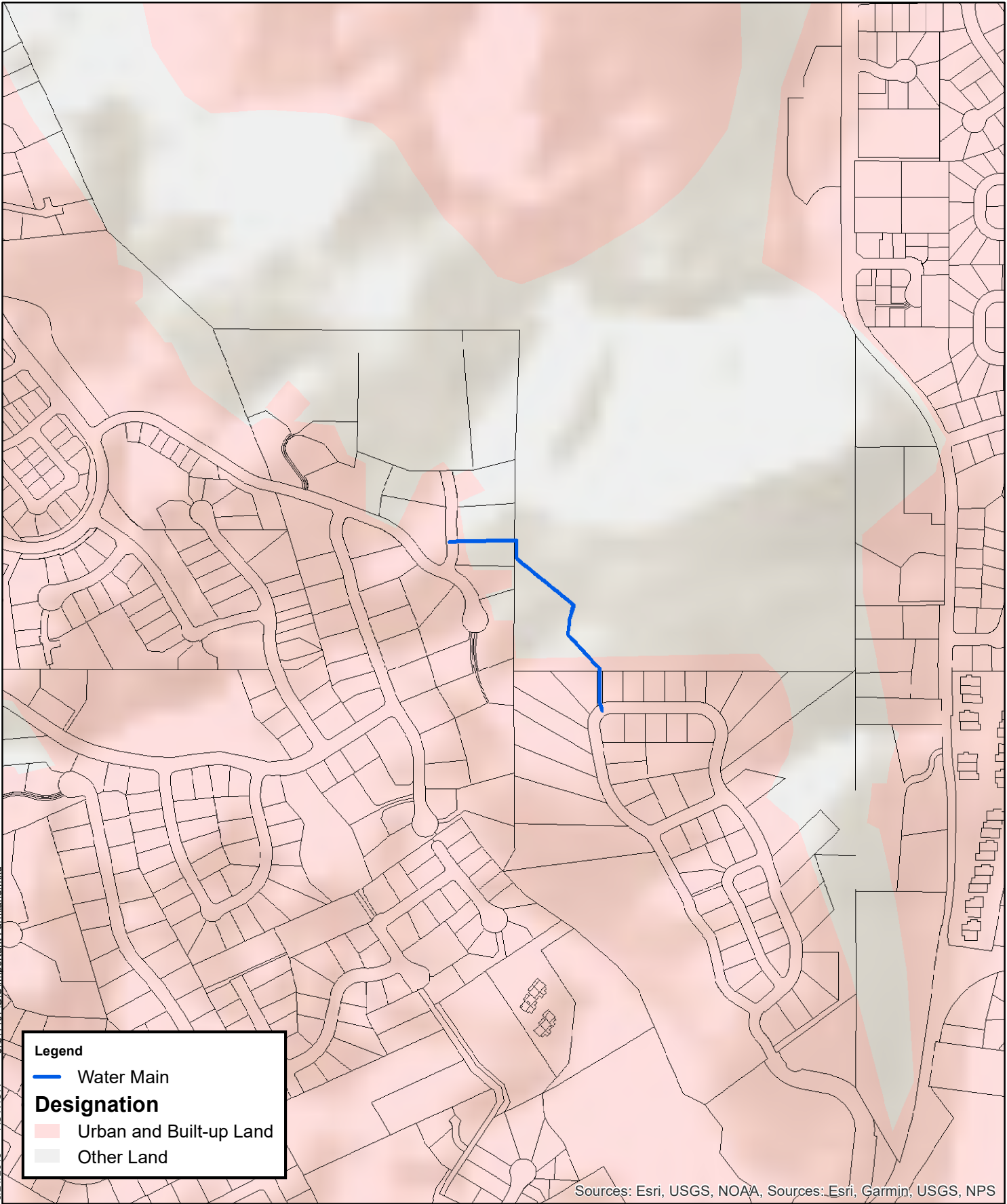
NI The project area does not currently support forest land and the project area is not forested. The Keysight parcel supports a large number of oaks but is not considered forestland. One seven-inch oak will be removed for installation of the intertie on the Keysight parcel). The intertie project will not result in any impact to forestland.

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

NI The project area is within the developed portion of the City of Santa Rosa and not currently in agricultural production. The project will not impact agricultural resources in the project area or result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

⁴ *Sonoma County Important Farmland—2016*. Farmland Mapping and Monitoring Program of the California Resources Agency.

J:\14407\GIS\Important Farmland.mxd
8/21/2018
AUTHOR



Legend

- Water Main

Designation

- Urban and Built-up Land
- Other Land

Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

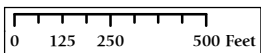


FIGURE 4
Important Farmland

Cobblestone Drive
Zone R2-R4 Water Main Connection
August 2018

Cumulative Impacts

There are no adverse cumulative environmental impacts to agricultural and forestry resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to agricultural and forestry resources have been identified; therefore, no mitigation is required.

III AIR QUALITY

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Would the project create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

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

LS The project area is within the Bay Area Air Quality Management City (BAAQMD). The BAAQMD plans and implements strategies to keep the District in attainment with California and federal air quality standards. For standards that are not designated as attainment, the BAAQMD develops plans to bring the District into attainment. BAAQMD’s 2017 Clean Air Plan is the most recent air quality plan for the District.

California and Federal standards for certain types of criteria air quality pollutants for the year 2015 (most recent update) are shown below.

Pollutant	Averaging Time	State Standard	Federal Primary Standard
Ozone	1-Hour	0.09 ppm	--
	8-Hour	0.07 ppm	0.070 ppm
PM10	Annual	20 ug/m3	--
	24-Hour	50 ug/m3	150 ug/m3
PM2.5	Annual	12 ug/m3	12 ug/m3
	24-Hour	---	35 ug/m3
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	20.0 ppm	35.0 ppm

Nitrogen Dioxide	Annual 1-Hour	0.03 ppm 0.18 ppm	.053 ppm 100 ppb
Sulfur Dioxide	24-Hour 3-Hour 1-Hour	0.04 ppm -- 0.25 ppm	.14ppm -- 75 ppb
Lead	30-Day Avg. Calendar Quarter 3-Month Avg.	1.5 ug/m3 -- --	-- 1.5 ug/m3 0.15 ug/m3

ppm = parts per million

ppb = parts per billion

ug/m3 = Micrograms per Cubic Meter

Ambient air quality measurements are routinely conducted at air quality monitoring stations throughout the BAAQMD to measure compliance with the criteria above for the air district. The most recent BAAQMD attainment status is shown below.

Standard	2015 State Status ⁵	2015 Federal Status
Ozone 8-Hour	Nonattainment	Nonattainment
Ozone 1-Hour	N/A	N/A
PM2.5	Nonattainment	Nonattainment
PM10	Nonattainment	Unclassified
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	N/A
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	N/A
Visibility Reducing Particles	Unclassified	N/A

Both the California Air Resources Board (CARB) and the US EPA use this type of monitoring data to designate areas according to attainment status for criteria air pollutants established by the agencies. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvements. The three basic designation categories are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the nonattainment designation, called nonattainment-transitional. The nonattainment-transitional designation is given to nonattainment areas that are progressing and nearing attainment.

⁵ <http://www.arb.ca.gov/desig/adm/adm.htm>

The project responds to the need an identified pressure deficiency within the project area that could negatively impact the City’s firefighting capacity. The project does not increase long-term emissions directly associated with it. Impacts associated with emissions from projected growth are appropriately addressed in the City’s General Plan and the BAAQMD’s Clean Air Plan at the air basin level. Because the project will not directly increase on-going emissions of monitored air pollutants and will not impact the area’s attainment status, it will not conflict with or obstruct implementation of the BAAQMD’s 2017 Clean Air Plan.

- b. Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

LSM The BAAQMD provides useful guidance in assessing the project’s potential impacts on attainment status. The BAAQMD’s 2017 Air Quality Guidelines⁶ establish recommended thresholds of significance for criteria pollutants for project construction and operation for CEQA analysis. The Air Quality Guidelines do not provide screening levels for this type of infrastructure project so it is necessary to conduct an analysis using the Road Construction Emissions Model (RoadMod), Version 8.1.0, per Air Quality Guidelines recommendations for linear pipeline projects.

The BAAQMD’s thresholds are presented below with a comparison to modeled project construction-related emissions generated utilizing the RoadMod model. Emissions shown below assume non mitigated emissions over the construction period.

Since the City has not adopted its own thresholds of significance, the BAAQMD’s thresholds are presented below with a comparison to projected project construction related emissions generated utilizing the Road Construction Emissions Model, Version 8.1.0 model (RoadMod).

BAAQMD Thresholds of Significance		Modeled Project Emissions
Criteria Air Pollutants & Precursors	Construction-related Average Daily Emissions (lb/day)	RoadMod Construction Emission Estimates (lb/day)
ROG	54	1.50
NOx	54	3.72
PM10	82 (exhaust only)	0.82
PM2.5	54 (exhaust only)	0.76

As indicated in the table above, the project’s construction-related emissions are modeled to be lower than the BAAQMD’s thresholds of significance. Based on the above, emissions associated with project construction are considered to be less than significant. Project operational emissions will be similar to current emissions since the project interties two existing water pressure zones and does not rely on booster pumps.

⁶ California Environmental Quality Act Air Quality Guidelines. Bay Area Air Quality Management District. May 2017.

Construction activities have the potential to create localized short-term dust impacts, PM10 and PM2.5. Mitigation Measure AQ1 includes feasible control measures to reduce such impacts to a less than significant level, as provided by the BAAQMD's Basic Construction Mitigation Measures.

- c. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

NI The project will not result in a cumulatively considerable net increase of any criteria pollutant. As indicated in (a.) above, the project will not negatively impact existing air quality conditions not already planned for by the City's General Plan and the BAAQMD's 2017 Clean Air Plan.

- d. Would the project expose sensitive receptors to substantial pollutant concentrations?

LSM The project will result in construction-related combustion of diesel fuel and dust that could negatively impact adjacent residents (considered sensitive receptors) along the pipeline routes. The nearest residences are approximately 15 feet to either side of the emergency access parcel at the southern end of the project. Demolition and excavation create the majority of vehicle emissions and construction-related dust. These activities could occur throughout the approximately one-month duration of construction of the project but would only occur for a day or two at any specific location and would therefore not expose sensitive receptors to substantial pollutant concentrations. Mitigation Measure AQ1 includes construction-related dust control that reduces this potential impact to less than significant.

- e. Would the project create objectionable odors affecting a substantial number of people?

NI The project is a water pressure zone intertie project that conveys potable water. No odors are associated with projects of this nature.

Cumulative Impacts

There are no adverse cumulative environmental impacts to air quality resulting from implementation of the proposed project.

Mitigation Measures

AQ1 The following Feasible Control Measures, as described by the BAAQMD, shall be implemented during construction to minimize fugitive dust and emissions:

- All 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 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- 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 [CCR]). 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.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

IV BIOLOGICAL RESOURCES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project 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 checked="" type="checkbox"/>	<input type="checkbox"/>
f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Overview

WRA, Inc. conducted a biological resources assessment⁷ and arborist assessment for the project, extending 25 feet to either side of the proposed water intertie pipe. The biological resources assessment describes the results of the site visits, which assessed the project area for the (1) potential to support special-status species, (2) the potential presence of sensitive biological communities such as wetlands or riparian habitats, and (3) the potential presence of other sensitive biological resources protected by local, state, and federal laws and regulations.

SENSITIVE BIOLOGICAL COMMUNITIES

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These habitats are protected under federal regulations such as the Clean

⁷ Biological Resources Assessment Cobblestone Drive R2-R4 Water Main Connection Project. WRA, Inc. August 2018.

Water Act; state regulations such as the Porter-Cologne Act, the California Fish and Game Code (CFGC), and the CEQA; or local ordinances or policies such as city or county tree ordinances, Special Habitat Management Areas, and General Plan Elements.

Waters of the United States

The U.S. Army Corps of Engineers (USACE) regulates “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated at a sufficient depth and for a sufficient duration to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as “other waters” or “non- wetland waters” and are often characterized by an ordinary high water mark (OHWM). Other waters or non-wetland waters, for example, generally include lakes, rivers, and streams. The placement of fill material into Waters of the U.S generally requires an individual or nationwide permit from USACE under Section 404 of the Clean Water Act.

Waters of the State

The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The Regional Water Quality Control Board (Regional Board) protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. Regional Board jurisdiction includes “isolated” wetlands and waters that may not be regulated by USACE under Section 404. Waters of the State are regulated by the Regional Board under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State, are required to comply with the terms of the Water Quality Certification determination. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Regional Board has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.

Other Sensitive Biological Communities

Other sensitive biological communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife (CDFW). CDFW ranks sensitive communities and keeps records of their occurrences in its California Natural Diversity Database (CNDDDB; CDFW 2018). In the CNDDDB, vegetation alliances are ranked 1 through 5 based on NatureServe's (2018) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in city or county general plans or ordinances.

SPECIAL-STATUS SPECIES

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the Federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed species and those that are formal candidates for listing. In addition, CDFW Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, CDFW California Fully Protected species, USFWS Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although these aforementioned species generally have no special legal status, they are given special consideration under CEQA. Bat species are also evaluated for conservation status by the Western Bat Working Group (WBWG), a non-governmental entity; bats named as a “High Priority” or “Medium Priority” species for conservation by the WBWG are typically considered special-status and are considered under CEQA. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory) with California Rare Plant Ranks (Rank) of 1 through 4 are also considered special-status plant species and must be considered under the CEQA. In addition to regulations for special-status species, most birds in the United States, including non-special-status native species, are protected by the Migratory Bird Treaty Act of 1918 (MBTA) and the CFGC. Under these laws, destroying active bird nests, eggs, and/or young is illegal.

CRITICAL HABITAT

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species’ recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species but which are needed for the species’ recovery are protected by the prohibition against adverse modification of critical habitat.

LOCAL POLICIES, ORDINANCES, AND REGULATIONS

City of Santa Rosa Tree Ordinance

The City of Santa Rosa recognizes the aesthetic, environmental, and economic benefits mature trees provide to the citizens of the City. Chapter 17-24, “Trees” of the Santa Rosa City Code (Tree Ordinance) regulates the protection of certain trees on public and private properties within the City limits. The Tree Ordinance defines a “heritage tree” as: valley oak (*Quercus lobata*), blue oak (*Q. douglasii*), or buckeye (*Aesculus californica*) 19 inches circumference at breast height (measured at 4.5 feet above ground; or 6 inches diameter at breast height [DBH]) or greater; madrone (*Arbutus menziesii*) 38 inches circumference (12 inches DBH) or greater; coast live oak (*Q. agrifolia*), black oak (*Q. kelloggii*), Oregon oak (*Q. garryana*), canyon live oak (*Q. chrysolepis*), interior live oak (*Q. wislizenii*), red alder (*Alnus rubra* [A. oregona]), or white alder (*A. rhombifolia*) 57 inches circumference (18 inches DBH) or greater; or redwood (*Sequoia sempervirens*), bay (*Umbellularia californica*), Douglas fir (*Pseudotsuga menziesii*), or big-leaf maple (*Acer macrophyllum*) 75 inches circumference (24 inches DBH) or greater.

A Tree Permit is generally required for the removal, alteration or relocation of any “heritage tree”, “protected tree” (i.e. any tree, including a heritage tree, designated to be preserved on an approved development plan or as a condition of approval of a tentative map, a tentative parcel map, or other development approval issued by the City), or “street tree” (i.e. any tree having a single trunk circumference greater than 6.25 inches or a diameter greater than two inches, a height of more than six feet, and one half or more of its trunk is within a public right of way or within five feet of the paved portion of a City street or a public sidewalk), except as exempted in Section 17-24.030 of the Tree Ordinance. Several non-native species including acacia, silver maple, ailanthus, hawthorn, fruitless mulberry, privet, pyracantha, Monterey pine, Monterey cypress, and fruit and nut trees (except walnut) are exempt from the provisions of the ordinance. Trees, other than heritage trees, situated within City owned parks and other City owned or controlled places when altered, removed, or relocated by City employees or by contractors retained by the City are also exempt.

LITERATURE REVIEW

Potential occurrence of special-status species in the project site was evaluated by first determining which special-status species occur in the vicinity of the project site through a literature and database search. Database searches for known occurrences of special-status species focused on the Santa Rosa 7.5-minute U.S. Geological Survey (USGS) quadrangle and the eight surrounding quadrangles: Healdsburg, Sebastopol, Two Rock, Cotati, Glen Ellen, Kenwood, Calistoga, and Mark West Springs. The following sources were reviewed to determine which special-status plant and wildlife species have been documented to occur in the vicinity of the project site:

- CNDDDB records (CDFW 2018)
- USFWS Information for Planning and Conservation Report (IPaC; USFWS 2018a)
- National Wetlands Inventory (USFWS 2018b)
- CNPS Rare and Endangered Plant Inventory (CNPS 2018b)
- CDFG publication “California’s Wildlife, Volumes I-III” (Zeiner et al. 1990)
- CDFG publication “California Bird Species of Special Concern” (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- California Herps: A Guide to the Amphibians and Reptiles of California (CalHerp 2018)
- Sonoma County Breeding Bird Atlas (Madrone Audubon Society 1995)
- A Flora of Sonoma County (Best et al. 1996)

SITE ASSESSMENT

A site visit was made to the project site on June 29, 2018, to search for suitable habitats for special-status species. Habitat conditions observed at the project site were used to evaluate the potential for presence of special-status species based on these searches and the professional expertise of the investigating biologists. The site assessment is intended to identify the presence or absence of suitable habitat for each special-status species known to occur in the vicinity in order to determine its potential to occur in the project site.

Analysis

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

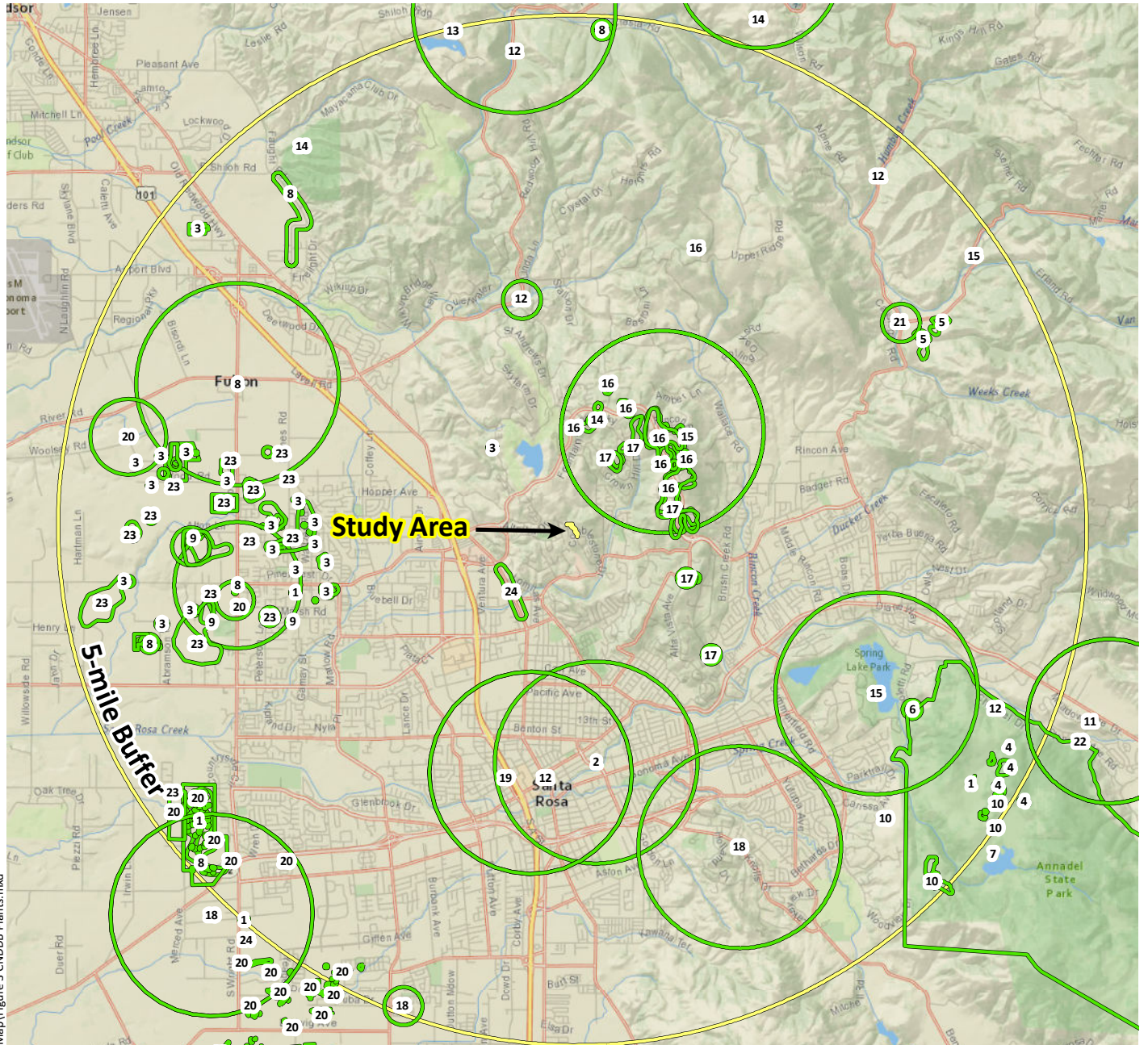
LSM Information contained in WRA's report related to special status species is presented below.

Plant Species

Based upon a review of the resources and databases, it was determined that 90 special-status plant species have been documented from the vicinity of the project site. Special-status plant species documented from within five miles of the site are shown on Figure 5. Of the 90 special-status species known from the region, one was determined to be present within the project site, six species were determined to have a moderate or high potential to occur within the project site, and seven species were determined to have a moderate or high potential but were determined to be absent from the project site, as the species was not encountered during protocol-level rare plant surveys which were conducted during the documented bloom period, or otherwise identifiable period of the species. These species are described below:

Narrow-anthered brodiaea (*Brodiaea leptandra*) CNPS Rank 1B.2. Present (initially assessed: High Potential). Narrow-anthered brodiaea is a perennial herb in the brodiaea family (*Themidaceae*) that blooms from May to July. It typically occurs in broadleaf upland forest, chaparral, and lower montane coniferous forest habitat at elevations ranging from 360 to 3,000 feet (CDFW 2018, CNPS 2018). Soil survey data from documented locations suggest this species is associated with gravelly loam and clay loam substrates derived from rhyolites, metavolcanics, and serpentine (CSRL 2018, CDFW 2018). Observed associated species include chamise (*Adenostoma fasciculatum*), mountain mahogany (*Cercocarpus betuloides*), scrub oak (*Quercus berberidifolia*), white oak (*Q. garryana*), Ponderosa pine (*Pinus ponderosa*), knobcone pine (*P. attenuata*), Pacific madrone (*Arbutus menziesii*), manzanitas (*Arctostaphylos spp.*), buck brush (*Ceanothus cuneatus*), harvest brodiaea (*Brodiaea elegans*), California oat grass (*Danthonia californica*), narrow leaf mules ears (*Wyethia angustifolia*), and Sonoma sage (*Salvia sonomensis*) (CDFW 2018).

Narrow-anthered brodiaea is known from 14 USGS 7.5-minute quadrangles in Lake, Napa, and Sonoma Counties (CNPS 2018). There are 15 CNDDDB (CDFW 2018) records in the greater vicinity of the project site, and 8 CCH (2018) records from Sonoma County. The nearest documented occurrence is undated from Rincon Ridge park approximately 1.25 miles north-northeast of the project site (CDFW 2018). Approximately 30 individuals of this species were found during the site visit in coast live oak woodland, and non-native grassland underlain by rocky volcanic substrate. Observed associated species included coast live oak, slim oat, smooth cat's ear (*Hypochaeris glabra*), common soap root (*Chlorogalum pomeridianum* var. *pomeridianum*), and rattlesnake grass (*Briza maxima*). This species has potential to be more widespread throughout coast live oak and non-native annual grassland portions of the site; including areas that were being grazed by goats where identifiable above ground portions could have been removed.



Path: L:\Acad 2000 Files\27000\27072\GIS\ArcMap\Figure 3 CNDDDB Plants.mxd

1, Baker's navarretia	7, Colusa layia	13, many-flowered navarretia	19, Santa Cruz clover
2, bent-flowered fiddleneck	8, congested-headed hayfield tarplant	14, Napa false indigo	20, Sebastopol meadowfoam
3, Burke's goldfields	9, dwarf downingia	15, narrow-anthered brodiaea	21, slender silver moss
4, Calistoga ceanothus	10, fragrant fritillary	16, Rincon Ridge ceanothus	22, Sonoma ceanothus
5, Clara Hunt's milk-vetch	11, holly-leaved ceanothus	17, Rincon Ridge manzanita	23, Sonoma sunshine
6, coastal triquetrella	12, Jepson's leptosiphon	18, saline clover	24, two-fork clover

Sources: National Geographic, CNDDDB July 2018, WRA | Prepared By: pkobylarz, 7/18/2018

Figure 5 Special-Status Plant Species Documented within 5-miles of the Study Area

Tilmon Cobblestone Intertie Project
Santa Rosa, California



Franciscan onion (*Allium peninsulare* var. *franciscanum*), CNPS Rank 1B.2. Moderate Potential. Franciscan onion is a perennial forb in the onion family (*Alliaceae*) that blooms from May to June. It typically occurs on dry hillsides underlain by clay substrate, often derived from serpentine or volcanics, in cismontane woodland and valley and foothill grassland habitat at elevations ranging from 165 to 975 feet (CDFW 2018, CNPS 2018). Observed associated species include California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), coast live oak (*Quercus agrifolia*), leather oak (*Q. durata*), and purple needle grass (*Stipa pulchra*) (CDFW 2018).

Franciscan onion is known from ten USGS 7.5-minute quadrangles in Mendocino, Santa Clara, San Mateo, and Sonoma counties (CNPS 2018). There is one CNDDDB record (CDFW 2018) in the greater vicinity of the project site, and five CCH (2018) records from Sonoma County. Franciscan onion has a moderate potential to occur in the grassland and coast live oak woodland habitat underlain by volcanic substrate in the project site due to the presence of associated species, suitable substrate, and woodland and grassland habitat that may support this species.

Bent-flowered fiddleneck (*Amsinckia lunaris*), CNPS Rank 1B.2. Moderate Potential. Bent-flowered fiddleneck is an annual forb in the forget-me-not family (*Boraginaceae*) that blooms from March to June. It typically occurs in open areas within cismontane woodland, valley and foothill grassland, and coastal bluff scrub habitat often underlain by clay substrate at elevations ranging from 10 to 1625 feet (CDFW 2018, CNPS 2018). Observed associated species include coast live oak, blue oak (*Quercus douglasii*), California juniper (*Juniperus californicus*), buck brush (*Ceanothus cuneatus*), poison oak, miniature lupine (*Lupinus bicolor*), foothill lotus (*Acemisson brachycarpus*), calf lotus (*A. wrangelianus*), fringe pod (*Thysanocarpus curvipes*), q-tips (*Micropus californicus*), cream cups (*Platystemon californicus*), slender tarweed (*Madia gracilis*), common yarrow (*Achillea millefolium*), goldenback fern (*Pentagramma triangularis*), one-sided bluegrass (*Poa secunda*), woolly sunflower (*Eriophyllum lanatum*), and slim oat (*Avena barbata*) (CDFW 2018).

Bent-flowered fiddleneck is known from 35 USGS 7.5-minute quadrangles in Alameda, Contra Costa, Colusa, Lake, Marin, Napa, San Benito, Santa Clara, Santa Cruz, San Mateo, and Yolo counties (CNPS 2018). There is one CNDDDB (CDFW 2018) record in the greater vicinity of the project site, and one CCH (2018) record from Sonoma County. Bent-flowered fiddleneck has a moderate potential to occur in the grassland and coast live oak woodland habitat within the project site due to the presence of suitable substrate, and associated species in woodland and grassland habitat.

Brewer's milk-vetch (*Astragalus breweri*), CNPS Rank 4.2. Moderate Potential. Brewer's milk-vetch is an annual herb in the pea (*Fabaceae*) family that blooms from April through June. It typically occurs in chaparral, cismontane woodland, meadows and seeps, and valley and foothill grasslands on serpentine or volcanic soils, sometimes in open gravelly locations, at elevations ranging from 300 to 2,400 feet (CNPS 2018). Known associated species include coast live oak, blue oak, Italian ryegrass (*Festuca perennis*), soft chess (*Bromus hordeaceus*), hairy cat's ear (*Hypochaeris radicata*), and blue dicks (*Dichelostemma capitatum*) (personal observation 2018).

Brewer's milk-vetch is known from 20 USGS 7.5-minute quadrangles in Colusa, Lake, Marin, Mendocino, Napa, Sonoma, and Yolo counties (CNPS 2018). There are no CNDDDB (CDFW

2018) records within the greater vicinity of the project site, and 15 CCH (2018) records from Sonoma County. Brewer's milk-vetch has moderate potential to occur in the project sites due to presence of suitable habitat and volcanic soils.

Bristly leptosiphon (*Leptosiphon acicularis*), CNPS Rank 4.2. Moderate Potential. Bristly leptosiphon is an annual forb in the phlox family (*Polemoniaceae*) that blooms from April to July. It typically occurs in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland habitat at elevations ranging from 175 to 4875 feet (CNPS 2018). Observed associated species include redstem filaree (*Erodium cicutarium*), soft chess (*Bromus hordeaceus*), miniature lupine (*Lupinus bicolor*), and rusty haired popcorn flower (*Plagiobothrys nothofulvus*) (personal observation 2018).

Bristly leptosiphon is known from nine USGS 7.5-minute quadrangles in Alameda, Butte, Contra Costa, Fresno, Humboldt, Lake, Marin, Mendocino, Napa, Santa Clara, San Mateo, and Sonoma counties (CNPS 2013). There are no CNDDDB (CDFW 2018) records within the greater vicinity of the project site, and seven CCH (2018) records from Sonoma County. The nearest documented occurrence is from 2018 in Taylor Mountain Regional Park, approximately 5 miles south of the project site (personal observation 2018). Bristly leptosiphon has a moderate potential to occur in the project site due to the presence of suitable habitat, and the relative location of the nearest documented occurrence.

Jepson's leptosiphon (*Leptosiphon jepsonii*), CNPS Rank 1B.2. Moderate Potential. Jepson's leptosiphon is an annual herb in the phlox family (*Polemoniaceae*) that blooms from March to May. It typically occurs in open to partially shaded areas on volcanic or serpentine substrate in chaparral and cismontane woodland habitat at elevations ranging from 325 to 1640 feet (CDFW 2018, CNPS 2018). Observed associated species include California bay, coast live oak, toyon, purple needle grass, California oat grass (*Danthonia californica*), and non-native annual grasses (CDFW 2018).

Jepson's Leptosiphon is known from 18 USGS 7.5-minute quadrangles Lake, Napa, and Sonoma counties (CNPS 2018). There are 14 CNDDDB (CDFW 2018) records in the greater vicinity of the project site, and 16 CCH (2018) records from Sonoma County. Jepson's leptosiphon has a moderate potential to occur in the oak woodland habitat underlain by volcanic substrate in the project site due to the presence of appropriate habitat, associated species, and suitable substrate.

Mt. Diablo cottonweed (*Micropus amphibolus*), CNPS Rank 3.2. Moderate Potential. Mt. Diablo cottonweed is an annual herb in the sunflower family (*Asteraceae*) that blooms from March to May. It typically occurs on thin, rocky substrates in broadleaf upland forest, chaparral, cismontane woodland, and valley and foothill grassland habitat at elevations ranging from 145 to 2710 feet (CNPS 2018). Observed associated species are not reported in the literature.

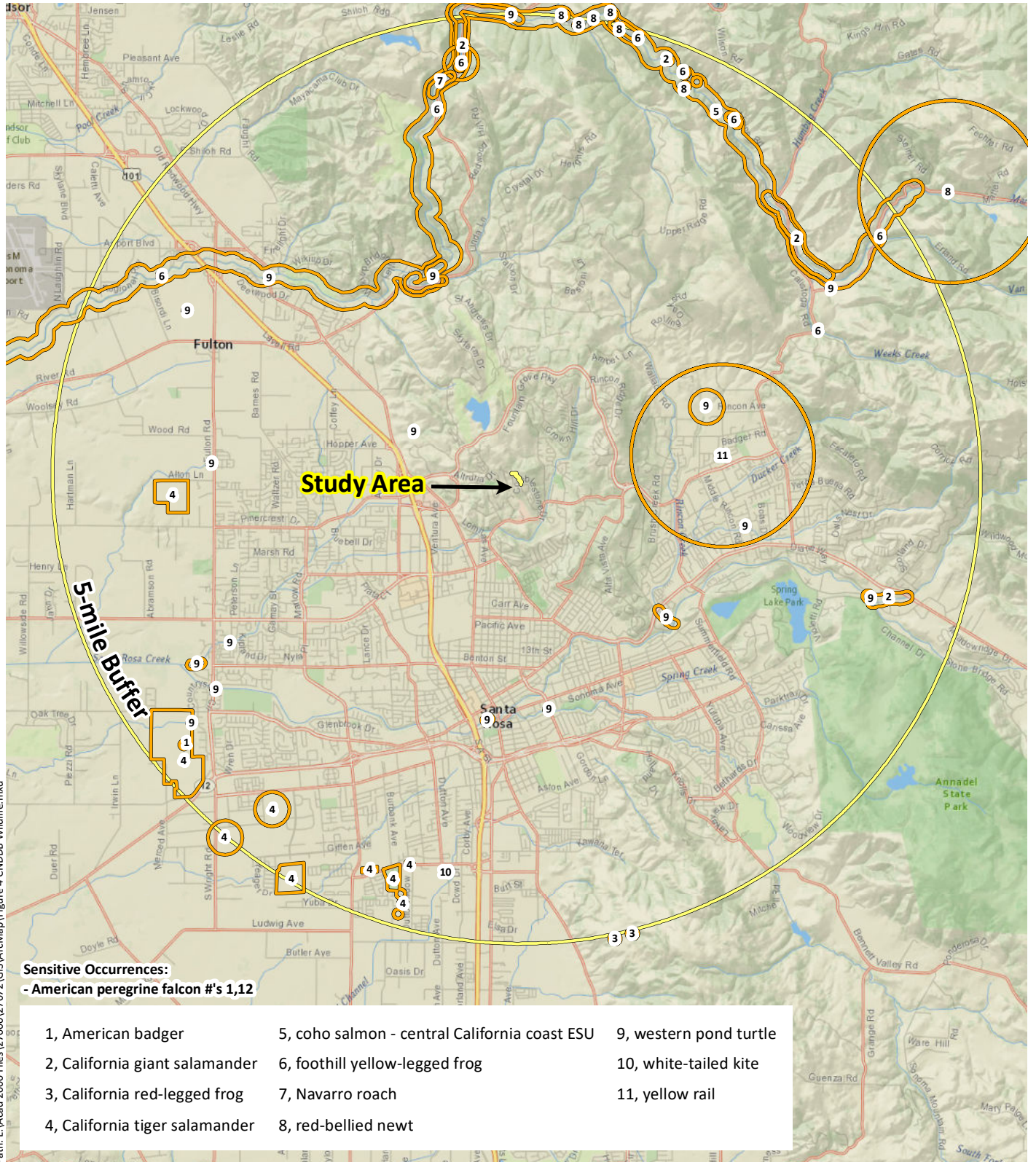
This species is known from 32 USGS 7.5-minute quadrangles in Alameda, Contra Costa, Colusa, Lake, Marin, Monterey, Napa, Santa Barbara, Santa Clara, Santa Cruz, San Joaquin, San Luis Obispo, Solano, and Sonoma counties (CNPS 2018). There are no CNDDDB records for this species, and seven CCH (2018) records from Sonoma County. Mt. Diablo cottonweed has a moderate potential to occur in the project site due to the presence of thin, rocky soils in grassland and woodland habitat.

One special-status plant species, narrow-anthered brodiaea (CNPS Rank 1B), was determined to be present in the western portion of the project area, though this species has potential to occur in other non-developed portions of the project area where goats were grazing at the time of the site visit. Six additional special-status plant species including Franciscan onion (CNPS Rank 1B), bent-flowered fiddleneck (CNPS Rank 1B), Jepson's leptosiphon (CNPS Rank 1B), Mt. Diablo cottonweed (CNPS Rank 3), Brewer's milk vetch (CNPS Rank 4), and bristly leptosiphon (CNPS Rank 4), were determined to have a moderate or high potential to occur within the project area, due to the presence of suitable biological communities, associated species, and volcanic substrates, and proximity to documented occurrences. Narrow-anthered brodiaea, bent-flowered fiddleneck, and Jepson's leptosiphon are CNPS Rank 1B species, meaning they are considered rare, threatened or endangered throughout their range in California. According to the CNPS guidelines (CNPS 2018c), many Rank 3 species may be considered for listing under CESA, and they should be considered under CEQA. Damage to the known present and potentially present plant species would be a potentially significant impact. Mitigation Measure BIO1 requires follow-up plant surveys and relocation of species, if discovered. With mitigation, potential impacts to these seven species would be less than significant.

Animal Species

Based upon a review of the resources and databases, it was determined that 41 special-status wildlife species have been documented from within the Cotati, Kenwood, Sebastopol, Calistoga, Glen Ellen, Healdsburg, Mark West Springs, Two Rock, and Santa Rosa USGS 7.5-minute quadrangles. Special-status wildlife species documented in CNDDDB within a five-mile radius of the project area, shown on Figure 6. The following six species were either observed on the July 7 site visit or determined to have adequate conditions and locality to warrant a moderate or high potential to occur:

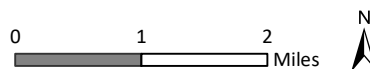
Oak titmouse (*Baeolophus inornatus*), USFWS Bird of Conservation Concern. Present. This relatively common species is year-round resident throughout much of California including most of the coastal slope, the Central Valley and the western Sierra Nevada foothills. Its primary habitat is woodland dominated by oaks. Local populations have adapted to woodlands of pines and/or junipers in some areas (Cicero 2000). The oak titmouse nests in tree cavities, usually natural cavities or those excavated by woodpeckers, though they may partially excavate their own (Cicero 2000). Seeds and arboreal invertebrates make up the birds' diet. Suitable oak trees for nesting and foraging are present within the project area. Oak titmouse was observed within the project area during the June 29, 2018 site visit.



Sources: National Geographic, CNDDB July 2018, WRA | Prepared By: pkobylarz, 7/26/2018

Figure 6: Special-Status Wildlife Documented within 5-miles of the Study Area

Tilmon Cobblestone Intertie Project
 Santa Rosa, California



Hoary bat (*Lasiurus cinereus*), WBWG Medium Priority. Moderate Potential. Hoary bats are highly associated with forested habitats in the western United States, particularly in the Pacific Northwest. They are a solitary species and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches, usually at the edge of a clearing. Roosts are typically 10 to 30 feet above the ground. They have also been documented roosting in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under driftwood, and clinging to the side of buildings, though this behavior is not typical. Hoary bats are thought to be highly migratory, however, wintering sites and migratory routes have not been well documented. This species tolerates a wide range of temperatures and has been captured at air temperatures between 0 and 22 degrees Celsius. This species reportedly has a strong preference for moths, but is also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2017). The project area contains trees with cavities of sufficient size to potentially provide roosting structure for this species, especially in areas of dense canopy cover. In addition, Frances Nielsen Ranch Park is less than 0.25 miles from the project area and provides adequate water for this species. Therefore, this species has a moderate potential to occur within the project area.

Pallid bat (*Antrozous pallidus*), CDFW Species of Special Concern, WBWG High Priority. Moderate Potential. Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs in a number of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous forests. They are most abundant in the arid Sonoran life zones below 6,000 feet, but have been found up to 10,000 feet in the Sierra Nevada. Pallid bats often roost in colonies of between 20 and several hundred individuals. Roosts are typically in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings. Tree roosting has been documented in large conifer snags (e.g., ponderosa pine), inside basal hollows of redwoods and giant sequoias, and within bole cavities in oak trees. They have also been reported roosting in stacks of burlap sacks and stone piles. Pallid bats are primarily insectivorous, feeding on large prey that is usually taken on the ground but sometimes in flight. Prey items include arthropods such as scorpions, ground crickets, and cicadas (WBWG 2017). The project area contains trees with cavities of sufficient size to potentially provide roosting structure for this species, especially in areas of denser canopy cover. In addition, Frances Nielsen Ranch Park is less than 0.25 miles from the project area and provides adequate water for this species. Therefore, this species has a moderate potential to occur within the project area.

Nuttall's woodpecker (*Picoides nuttallii*), USFWS Bird of Conservation Concern. Moderate Potential. Nuttall's Woodpecker is a year-round resident throughout most of California west of the Sierra Nevada. Typical habitat is oak or mixed woodland, and riparian areas (Lowther 2000). Nesting occurs in tree cavities, principally those of oaks and larger riparian trees. Nuttall's woodpecker also occurs in older residential settings and orchards where trees provide suitable foraging and nesting habitat. This species forages on a variety of arboreal invertebrates. The project area is primarily oak woodland with suitable trees for foraging and nesting habitat. This species has a moderate potential to occur.

White-tailed kite (*Elanus leucurus*), CDFW Fully Protected Species. Moderate Potential. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands.

Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. The project area provides trees of suitable size for nesting as well as nearby foraging habitat. However, no raptor nests were observed on the June 29, 2018 site visit. This species has a moderate potential to occur within the project area.

Allen's hummingbird (*Selasphorus sasin*), USFWS Bird of Conservation Concern. Moderate Potential. Allen's hummingbird, common in many portions of its range, is a summer resident along the majority of California's coast and a year-round resident in portions of coastal southern California and the Channel Islands. Breeding occurs in association with the coastal fog belt, and typical habitats used include coastal scrub, riparian, woodland and forest edges, and eucalyptus and cypress groves (Mitchell 2000). It feeds on nectar, as well as insects and spiders. Trees present within the project area provide potential nesting habitat and flowering species within and adjacent to the project area provide foraging habitat for Allen's hummingbird. Therefore, this species has a high potential to occur within the project area.

The project may impact white-tailed kite, oak titmouse, Allen's hummingbird, Nuttall's woodpecker, and non-special-status birds protected by MBTA and CFGC by modifying nesting habitats or by causing disturbance of a sufficient level to cause abandonment of an active nest. Impacts to these species and their habitats could occur during the removal of vegetation, trenching, or other ground-disturbing activities. These activities could result in the direct removal or destruction of active nests, as well as generate audible, vibratory and/or visual disturbances that result in nest abandonment. The direct removal/destruction of active nests due to project activities or disturbance to breeding birds sufficient to result in the abandonment of active nests is a potentially significant impact. Mitigation Measure BIO2 requires preconstruction nesting surveys to reduce the potential impact to less than significant.

The project area contains trees with foliage and possible cavities that may provide roost habitat to special-status bat species documented in the vicinity (hoary bat and pallid bat). Impacts to these species and their roost habitats could occur during the removal of trees within the project area. These activities could result in the direct removal or destruction of a roost and/or maternity roost. Project activities may also create audible, vibratory and/or visual disturbances which cause maternity roosting bats to abandon their roost site. Activities that result in the direct removal of active roosts or disturbance to maternity roosting bats sufficient to result in the abandonment of the roost is a potentially significant impact. Mitigation Measure BIO3 will reduce potential impacts to bat species to less than significant.

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

LSM Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These include:

- **Waters of the United States:** The U.S. Army Corps of Engineers (Corps) regulates Waters of the United States under Section 404 of the Clean Water Act. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Areas that are inundated at a sufficient depth and for a sufficient duration to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as other waters and are often characterized by an ordinary high water mark (OHWM). Other waters or non-wetland waters generally include lakes, rivers, and streams. The placement of fill material into Waters of the U.S generally requires an individual or nationwide permit from the Corps under Section 404 of the Clean Water Act.
- **Waters of the State:** The term Waters of the State is defined by the Porter-Cologne Act as any surface water or groundwater, including saline waters, within the boundaries of the state, and under this Act the Regional Water Quality Control Board (Regional Board) protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. Regional Board jurisdiction under Porter-Cologne includes isolated wetlands and waters that may not be regulated by the Corps under Section 404 and stream banks between the ordinary high water mark and top of bank. Waters of the State within federal jurisdiction are regulated by the Regional Board under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction and have the potential to impact Waters of the State, are required to comply with the terms of the Section 401 Water Quality Certification determination. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Regional Board has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.
- **Aquatic and Riparian Habitat:** Work in or near aquatic and riparian habitat along streams and lakes is regulated by the California Department of Fish and Wildlife (CDFW) under Fish and Game Code 1602. Work that will or may cause ground disturbance and/or removal of riparian vegetation within streams, stream banks, or 25-50 feet from top of bank (in unvegetated stream segments) or from outer edge of riparian vegetation may require a Streambed Alteration Agreement with CDFW.
- **Other Sensitive Biological Communities:** Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife.

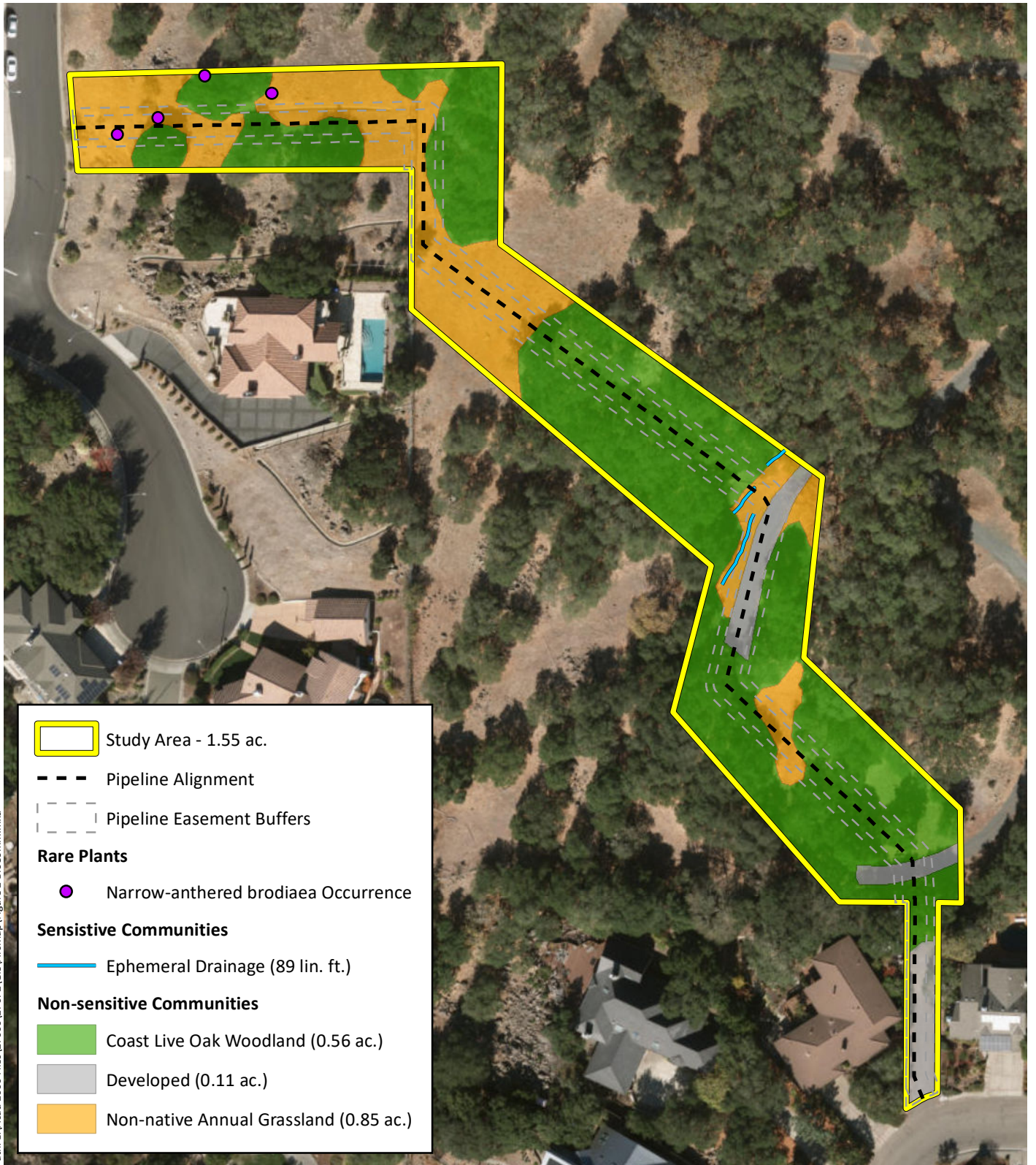
Non-sensitive biological communities observed include developed, non-native annual grassland, and coast live oak woodland. One sensitive biological community, ephemeral drainage, is also present within the project site, as shown on Figure 7. These are described further below:

Developed: The project site contains approximately 0.11 acre of developed areas. Developed areas within the project site include existing gravel roads and driveways, fences and locked gates. These areas are of low habitat value, and vegetative cover is dominated by ruderal herbaceous species and occasional native coast live oak (*Quercus agrifolia*) trees. Developed areas are not considered sensitive. However, this community does contain native trees large enough to be considered heritage trees per the City of Santa Rosa Tree Ordinance.

Non-native annual grassland: The project site contains approximately 0.85 acre of non-native annual grassland. Non-native grassland areas within the project site are limited to several, relatively small openings within coast live oak woodland. Vegetative cover within these areas is typically dominated by common non-native invasive grasses and forbs including slim oat (*Avena barbata*), ripgut brome (*Bromus diandrus*), Harding grass (*Phalaris aquatica*), rose clover (*Trifolium hirtum*), and cat's ear (*Hypochaeris* spp.), but also contains low cover of native grasses including purple needle grass (*Stipa pulchra*), blue wildrye (*Elymus glaucus*), and variable cover of native forb species including narrow-anthered brodiaea (*Brodiaea leptandra*), and turkey mullein (*Croton setiger*). Scattered individual trees and shrubs are present including coast live oak, and coyote brush (*Baccharis pilularis* ssp. *consanguinea*). Non-native annual grassland is not considered a sensitive biological community, however it does have potential to support special-status plant and wildlife species discussed below, and also contains several native trees large enough to be considered heritage trees per the City of Santa Rosa Tree Ordinance.

Coast live oak woodland (*Quercus agrifolia* Woodland Alliance): The project site contains approximately 0.56 acre of coast live oak woodland. Coast live oak woodland is known from the outer and inner Coast Ranges, Transverse Ranges, and southern coast from northern Mendocino County south to San Diego County. This vegetation community is typically located on terraces, canyon bottoms, slopes, and flats underlain by deep, well-drained sandy or loam substrates with high organic content (CNPS 2018a).

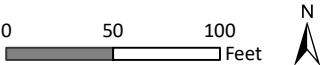
Coast live oak woodland within the project site consists in an upland setting on southeastern facing slopes underlain by rocky, volcanic substrates. The overstory is dominated by coast live oak with occasional black oak (*Quercus kelloggii*), and California bay (*Umbellularia californica*). Within the project site, this community has a relatively open understory dominated by a mixture of native and non-native grasses, forbs, shrubs and woody vines. Common understory shrub species include toyon (*Heteromeles arbutifolia*) and poison oak (*Toxicodendron diversilobum*). The herbaceous layer is dominated by non-native annual grasses and forbs including ripgut brome, and slim oat. This community was being grazed by goats during the time of the site visit, and as a result, native forb species, if present, were sparsely observed. Coast live oak woodland has a sensitivity ranking of G5, S4 indicating that it is globally secure and apparently secure in California, and is thus not considered a sensitive community. However, this community has the potential to support special-status plant and wildlife species discussed below, and also contains several mature trees large enough to be considered heritage trees per the City of Santa Rosa Tree Ordinance.



Sources: National Geographic, WRA | Prepared By: pkobylarz, 7/26/2018

Figure 7 Biological Communities

Tilmont Cobblestone Intertie Project
 Santa Rosa, California



Ephemeral Drainage: Potential Regional Board jurisdiction. The project site contains approximately 89 linear feet of an ephemeral drainage located in the central portion of the project site. The unnamed, ephemeral drainage appeared to originate as a roadside ditch following the gravel road which winds through the project site. This feature flows in a southerly direction through the project site, and contains only marginal and discontinuous indicators of concentrated flow. The feature is approximately one foot wide at its widest point in the northern portion of the project site. The feature then appears to flow sub surface at the intersection of the drainage and the gravel road, resurfacing as two marginal, six-inch wide rivulets within the project site, and then the feature appears to flow subsurface again, as indicators of surface flow are not evident immediately south of the project site. This feature appears to be isolated, and contains only marginal, discontinuous indicators of OHWM, and would not likely be considered USACE jurisdiction as a Waters of the U.S. However, this feature may be considered a Waters of the State under Regional Board jurisdiction per the Porter-Cologne Water Quality Control Act.

This feature may be considered a Waters of the State under Regional Board jurisdiction and would likely require a Waste Discharge Requirement (WDR) permit from the Regional Board under Porter-Cologne Water Quality Control Act. Mitigation Measure BIO4 requires consultation with USACE and the Regional Board and obtaining a permit, if required.

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

NI No wetlands or wetland indicators were identified during the biological resources site visit. Please see b.) above.

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

NI The project site does not generally support wildlife nursery sites. Because of the level of development in the project area and surrounding residential neighborhoods, the length of time the project area has been developed, and continued maintenance of the project area, the project area is not characteristic of a wildlife migratory corridor. Use of the Keysight property by animals will not be impeded by the project once construction is complete.

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

LS The Project has been designed to avoid removing heritage and other trees. A comprehensive tree survey⁸, conducted by WRA's ISA-Certified Arborist, identified 55 trees in the project area which could be potentially impacted by project construction via root zone encroachment. Tree survey results are shown on Figure 8. A total of 55 trees were inventoried during the assessment, including 23 heritage trees and 32 non-heritage trees. The arborist report indicated

⁸ *Tree Survey Report, Cobblestone Drive R2-R4 Water Main Connection Project*. WRA Environmental Consultants. August 2018.

the potential removal of one 52-inch multi-trunk coast live oak heritage tree (tree #348), and three non-heritage trees (trees #374, 349, and 312). Modifications to the pipeline route, as indicated on Figure 3, avoid removal of all trees except one 7.3-inch non-heritage coast live oak tree that is directly in line with the pipeline alignment.

Chapter 17-24 of the City code contains the City's tree ordinance that regulates the protection of certain trees on public and private properties within the City limits. The Tree Ordinance defines a "heritage tree" as: valley oak (*Quercus lobata*), blue oak (*Q. douglasii*), or buckeye (*Aesculus californica*) 19 inches circumference at breast height (measured at 4.5 feet above ground; or 6 inches diameter at breast height [DBH]) or greater; madrone (*Arbutus menziesii*) 38 inches circumference (12 inches DBH) or greater; coast live oak (*Q. agrifolia*), black oak (*Q. kelloggii*), Oregon oak (*Q. garryana*), canyon live oak (*Q. chrysolepis*), interior live oak (*Q. wislizenii*), red alder (*Alnus rubra* [*A. oregona*]), or white alder (*A. rhombifolia*) 57 inches circumference (18 inches DBH) or greater; or redwood (*Sequoia sempervirens*), bay (*Umbellularia californica*), Douglas fir (*Pseudotsuga menziesii*), or big-leaf maple (*Acer macrophyllum*) 75 inches circumference (24 inches DBH) or greater.

As described in City code section 17.24.030, the City is exempt from the tree ordinance, other than heritage trees, situated within City owned parks and other City owned or controlled places when altered, removed, or relocated by City employees or by contractors retained by the City. Therefore removal of one non-heritage tree would not be considered a significant impact as it would not conflict with the City of Santa Rosa Tree Ordinance.

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

NI The project location is not part of an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

Cumulative Impacts

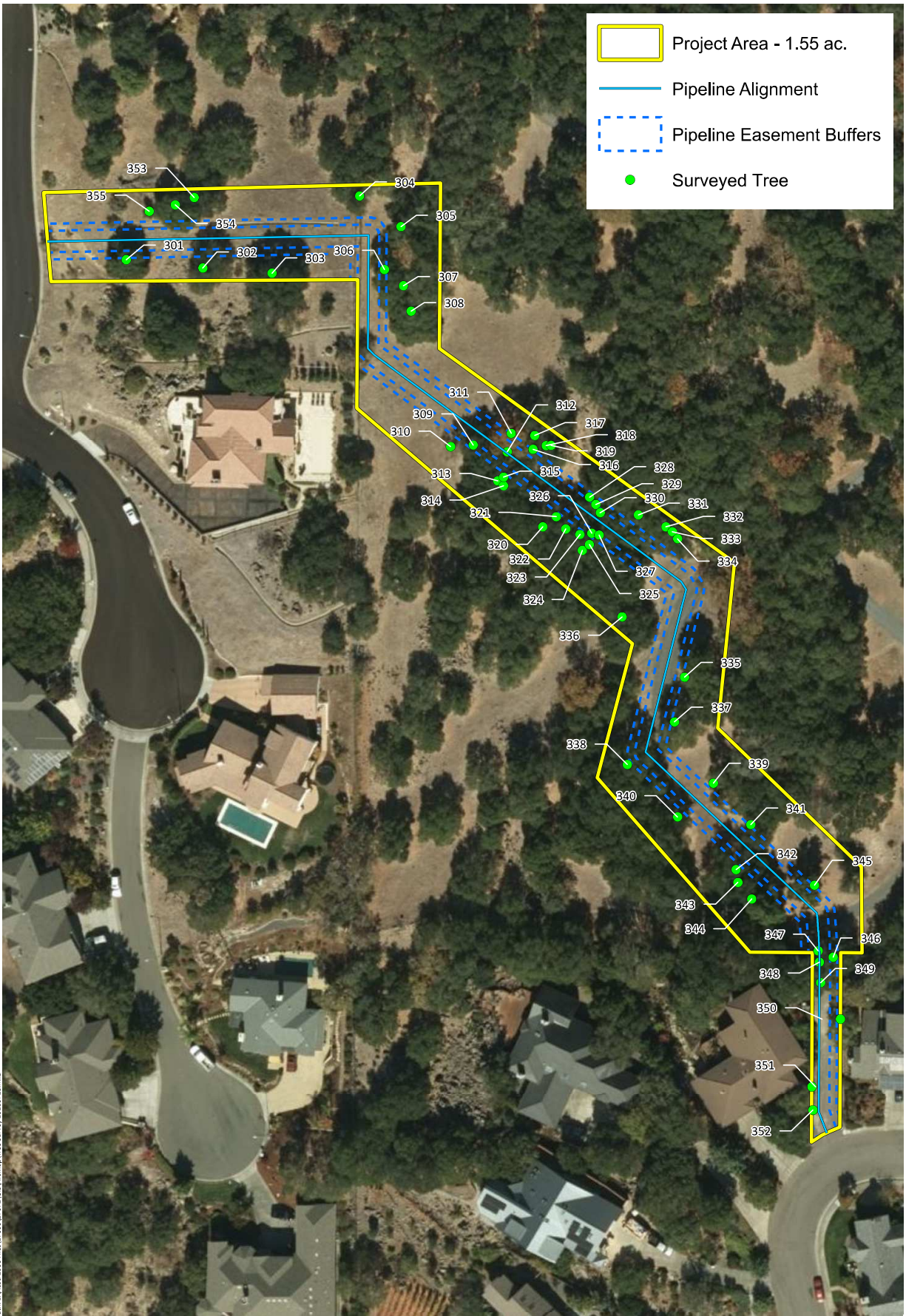
There are no adverse cumulative environmental impacts to biological resources resulting from implementation of the proposed project.

Mitigation Measures

BIO1 Special-Status Plants: The project potentially will impact special-status plant species. One special-status plant species, narrow-anthered brodiaea, was observed in the western portion of the project area. Six additional special-status plant species have a moderate or high potential to occur: Franciscan onion, bent-flowered fiddleneck, Jepson's leptosiphon, Mt. Diablo cottonweed, Brewer's milk vetch, and bristly leptosiphon. Two follow-up protocol-level rare plant surveys shall be conducted during the peak blooming periods of these species (April and May) to determine presence or absence within the project area, and to document the full extent of narrow-anthered brodiaea in the project area.

Following the spring plant surveys, special-status species that are determined to be within the limit of grading and adversely impacted shall be replaced by expanding population in suitable

adjacent areas. A qualified biologist shall determine the level of impacts and develop a habitat mitigation and monitoring plan (HMMP) to offset the impacts to special-status plant species. This plan would likely recommend using unoccupied and preserved portions of the project area to maintain or expand populations of the special-status plants that may occur on-site. The HMMP shall include but not be limited to collection, salvage, storage, reintroduction, and monitoring of existing special-status plant populations. With the implementation of measures outlined in an HMMP to offset special-status plant impacts, this impact would be less-than-significant.



Path: L:\Acad 2010 Files\270600\27077\GIS\ArcMap\Tree Survey 20180718.mxd

Sources: 2013 SonomaVeg Aerial, WRA | Prepared By: pkobylarz, 7/18/2018

Figure 8 Tree Survey Map

BIO2 Special-Status and Non-Status Nesting Birds: The following measures shall be implemented to avoid impacts to white-tailed kite, oak titmouse, Allen’s hummingbird, Nuttall’s woodpecker, and other nesting birds protected by the MBTA and CFGC:

- If ground disturbance or vegetation removal is initiated in the non-breeding season (September 1 through January 31), no pre-construction surveys for nesting birds are required and no adverse impact to birds would result.
- If ground disturbance or removal of vegetation occurs in the breeding bird season (February 1 through August 31), pre-construction surveys shall be performed by a qualified biologist no more than 14 days prior to commencement of such activities to determine the presence and location of nesting bird species. If active nests are present, temporary no-work buffers shall be placed around active nests to prevent adverse impacts to nesting birds. Appropriate buffer distance shall be determined by a qualified biologist and is dependent on species, surrounding vegetation, and topography. Once active nests become inactive, such as when young fledge the nest or the nest is subject to predation, work shall continue in the buffer area and no adverse impact to birds will result.

BIO3 Special-Status Bat Species: The following measures shall be implemented to avoid impacts to special-status bat species:

- Pre-construction roost assessment survey: A qualified biologist shall conduct a roost assessment survey of trees located within the project area. The survey will assess use of the trees and cavities for roosting as well as potential presence of bats. If the biologist finds no evidence of, or potential to support bat roosting, no further measures are recommended. If evidence of bat roosting is present, additional measures described below shall be implemented:
 - Work activities outside the maternity roosting season: If evidence of bat roosting is discovered during the pre-construction roost assessment and tree removal is planned August 1 through February 28 (outside the bat maternity roosting season), a qualified biologist shall implement passive exclusion measures to prevent bats from re-entering the tree cavities. After sufficient time to allow bats to escape and a follow-up survey to determine if bats have vacated the roost, tree removal may continue and impacts to special-status bat species will be avoided.
 - Work activities during the maternity roosting season: If a pre-construction roost assessment discovers evidence of bat roosting in the trees during the maternity roosting season (March 1 through July 31), and determines maternity roosting bats are present, removal of maternity roost trees shall be avoided during the maternity roosting season or until a qualified biologist determines the roost has been vacated.

BIO4 Ephemeral Drainage: A wetland verification request shall be submitted to USACE prior to project construction. If USACE concurs that the feature is non-jurisdictional, no further permit from USACE would be required. If the feature is determined to be a Waters of the U.S. by USACE, the project shall obtain a CWA Section 404 permit and adhere to all permit conditions and mitigation requirements. The project shall also obtain a WDR permit from the Regional Board for temporary impacts to the ephemeral drainage. Potential impacts to water quality would be avoided and minimized by adhering to the BMPs and permit conditions established by the Regional Board.

V CULTURAL RESOURCES

The California Environmental Quality Act (CEQA) requires that historical resources be considered during the environmental review process. This is accomplished by an inventory of resources within a study area and by assessing the potential that historical resources could be affected by development. The term “Historical Resources” encompasses prehistoric and historical archaeological sites and built environment resources (e.g., buildings, bridges, canals). An additional category of resources is defined in CEQA under the term “Tribal Cultural Resources” (Public Resources Code Section 21074). They are not addressed in this report. Tribal cultural resources are resources that are of specific concern to California Native American tribes, and knowledge of such resources is limited to tribal people. Pursuant to revisions to CEQA enacted in July of 2015, such resources are to be identified by tribal people in direct, confidential consultation with the lead agency (PRC §21080.3.1).

Paleontology is the study of fossils—the recognizable remains and traces of once-living, non-human organisms that are incorporated into the Earth’s rocks. Shells, bones, leaves, tracks, trails, and a variety of other remains constitute a record of the history of life on the planet dating back 3.5 billion years⁹. Fossils provide the basic data to establish a relative time scale of the physical history of the Earth. Fossils are found in a definite succession in sedimentary and slightly metamorphosed rocks. Fossils are generally most common in rocks formed in relatively shallow marine waters. In freshwater environments, fossils of animals are usually most abundant in rocks formed in lakes. Fossils tend to be least abundant in rocks that formed on dry land because dead plants and animals ordinarily are exposed to the air for long periods of time (precluding fossiliferous formation). Most fossils are relatively small and are collected either by picking up loose specimens on weathered rocks surfaces or by using simple hand tools.

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project 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"/>
c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

⁹ Paleontological Collecting, National Academy Press. Washington, DC. 1987.

Analysis

- a. Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

LSM Tom Origer & Associates conducted a cultural resources investigation for the project in July 2018¹⁰. The study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 17-3080), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2018-062).

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 17-3080) was completed of the archaeological site base maps and records, survey reports, and other materials on file at the Northwest Information Center (NWIC), Sonoma State University, Rohnert Park by Julia Franco on June 22, 2018.

Archival research found that portions of the study area had been previously subjected to an historical resources survey (Fredrickson 1974a; Gerike and Fredrickson 1983). Six studies have been conducted within a quarter mile (Clark 1994; Del Bondio and Origer 2010; Gerike and Fredrickson 1982; Loyd and Origer 1993; Origer and Carpenter 1979; True 1988). These studies have resulted in the finding of one resource within a quarter mile of the study area (Fredrickson 1974b). This resource is located over 1,000 feet from the study area and would not extend into the study area. There are no reported ethnographic sites within one mile of the survey area (Barrett 1908).

A review of 19th and 20th century maps shows no buildings within the study area (Bell and Heymans 1888; Bowers 1867; GLO 1865; McIntire and Lewis 1908; Peugh 1934; Reynolds and Proctor 1898; Thompson 1877; USGS 1916, 1944, 1954a, 1954b).

An intensive field survey of the project area was completed by Eileen Barrow of Tom Origer & Associates on June 29, 2018. Ms. Barrow holds a MA in cultural resource management. Ms. Barrow surveyed a larger area than necessary in the event the pipeline route needs to be adjusted. The study area was walked in zig-zagging transects to survey for archaeological resources. Several boulders within the study area were examined for bedrock mortars and petroglyphs. Ground visibility ranged from excellent to poor, with vegetation and imported gravel, being the primary hindrances. No resources were found during the course of the study and no historical resources were observed.

In the unlikely event that historical resources are discovered during construction work, Mitigation Measure CR1 will reduce such impact to a less than significant level.

¹⁰ A Historical Resources Survey for the Cobblestone Drive Zone R2-R4 Water Main Connection Project. Tom Origer & Associates. July 12, 2018.

- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

LSM Tom Origer & Associates conducted a cultural resources investigation for the project. The alignment was examined by a records search and was examined in the field. As indicated in a.) above, no resources were found in the archival research or field investigation.

Tom Origer & Associates sent a request to the State of California's Native American Heritage Commission seeking information from the sacred lands files and the names of Native American individuals and groups that would be appropriate to contact regarding this project. Origer & Associates also sent letters to the following groups (Additional AB52 consultation is discussed in the Tribal Cultural Resources section of this document):

- 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

The following responses were received by Origer & Associates:

- The Native American Heritage Commission replied with a letter dated July 10, 2018, in which they indicated that the sacred land file has no information about the presence of Native American cultural resources in the immediate project area.
- A letter was received from Reg Elgin, Tribal Historic Preservation Officer for the Dry Creek Rancheria, on July 6, 2018 stating that the tribe is not aware of any historic properties but wanted to be notified in the event new information or historic remains are found.

Brenda Tomaras, representative for Lytton Rancheria of California responded on July 9, 2018 stating that the tribe has no specific information but that the study area falls within their traditional territory and they will be consulting further with the appropriate lead agency. No archaeological site indicators were observed or recorded for the project and initial tribal contact did not reveal tribal cultural resources to be present. No further archaeological investigation was determined to be necessary by Tom Origer & Associates for the project. However, in the unlikely event that archaeological resources are discovered during construction work, Mitigation Measure CR1 will reduce such impact to a less than significant level.

- c. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

LSM Construction of the project is not anticipated to disturb any paleontological resources. However, the remote possibility exists that paleontological indicators might be discovered during construction of the facilities. Mitigation Measure CR2 will reduce such impact to a less than significant level.

- d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

LSM There are no known human remains in the project area. However, the remote possibility exists that human remains could be discovered during construction. In such an event, Mitigation Measure CR3 will reduce such impact to a less than significant level.

Cumulative Impacts

There are no adverse cumulative environmental impacts to cultural resources resulting from implementation of the proposed project.

Mitigation Measures

CR1 The project plans and specifications shall provide that in the event prehistoric-era or historic-era archaeological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. Prehistoric-era archaeological site indicators could include chipped chert and obsidian tools and tool manufacture waste flakes, grinding implements such as mortars and pestles, and locally darkened soil containing the previously mentioned items as well as fire altered stone and dietary debris such as bone and shellfish fragments. Historic-era archaeological site indicators could include items of ceramic, glass and metal, and features such as structural ruins, wells and pits containing such artifacts. After cessation of excavation, the contractor shall immediately contact the City. The City shall contact a qualified professional archaeologist immediately after the find. Such archaeologist shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The City shall also contact Buffy McQuillen, Tribal Heritage Preservation Officer (THPO) of the Federated Indians of Graton Rancheria, 6400 Redwood Drive, Suite 300, Rohnert Park, CA 94928, (707)566-2288 ext. 137. The contractor shall not resume construction activities until authorization to proceed is received from the City.

CR2 The project plans and specifications shall provide that in the event paleontological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. After cessation of excavation, the contractor shall immediately contact the City. The City shall contact a qualified professional geologist or paleontologist immediately after the find. Such consultant shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The contractor shall not resume construction activities until authorization to proceed is received from the City.

CR3 If human remains are encountered during grading, excavation or trenching, all construction activity shall cease and the contractor shall immediately contact the City and the Sonoma County Coroner's Office. If the remains are determined by the Coroner's Office to be of Native American origin, the Native American Heritage Commission shall be contacted and the procedures outlined in CEQA §15064.5 (d) and (e) shall be implemented by the City or its designee.

VI GEOLOGY & SOILS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project expose people or structures to 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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

TOPOGRAPHY AND SOILS

The topography in the project area is moderately sloped and southeast facing, with elevations ranging from approximately 525 feet above mean sea level (amsl) at the western end of the project to approximately 470 feet amsl at the southeastern terminus.

The project area contains one soil mapping unit: Guenoc gravelly silt loam, 5 to 30 percent slopes. The Guenoc series consist of moderately deep, well drained soils weathered from volcanic and metamorphic rocks, mainly basaltic rock. These soils occur on foothills and have slopes of 2 to 75 percent. In a representative profile, the surface layer (A-horizon) is dark reddish brown (2.5YR 3/4) clay loam with 10 percent subangular pebbles from 0 to 3 inches. This is underlain by Bt-horizon of dark reddish brown

(2.5YR 3/4) to dark red (2.5YR 3/6) clay to gravelly clay from 3 to 28 inches. This is underlain by hard, fractured basaltic bedrock at 28 inches and below.

LIQUEFACTION

Liquefaction is the process where water is combined with unconsolidated soils, generally from ground motions and pressure, which causes the soils to behave like quicksand. Liquefaction potential is determined from a variety of factors including soil type, soil density, depth to the groundwater table, and the expected duration and intensity of ground shaking. Liquefaction is most likely to occur in deposits of water-saturated alluvium or areas of considerable artificial fill.

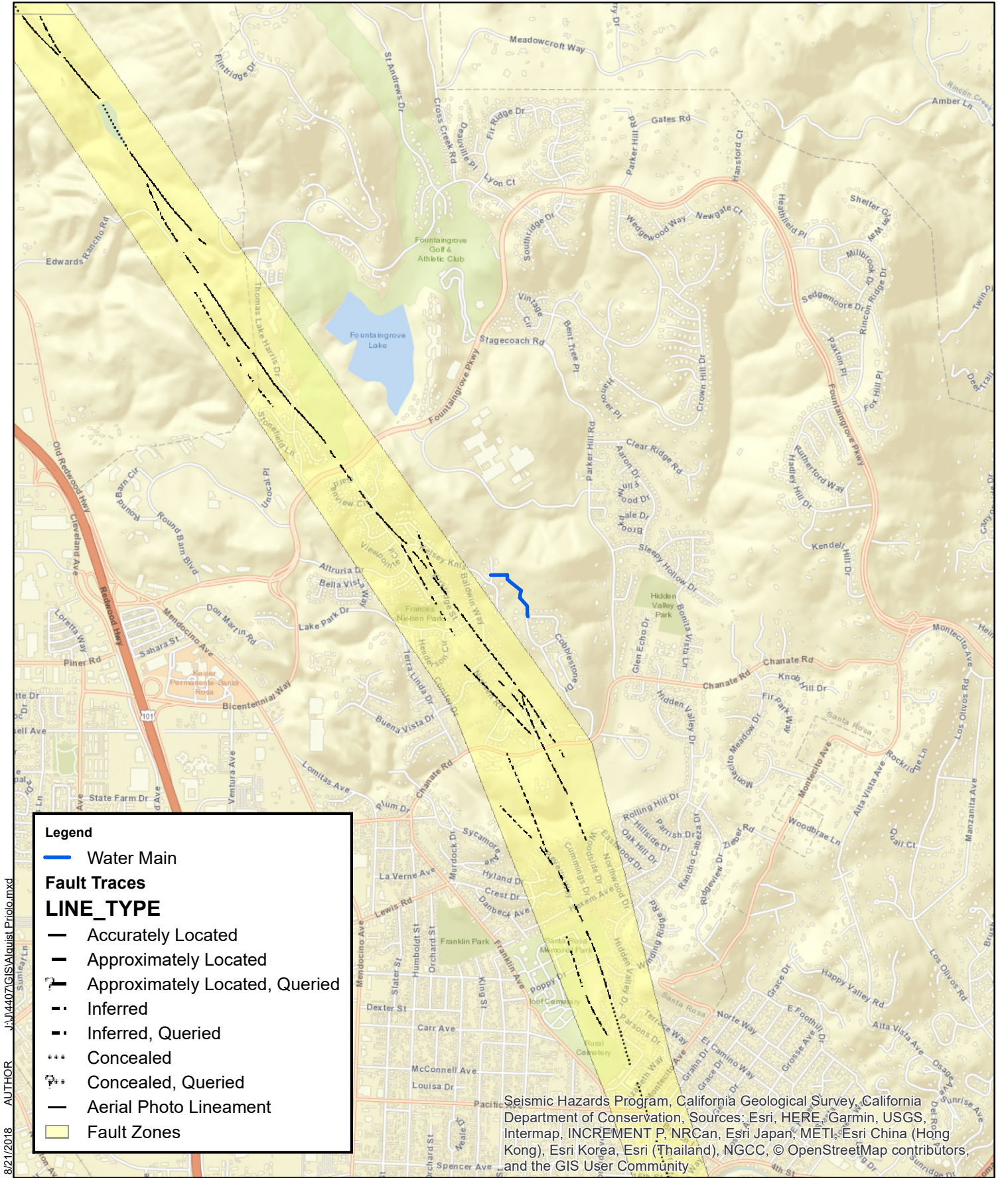
Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (prior to January 1, 1994, known as the Alquist-Priolo Special Studies Zones Act – CCR, Title 14, Section 3600) sets forth the policies and criteria of the State of California in regard to building within active fault zones mapped pursuant to the Act. The Alquist-Priolo Earthquake Fault Zoning Act outlines cities' and counties' responsibilities in prohibiting the location of developments and structures for human occupancy across the trace of active faults. The policies and criteria are limited to potential hazards resulting from surface faulting or fault creep within Earthquake Fault Zones delineated on maps officially issued by the State Geologist. Figure 9 shows the project relative to the nearest mapped fault zone. The proposed project is approximately 1,000 feet east of a designated Rodgers Creek fault rupture zone.

SEISMIC CONDITIONS

Similar to all of Sonoma County, the project area is within a seismically active area. The deformational processes and seismicity of the coast ranges immediately north of San Francisco Bay are dominated by the San Andreas fault system, a series of right lateral strike slip faults that include the San Andreas, Hayward-Rodgers Creek, Healdsburg, Mayacama, Concord- Green Valley, Cordelia, Konocti, Hunting Creek, and West Napa faults. The San Andreas Fault System is responding to the strain produced by the relative motions of the Pacific and North American Tectonic Plates. This strain is relieved by right lateral strike slip faulting on the San Andres and related faults. The effects of this deformation include mountain building, basin development, and generation of earthquakes.

Earthquakes of magnitude 6.5 or greater in the Coast Ranges immediately north of San Francisco Bay include the 1892 Winters/Vacaville Earthquakes (M6.6), associated with a system of low angle thrust faults along the western margin of Great Valley; the 1898 Mare Island Earthquake (M6.4), at the southern end of the Rodgers Creek fault; the 1906 San Francisco Earthquake (M7.8); and the 1923, 1994, and 1995 Cape Mendocino Earthquakes (M7.2, M7.1, and M6.8, respectively) on the northern segment of the San Andreas fault. In addition, the epicenters of the 1969 Santa Rosa Earthquake (M5.6) at the northern end of the Rodgers Creek fault occurred in close proximity to the project. The nearest faults considered to be 'Holocene-active' (experiencing surface rupture within about the last 11,000 years) are shown below and on Figure 10. Other faults in the project area are considered to be in the 700,000 to two million year old range and considered less likely to result in seismic activity. Faults with the potential to produce earthquakes are described below.



8/21/2018 AUTHOR J:\4407\GIS\Alquist Priolo.mxd

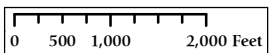
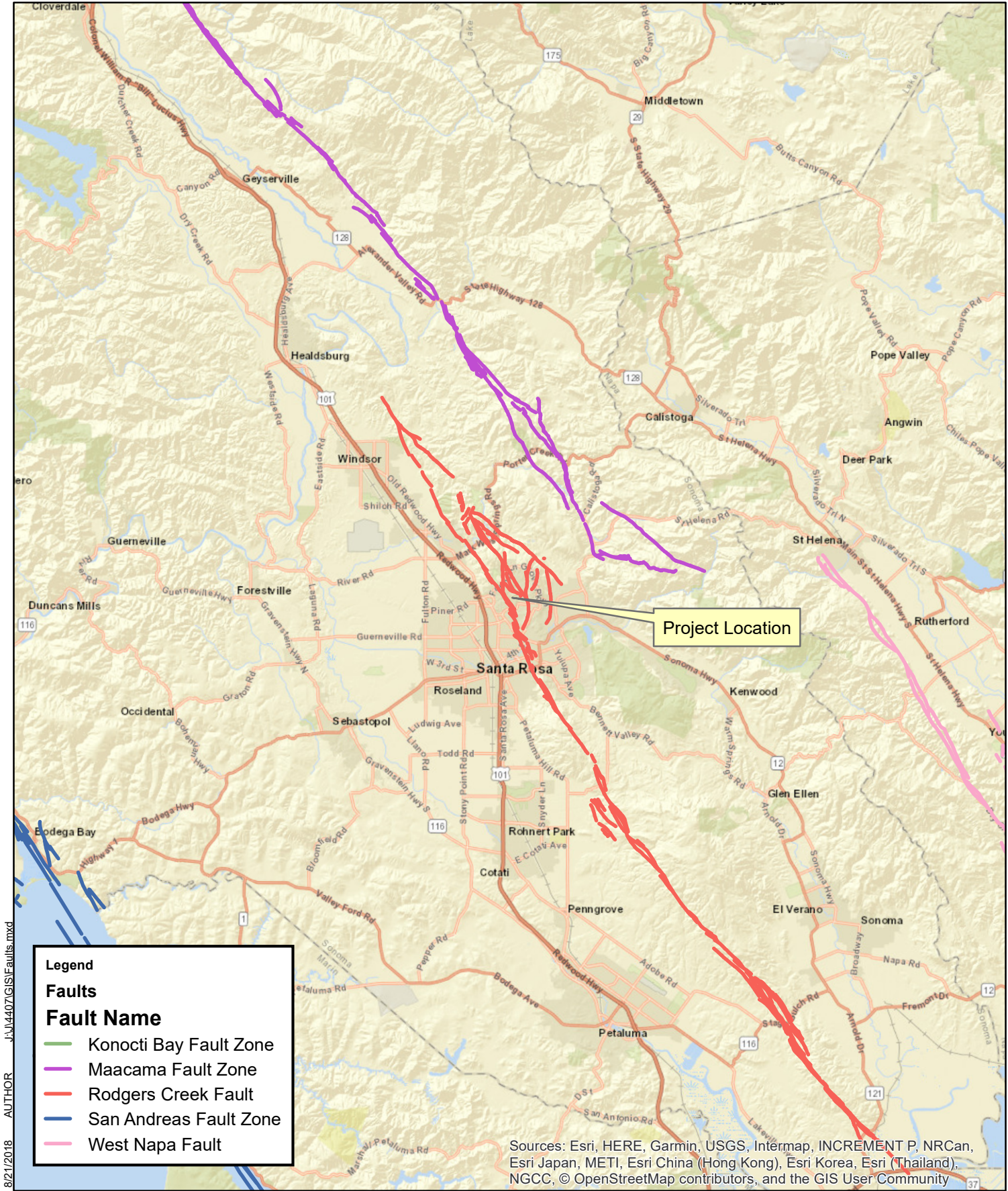


FIGURE 9

Alquist Priolo Fault Zones

**Cobblestone Drive
Zone R2-R4 Water Main Connection
August 2018**



8/21/2018 AUTHOR J:\4407\GIS\Faults.mxd

Legend

Faults

Fault Name	Color
Konocti Bay Fault Zone	Green
Maacama Fault Zone	Purple
Rodgers Creek Fault	Red
San Andreas Fault Zone	Blue
West Napa Fault	Pink

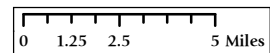


FIGURE 10
Earthquake Faults

Cobblestone Drive
Zone R2-R4 Water Main Connection
August 2018

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

Fault	Distance to Fault (miles)	Direction to Fault
Rodgers Creek	0.15	West
Mayacama	4	Northeast
W. Napa	23	Southeast
San Andreas	25	West
Konocti	30	North

Throughout Sonoma County and entire Northern California region, ground shaking from earthquakes represents a significant geologic hazard to developments. The intensity of ground shaking will be dependent on several factors such as: 1) distance from the site to the earthquake focus; 2) depth of earthquake focus; 3) earthquake magnitude; 4) response of the underlying soil and rock; and, 5) topography and local geologic structure.

Seismic Hazard Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC 2690 2699.6) is intended to reduce damage resulting from earthquakes. The Seismic Hazards Mapping Act addresses earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites in Seismic Hazard Zones until appropriate site-specific geologic or geotechnical investigations have been carried out, and measures to reduce potential damage have been incorporated into the development plans.

California Building Code

In addition to the requirements of the UBC, the California Code of Regulations, Title 24, also known as the California Building Standard Code or the California Building Code (CBC), establishes further guidance for foundation design, shear wall strength, and other structurally related concerns. The CBC modified UBC regulations for specific conditions found in California and included a large number of more detailed and/or more restrictive regulations. For example, CBC includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. The CBC requires structures to be built to withstand ground shaking in areas of high earthquake hazards and the placement of strong motion instruments in larger buildings to monitor and record the response of the structure and the site of the seismic activity. Compliance with CBC regulations ensures the adequate design and construction of building foundations to resist soil movement. In addition, the CBC also contains drainage requirements in order to control surface drainage and to reduce seasonal fluctuations in soil moisture content.

Analysis

- a. Would the project expose people or structures to 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.

LS As indicated on Figure 9, the project is located approximately 1,000 feet east of a designated Rogers Creek fault rupture zone. If the project were within the fault rupture zone, a registered geologist would be required to identify fault trace locations consistent with the Alquist Priolo Earthquake Fault Zoning Act. While the project is located outside of the mapped zone, a geotechnical assessment of the project alignment is being conducted and all recommendations will be incorporated into the project design. Due to the nature of the project and the incorporation of geotechnical recommendations, risk to the pipeline, people and structures from fault rupture is considered to be less than significant.

- ii. Strong seismic ground shaking?

LS As shown on Figure 10, the project is located approximately 1,000 feet easterly of the Rodgers Creek fault, a right lateral, en echelon, strike slip fault, believed to comprise the northern continuation of the Hayward fault zone. The surface expression of the fault extends from just north of Highway 37 on the south to approximately 3½ miles southeast of Healdsburg on the north. Geomorphic features in late Holocene alluvial deposits, including offset and beheaded streams, shutter ridges, pressure ridges, sag ponds and fault scarps, are indicative of Holocene activity. In addition, the epicenters of the 1969 Santa Rosa Earthquakes and the 1898 Mare Island Earthquake were located on the Rodgers Creek fault. As a result, the California Geological Survey (CGS) has zoned the Rodgers Creek fault as active. CGS has calculated a Mmax for the Rodgers Creek fault of 7.0.

The site is within an area affected by strong seismic activity with several northwest-trending Earthquake Fault Zones existing in close proximity to the alignment. Therefore, future seismic shaking should be anticipated along the alignment. It will be necessary to design and construct the proposed pipeline in strict adherence with current standards for earthquake-resistant construction and geotechnical recommendations. With these considerations, risk to the pipeline from strong seismic shaking is considered to be less than significant.

- iii. Seismic-related ground failure, including liquefaction?

LS As indicated in (ii.) above, seismic ground shaking could occur in the project area. Liquefaction is a rapid loss of shear strength experienced in saturated, predominantly granular soils below the groundwater level during strong earthquake ground shaking due to an increase in pore water pressure. The occurrence of this phenomenon is dependent

on many complex factors including the intensity and duration of ground shaking, particle size distribution and density of the soil. The proposed alignment is entirely located within the Guenoc soil series, typically underlain by bedrock and not susceptible to liquefaction.

Seismic slope failure or lurching/lateral spreading is a phenomenon that occurs during earthquakes when slopes or man-made embankments yield and displace in the unsupported direction. This phenomenon can occur in tandem with liquefaction. The project is located in an area of five to 30 percent slopes. Therefore, there is potential for lurching/lateral spreading along the pipeline alignment. Recommendations from the geotechnical assessment will be incorporated into project design to reduce the risk to the pipeline from seismic-related ground failure to less than significant.

iv. Landslides?

LS Published California Department of Conservation California Geological Survey maps do not indicate landslides in the project area. While the project is located on slopes, the pipeline will be designed and constructed according to geotechnical recommendations. Therefore, the risk of landslides impacting the proposed pipeline alignment is less than significant.

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

LSM The planned alignment is primarily in grassland or oak woodland. Surfaces will be restored to existing conditions once construction is complete to ensure there is no long-term erosion. There is the potential for short-term, construction-related erosion to occur. To ensure erosion is minimized to the extent practicable and does not enter waterways, an erosion control plan will be prepared. Mitigation Measure GS1 requires that those actions occur and will reduce any potential soil erosion impact to a less than significant level.

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

LS The proposed alignment is entire located within the Guenoc soil series, typically underlain by bedrock, generally considered to be stable. Geotechnical recommendations will be incorporated into project design and will reduce the potential for the project to cause or be impacted by on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse to less than significant.

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

NI As indicated in c.) above, soils at the project site will support the proposed project with appropriate engineering recommendations.

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

NI No alternative waste water disposal systems are associated with the project.

Cumulative Impacts

There are no adverse cumulative environmental impacts to geology and soils resulting from implementation of the proposed project.

Mitigation Measures

GS1 The City shall prepare an erosion control plan for the project. Appropriate BMPs will be implemented by the project to minimize construction-related erosion and runoff. Suggested BMPs include, but are not limited to:

- Schedule construction activities during dry weather. Keep grading operations to a minimum during the rainy season (October 1 through April 30).
- Protect and establish vegetation.
- Stabilize construction entrances and exits to prevent tracking onto roadways.
- Protect exposed slopes from erosion through preventative measures. Cover the slopes to avoid contact with storm water by hydroseeding, applying mulch or using plastic sheeting.
- Install straw wattles and silt fences on contour to prevent concentrated flow. Straw wattles should be buried 3 to 4 inches into the soil, staked every 4 feet, and limited to use on slopes that are no steeper than 3 units horizontal to 1 unit vertical. Silt fences should be trenched 6 inches by 6 inches into the soil, staked every 6 feet, and placed 2 to 5 feet from any toe of slope.
- Designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains. Maintain washout area and dispose of concrete waste on a regular basis.
- Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids. Use oil pans under stationary vehicles.
- Protect drainage inlets from receiving polluted storm water through the use of filters such as fabrics, gravel bags or straw wattles.
- Check the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.
- Inspect all BMPs before and after a storm event. Maintain BMPs on a regular basis and replace as necessary.

VII GREENHOUSE GAS EMISSIONS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Would the project Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

- a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

LS The project would result in short-term greenhouse gas (GHG) emissions associated with construction. Long-term GHG emissions associated with all the project will be unchanged since the project utilizes an intertie between pressure zones to increase pressure rather than a booster pump station (no additional energy inputs are required).

The BAAQMD provides useful guidance in assessing project impacts on GHGs. The BAAQMD's 2017 Air Quality Guidelines establish recommended thresholds of significance for GHGs for project operation for CEQA analysis but do not contain a threshold for project construction. The adjacent Sacramento Metropolitan Air Quality District has established 1,100 metric tons/year as its threshold of significance for construction-related GHG emissions¹¹. Project construction GHG emissions were modeled using the Roadway Construction Emissions Model developed by SMACMD for transportation and pipeline projects. Results of construction-related CO₂e emissions are shown below and are modeled to be 6.56 metric tons per year (MT/yr) CO₂e, under the 1,100 (MT/yr) threshold and therefore, less than significant. Because the project passively interties to existing water pressure zones, operational emissions will be unchanged and were not quantified.

¹¹ <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>

SMAQMD Thresholds of Significance			Project Emissions	
	Construction Average Daily Emissions (MT/yr)	Operational Annual Emissions (MT/yr)	RoadMod ¹² Construction Emission Estimates (MT/yr)	RoadMod Operational Emission Estimates (MT/yr)
GHG as CO ₂ e	1,100	1,100	6.56	Not quantified

Construction-related emissions are short-term and temporary and below the 1,100 metric tons/year threshold. Based on this, short-term emissions are therefore considered to be less than significant.

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

NI In 2006, the State of California passed the California Global Warming Solutions Act of 2006 (AB 32), which created a comprehensive, multi-year program to reduce GHG emissions in California. AB 32 required the California Air Resources Board (ARB or Board) to develop a Scoping Plan, adopted in 2008, that describes the approach California will take to reduce GHGs to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was updated in 2014. In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels by 2030.

The 2014 Scoping Plan indicates that:

Recognizing the important role local governments play in the successful implementation of AB 32, the initial Scoping Plan called for local governments to set municipal and communitywide GHG reduction targets of 15 percent below then-current levels by 2020, to coincide with the statewide limit. As California continues to build its climate policy framework, there is a need for local government climate action planning to adopt mid-term and long-term reduction targets that are consistent with scientific assessments and the statewide goal of reducing emissions 80 percent below 1990 levels by 2050. Local government reduction targets should chart a reduction trajectory that is consistent with, or exceeds, the trajectory created by statewide goals. Improved accounting and centralized reporting of local efforts, including emissions inventories, policy programs, and achieved emission reductions, would allow California to further incorporate, and better recognize, local efforts in its climate planning and policies.

The Scoping Plan recognizes that local GHG reduction commitments and climate action plans are essential to the state meeting its targeted emissions reductions.

¹² Roadway Construction Emissions Model v 8.1.0

The City adopted its Community Climate Action Plan (CAP) in 2012 that examines community-wide sources of GHG emissions and outlines strategies for reducing these emissions. The City developed its Municipal Operations Climate Plan in 2013¹³. The MCAP identifies projects, practices, and programs that will enable the City to cost-effectively and efficiently reduce GHG emissions from municipal operations and activities. Water and wastewater operations represent approximately one percent of community-wide GHG emissions by sector.

This project was not identified by the MCAP as a way to reduce water system operation-associated GHGs. The project would result in short-term greenhouse gas (GHG) emissions associated with project construction, as described above. The project would not result in additional long-term operational emissions of GHGs due to the passive intertie nature of the project and would therefore not conflict with the MCAP.

Cumulative Impacts

As indicated in a). above, the project will result in the short-term emission of GHGs associated with project construction, well below the 1,100 (MT/yr) threshold. Because construction-related GHG emissions are short-term, temporary and below the threshold and operational emissions will be unchanged, GHG emissions associated with the project are not considered to be cumulatively considerable.

Mitigation Measures

No adverse environmental impacts to greenhouse gas emissions have been identified; therefore, no mitigation is required.

¹³ Municipal Operations Climate Action Plan. City of Santa Rosa. August 6, 2013.

VIII HAZARDS & HAZARDOUS MATERIALS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

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

NI As a water pressure zone intertie project, there is no routine transport, use or disposal of hazardous materials associated with this project. Construction of the proposed project would include the use and short-term storage of construction-related hazardous materials. These materials include, but are not limited to, lubricants, adhesives, paints, asphalt, and toxic solvents. The proposed project is required to comply with federal, state, and local regulations regarding the storage, handling, disposal, and cleanup of hazardous materials. The project will

not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

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

LSM As indicated above, the project will not introduce new hazardous materials or hazardous materials handling. As with any construction project, there is the potential for a fuel/oil spill during construction from construction vehicles and equipment. Mitigation Measure HM1 will reduce such impact to a less than significant level.

- c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

NI As indicated above, the project will not result in emissions or handling of hazardous materials.

- d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

LSM The proposed project is not within 1,000 feet of any location identified by the State Water Resources Control Board GeoTracker system, as shown on Figure 11, and is unlikely to encounter any contamination associated with those sites. There is the possibility with any construction project that contaminated soils will be found during construction. In that event, Mitigation Measure HM1 requires the contractor to cease work and contact the City to develop a plan to dispose of the soils and ensure worker safety and protection of the environment.

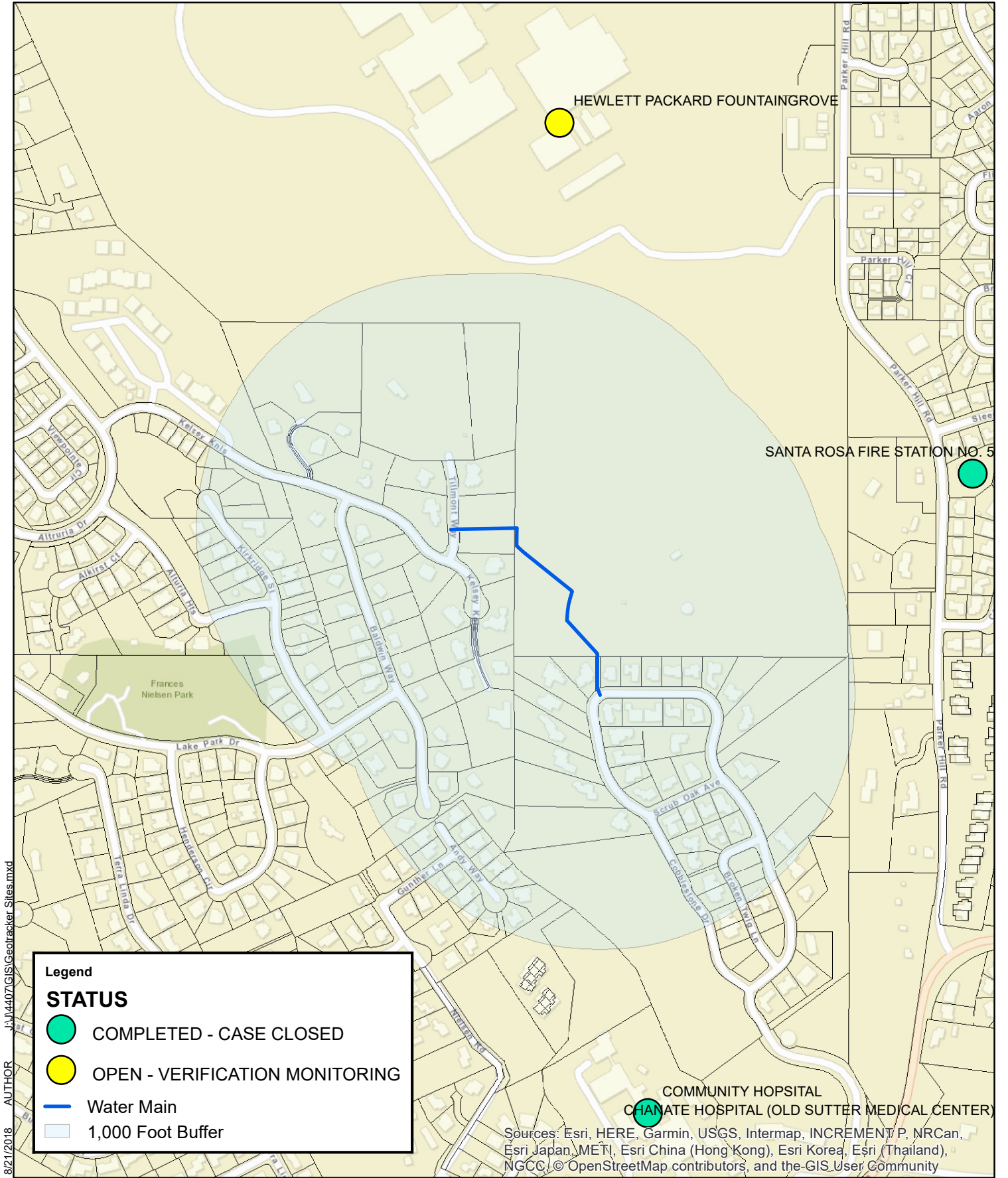
- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

NI There are no public use airports within two miles of the project area. The closest airport is the Sonoma County Airport located approximately five miles northwesterly of the project¹⁴. The project will not pose any increased risk to or from air traffic.

- f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

NI The project is not located in the vicinity of a private airstrip and is entirely within the developed area of Santa Rosa.

¹⁴ *Comprehensive Airport Land Use Plan for Sonoma County*. 2016. Airport Land Use Commission.



8/21/2018 AUTHOR J:\14407\GIS\Geotracker_Sites.mxd

Legend

STATUS

- COMPLETED - CASE CLOSED
- OPEN - VERIFICATION MONITORING
- Water Main
- 1,000 Foot Buffer

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

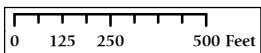


FIGURE 11
Hazardous Materials Sites

Cobblestone Drive
Zone R2-R4 Water Main Connection
August 2018

- g. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

NI The project will not impair an adopted emergency response or evacuation plan. Minor portions of the project that will be constructed in public roadways will be required to maintain emergency access by Mitigation Measure TT1 contained in the Traffic and Transportation section of this document.

- h. Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

NI The likelihood of a wildland fire at the project site is high. The project site and surrounding areas were impacted by the October 2017 Tubbs fire. The project area is designated by the City as a wildland-urban interface zone. The project objective is to improve water pressure in the Cobblestone Drive area for firefighting, considered a beneficial impact.

Cumulative Impacts

There are no adverse cumulative environmental impacts to or from hazards/hazardous materials resulting from implementation of the proposed project.

Mitigation Measures

HM1 The contractor shall be required to follow the provisions of § 5163 through 5167 of the General Industry Safety Orders (California Code of Regulations, Title 8) to protect the project area from being contaminated by accidental release of any hazardous materials. If hazardous materials are encountered during construction or occur as a result of an accidental spill, the contractor shall halt construction immediately, notify the City, and implement remediation in accordance with the project specifications and applicable requirements of the North Coast Regional Water Quality Control Board. Disposal of all hazardous materials shall be in compliance with current California hazardous waste disposal laws.

IX HYDROLOGY & WATER QUALITY

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or 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 type="checkbox"/>	<input checked="" type="checkbox"/>
e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Would the project otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Would the project be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SURFACE WATER

The proposed project site is located within the Russian River watershed. An unnamed intermittent drainage crosses through a portion of the project site. The surrounding project area is developed with residential uses, roadways and storm drain facilities. Stormwater in the project area is directed via the City's storm drain network and conveyed to Russel Creek or Paulin Creek. There are no designated wild or scenic rivers in the project area.

FEDERAL REGULATIONS

Clean Water Act

Important applicable sections of the federal CWA (33 USC 1251–1376) are identified below:

- Sections 303 and 304 provide water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of CWA. Certification is provided by the Regional Board.
- Section 402 establishes the NPDES permitting system for the discharge of any pollutant (except for dredged or fill material) into waters of the United States. This permit program is administered by the Regional Board.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) is responsible for implementing the Clean Water Act and issues NPDES permits to cities and counties through regional water quality control boards. The project location is regulated by the North Coast Regional Water Quality Control Board (Regional Board).

The SWRCB has issued a statewide General Permit (Water Quality Order No. 99-08-DWQ) for construction activities within the state. The Construction General Permit (CGP) is implemented and enforced by the RWQCBs. The CGP applies to construction activity that disturbs one acre or more and requires the preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that identifies best management practices (BMPs) to minimize pollutants from discharging from the construction site to the maximum extent practicable.

STATE REGULATIONS

Porter-Cologne Water Quality Act

The State of California's Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.) provides the basis for water quality regulation in California. This Act requires a Report of Waste Discharge for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the state. Based on the report, the Regional Boards issue waste discharge requirements to minimize the effect of the discharge.

LOCAL REGULATIONS

The City has developed its 2017 Storm Water Low Impact Development Technical Design Manual (LID Manual) to satisfy the Regional Board's Order No. R1-2015-0030, NPDES NO. CA0025054 National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems. The LID Manual provides technical guidance for project designs that require the implementation of permanent storm water Best Management Practices (BMPs), defined as permanent storm water BMPs that treat or retain storm water through a soil filter media and/or vegetation and/or retain storm water runoff onsite through infiltration or evapotranspiration. This requirement is triggered by project creating or replacing 10,000 or more square feet of impervious surface.

Analysis

- a. Would the project violate any water quality standards or waste discharge requirements?

NI The project will not result in violation of water quality standards or waste discharge requirements. The water pressure zone intertie will not alter or violate existing water quality standards or waste discharge requirements that the City operates under. Crossing the small intermittent drainage on the site may require a Waiver of Waste Discharge Requirements permit from the Regional Board, as described in the Biological Resources section, but will not result in waste discharge requirements.

- b. Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

NI The project provides an intertie between two existing water pressure zones, is not growth inducing and will not impact existing water demands or groundwater levels in the project area or elsewhere. The project does not introduce any significant impervious surfaces and will not substantially interfere with groundwater recharge.

- c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

NI The project will not substantially alter the existing project area drainage. As indicated in the Biological Resources section of this document, the intertie will cross a small ephemeral drainage that runs parallel to the existing gravel road. The drainage will be restored upon project completion, according to permits if they are required. The project will not alter the course of any stream or river.

- d. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

NI As indicated in c.) above, the project will restore existing surfaces and will not permanently alter drainage patterns along its alignment.

- e. Would the project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

NI The project will not result in runoff that would exceed the capacity of the existing City storm drain system. Pervious and impervious surfaces disturbed by construction of the project will be restored to their previous condition and will not result in any significant change in stormwater runoff. Similarly, the nature of the runoff will be substantially the same and the project will not provide additional sources of polluted runoff. The disturbed area is below the one-acre General Construction Permit threshold and below the LID Manual threshold of 10,000 square feet of impervious surface.

- f. Would the project otherwise substantially degrade water quality?

LSM Mitigation Measure GS1 contained in the Geology & Soils section of this document requires that an erosion control plan be prepared to reduce any potential soil erosion impact to a less than significant level. The project will not otherwise introduce new pollutants that would substantially degrade water quality. The disturbed area is below the one-acre General Construction Permit threshold and below the LID Manual threshold of 10,000 square feet of impervious surface.

- g. Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

NI The project area is not located within a 100-year flood hazard area and does not include construction of housing.

- h. Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

NI As indicated above, the project area is not located within a 100-year flood hazard area.

- i. Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

NI The project is not at significant risk from flooding as the result of the failure of a levee or dam. No such features existing in the project vicinity and the project will be underground.

- j. Would the project be subject to inundation by seiche, tsunami, or mudflow?

NI The project is not in an area subject to inundation by seiche, tsunami or mudflows.

Cumulative Impacts

There are no adverse cumulative environmental impacts to hydrology/water quality resulting from implementation of the proposed project.

Mitigation Measures

GS1 The City shall prepare an erosion control plan for the project. Appropriate BMPs will be implemented by the project to minimize construction-related erosion and runoff. Suggested BMPs include, but are not limited to:

- Schedule construction activities during dry weather. Keep grading operations to a minimum during the rainy season (October 1 through April 30).
- Protect and establish vegetation.
- Stabilize construction entrances and exits to prevent tracking onto roadways.
- Protect exposed slopes from erosion through preventative measures. Cover the slopes to avoid contact with storm water by hydroseeding, applying mulch or using plastic sheeting.
- Install straw wattles and silt fences on contour to prevent concentrated flow. Straw wattles should be buried 3 to 4 inches into the soil, staked every 4 feet, and limited to use on slopes that are no steeper than 3 units horizontal to 1 unit vertical. Silt fences should be trenched 6 inches by 6 inches into the soil, staked every 6 feet, and placed 2 to 5 feet from any toe of slope.
- Designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains. Maintain washout area and dispose of concrete waste on a regular basis.
- Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids. Use oil pans under stationary vehicles.
- Protect drainage inlets from receiving polluted storm water through the use of filters such as fabrics, gravel bags or straw wattles.
- Check the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.
- Inspect all BMPs before and after a storm event. Maintain BMPs on a regular basis and replace as necessary.

X LAND USE & PLANNING

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

- a. Would the project physically divide an established community?

NI The project will not physically divide an established community. The proposed water pressure zone intertie is intended to address an identified pressure deficiency for fire protection. The water intertie will be constructed below ground and surfaces will be restored.

- b. Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

NI The project will not conflict with any applicable land use plan, policy or regulation. The project responds to identified City infrastructure improvement needs.

- c. Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

NI The project is not within a habitat conservation plan or natural community conservation plan.

Cumulative Impacts

There are no adverse cumulative environmental impacts to land use and planning resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to land use and planning have been identified; therefore, no mitigation is required.

XI MINERAL RESOURCES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

NI The project site does not include any known mineral resource that would be of value to the region and the residents of the state. The project will not affect the availability of any such resource.

- b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

NI The project area is not delineated in the City's General Plan as a locally important mineral resource recovery site.

Cumulative Impacts

There are no adverse cumulative environmental impacts to mineral resources resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to mineral resources have been identified; therefore, no mitigation is required.

XII NOISE

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in exposure of persons to or generation of noise levels 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. Would the project result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<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 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"/>
f. For a project within the vicinity of a private airstrip, 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"/>

Analysis

- a. Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

LSM The project will not result in any long-term increases in noise levels in the project vicinity. The project is a water line project that interties two existing water pressure zones and noise is not typically associated with operation of such facilities. Because the project is using a passive intertie to increase water pressure zone pressures, the project does not involve the use of booster pump stations.

Construction of the project will result in short-term noise. The City's ambient noise levels associated with zoning districts is shown below (Santa Rosa City Section Code 17-16.030). Code Section 17-16.120 states: 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 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. City Code Section 17-16.150 "Motor-driven vehicles-Noise" provides vehicle noise level limitations as set forth in Section 23130 of California Vehicle Code. This allows for higher noise levels for vehicles.

Zone	Time	Sound Level A (decibels) Community Environment Classification
R1 and R2	10 p.m. to 7 a.m.	45
R1 and R2	7 p.m. to 10 p.m.	50
R1 and R2	7 a.m. to 7 p.m.	55
Multi-family	10 p.m. to 7 a.m.	50
Multi-family	7 a.m. to 10 p.m.	55
Office & Commercial	10 p.m. to 7 a.m.	55
Office & Commercial	7 a.m. to 10 p.m.	60
Intensive Commercial	10 p.m. to 7 a.m.	55
Intensive Commercial	7 a.m. to 10 p.m.	65
Industrial	Anytime	70

The Federal Highway Administration provides noise levels associated with typical construction equipment in its Construction Noise Handbook¹⁵. Those noise levels are provided below.

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	81
Backhoe	80
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Crane Mobile	83
Generator	81
Jack Hammer	88
Loader	85
Mounted Impact Hammer (Rock Hammer)	90
Paver	89
Pump	76
Roller	74
Saw	76
Truck	88

¹⁵ https://www.fhwa.dot.gov/Environment/noise/construction_noise/handbook/handbook09.cfm

Based on the above typical noise levels, construction activities are expected to result in a temporary increase in noise levels that exceed the City's established noise criteria by five decibels. Adjacent residences would be exposed to non-attenuated construction noise. However, no one location will be adjacent to excessive noise levels for more than a few days at a time over the course of the one month construction window. The rock hammer would only be used intermittently (if at all) if rocks or cobbles are encountered within the trench that could not be avoided. While construction-related noise will likely exceed the City's thresholds, Mitigation Measure N1 will reduce such temporary construction-related noise to a less than significant level.

- b. Would the project result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?

LS Implementation of the project will not result in the exposure of people to or the generation of long-term groundborne vibration or noise levels associated with the project. If cobbles or rocks are encountered in the trench and the pipeline cannot be realigned to avoid them, the use of a rock hammer or rock wheel may be necessary for isolated locations to fracture the rock for removal from the trench. It is expected that approximately 100 to 150 feet of pipeline will be installed per day, so intermittent use of these technologies would limit any exposure to ground borne vibration over the project alignment and would only be employed, as needed, during excavation. Additionally, construction times would be limited by Mitigation Measure N1 to typical daytime construction hours. Due to the limited potential for exposure to vibration that might be associated with intermittent use of a rock hammer and the short day-time construction window, this impact considered to be less than significant.

- c. Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

NI As stated above, the project will not result in a significant long-term increase in ambient noise levels. The project will not increase ambient noise levels in any appreciable way.

- d. Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

NI With the exception of the construction period, the project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity. See (a.) above.

- 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 expose people residing or working in the project area to excessive noise levels?

NI There are no public use airports within two miles of the project area. The closest airport is the Sonoma County Airport located approximately five miles northwest of the project. The project will not alter the existing noise environment resulting from air traffic.

- f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

NI The project is not in the vicinity of a private airstrip.

Cumulative Impacts

There are no adverse cumulative environmental impacts to noise resulting from implementation of the proposed project.

Mitigation Measures

No adverse long-term environmental impacts to noise have been identified; therefore, only construction phase mitigation is required.

N1 The following measures shall be implemented at the construction site to reduce the effects of construction noise on adjacent residences:

- Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way shall generally be restricted to the hours of 7:00 a.m. to 7:00 p.m, or as allowed by City code. Any work outside of these hours should require a special permit from the City Engineer. There should be a compelling reasons for permitting construction outside the designated hours.
- The City shall provide notice to all residences within 500 feet of the construction activities at least 48 hours prior to commencing construction. The notice shall include the contact information for the City’s noise disturbance coordinator and the anticipated construction schedule.
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines shall be strictly prohibited.
- Staging of construction equipment and all stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be staged as far as practical from existing sensitive noise receptors.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Control noise from construction workers’ radios to the point where radio noise is not audible at existing residences bordering the project site.
- A sign providing contact information for the construction manager shall be posted onsite of construction-related questions/complaints.

XIII POPULATION & HOUSING

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Analysis

- a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

NI The project will not induce population growth. The project is intended to correct an identified water pressure deficiency in the existing water pressure zones.

- b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

NI No housing would be displaced by the project.

- c. Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

NI The project will not require the construction of replacement housing elsewhere.

Cumulative Impacts

There are no adverse cumulative environmental impacts to population and housing resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to population and housing have been identified; therefore, no mitigation is required.

XIV PUBLIC SERVICES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

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

- i. Fire protection?

NI The project will not have a significant negative effect on fire protection services. The project will increase pressure in the water pressure zone on Cobblestone Drive to improve fire protection, a beneficial impact.

- ii. Police protection?

NI The project will not have a significant impact on police protection.

- iii. Schools?

NI The proposed improvements are not located adjacent to any schools and will not otherwise negatively impact schools in the area.

- iv. Parks?

NI The project will have no impact on parks.

v. Other public facilities?

NI The project will not impact other public facilities.

Cumulative Impacts

There are no adverse cumulative environmental impacts to public services resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to public services have been identified; therefore, no mitigation is required.

XV RECREATION

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Analysis

- 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?

NI The project is not growth inducing and will not have a significant impact on recreational facilities. The project improves existing infrastructure in the project area.

- 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?

NI The project does not include or require expansion of recreational facilities.

Cumulative Impacts

There are no adverse cumulative environmental impacts to recreation resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to recreation have been identified; therefore, no mitigation is required.

XVI TRANSPORTATION/TRAFFIC

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	■	<input type="checkbox"/>	<input type="checkbox"/>
c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
e. Would the project result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Analysis

- a. Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

NI The project does not conflict with an applicable transportation plan, ordinance or policy. The project will not have any long-term impacts to transportation.

- b. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

LSM The project does not increase vehicle trips to or from the project area. Upon project completion, roadway surfaces associated with the minor portions of the project occurring in Cobblestone Drive and Tillmont Way will be restored to existing conditions. Therefore, the proposed project does not conflict with any applicable congestion management program.

Construction will reduce access in those areas to vehicle, pedestrian and bike traffic. Standard traffic control mitigation provided in TT1 will reduce these impacts along Cobblestone Drive and Tillmont Way and ensure access to driveways when active construction is not underway.

- c. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

NI The project will have no impact on air traffic patterns.

- d. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

NI The project will not increase design hazards. Road surfaces will be restored to existing conditions in the minor portions of the pipeline constructed in roadways.

- e. Would the project result in inadequate emergency access?

NI The project will not have any long-term impact to emergency access since roadways will be restored to existing conditions. The traffic control plan will ensure emergency access is maintained.

- f. Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

NI The project will not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. The project will be underground.

Cumulative Impacts

There are no adverse cumulative environmental impacts to transportation/traffic resulting from implementation of the proposed project.

Mitigation Measures

- TT1** The contractor shall develop and submit an appropriate Traffic Control Plan (TCP) in accordance with the California Manual of Uniform Traffic Control Devices (MUTCD) for review and approval by the City for those portions of the project that impact traffic circulation. The TCP shall ensure thru traffic, and temporary driveway access during periods where active construction is not taking place. Emergency access shall be maintained at all times.

XVII TRIBAL CULTURAL RESOURCES

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 Resources 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"/>

REGULATORY SETTING

Assembly Bill 52 (AB 52), the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. AB52 established a formal consultation process for California Native American Tribes to be conducted with the CEQA process. All projects that file a notice of intent to adopt a mitigated negative declaration after July 1, 2016, are subject to AB 52 which added tribal cultural resources (TCR) protection under CEQA. A TCR is defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American Tribe or the lead agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB 52 also mandates lead agencies to consult with tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Analysis

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).

LSM As described in the Cultural Resources section, Tom Origer & Associates completed a cultural resources study for the project that did not identify recorded tribal cultural resources or evidence of such in the field survey. As part of the AB52 tribal consultation process, project information and the cultural resources report were sent via certified mail to the following tribes (identified by the Native American Heritage Commission) by the City on July 23, 2018:

- 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

On August 2, 2018, Buffy McQuillen, Tribal Heritage Preservation Office, of the Federated Indians of Graton Rancheria responded to the City via email that they had received the AB52 notification and would provide any comments within ten days. On October 11, 2018, Ms. McQuillen responded via email indicating there is a possibility for an inadvertent discovery of cultural resources and requested that the project have a notification provision to contact the FIGR Tribal Heritage Preservation Officer (THPO) if cultural resources are encountered during any ground disturbing activities. This information has been included in mitigation measure CR1, contained in the Cultural Resources section of this document.

On August 23, 2018, Lorin Smith, Tribal Historic Preservation Office of the Stewarts Point Kashia Band of Pomo Indians responded by email that the project is outside of their aboriginal territory and did not have any comments.

No further comments have been received by the City as of the date of publication of this Initial Study. No tribes have responded requesting to enter into consultation under AB52 and no tribal cultural resources have been identified.

- b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

LSM The cultural resources study for the project did not identify recorded tribal cultural resources or evidence of such in the field survey. None of the tribes contacted by Tom Origer & Associates or by the City have responded indicating knowledge of tribal cultural resources in the project area.

There is always the possibility of accidental discovery of archaeological resources during construction. In the event resources are discovered, implementation of mitigation measure CR1, contained in the Cultural Resources section, will reduce such impact to less than significant.

Cumulative Impacts

There are no adverse cumulative environmental impacts to tribal cultural resources resulting from implementation of the proposed project.

Mitigation Measures

CR1 The project plans and specifications shall provide that in the event prehistoric-era or historic-era archaeological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. Prehistoric-era archaeological site indicators could include chipped chert and obsidian tools and tool manufacture waste flakes, grinding implements such as mortars and pestles, and locally darkened soil containing the previously mentioned items as well as fire altered stone and dietary debris such as bone and shellfish fragments. Historic-era archaeological site indicators could include items of ceramic, glass and metal, and features such as structural ruins, wells and pits containing such artifacts. After cessation of excavation, the contractor shall immediately contact the City. The City shall contact a qualified professional archaeologist immediately after the find. Such archaeologist shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The City shall also contact Buffy McQuillen, Tribal Heritage Preservation Officer (THPO) of the Federated Indians of Graton Rancheria, 6400 Redwood Drive, Suite 300, Rohnert Park, CA 94928, (707)566-2288 ext. 137. The contractor shall not resume construction activities until authorization to proceed is received from the City.

XVIII UTILITIES & SERVICE SYSTEMS

	Potentially significant impact	Less than significant impact with mitigation incorporation	Less than significant impact	No impact
a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■
g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	■

Analysis

- a. Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

NI The project would not exceed wastewater treatment requirements of the Regional Board. The project is a water pressure zone intertie project that does not promote growth in the project area. The project will not alter the City's wastewater treatment plant operations.

- b. Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

NI The project itself will not increase demand for water. The City plans for growth through its General Plan. The City will implement water system capacity and supply improvements according to its Urban Water Management Plan (UWMP) that provides an assessment of the

City's water system, including water supply and demand conservation programs. This project does not alter the UWM or require new water treatment facilities.

- c. Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

NI The project will not impact storm water drainage facilities in the project area. The project does not introduce any new impervious surfaces or alter local drainage patterns in a way that would impact existing storm water facilities.

- d. Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

NI As indicated in b.) above, the City's UWMP plans for water supplies to meet future growth. The project itself will not alter the need for water supply.

- e. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

NI The project is not growth inducing and will not impact the City's wastewater treatment. Planned growth and associated increased wastewater treatment are addressed by the City's General Plan and Master Plan Update.

- f. Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

NI The project will generate spoils during construction that will be stockpiled for reuse by the City or contractor, according to regulations. No increase in solid waste generation will occur as the project will not increase solid waste demands above those associated with existing conditions.

- g. Would the project comply with federal, state, and local statutes and regulations related to solid waste?

NI The project will comply with federal, state and local statutes and regulations related to solid waste.

Cumulative Impacts

There are no adverse cumulative environmental impacts to utilities and service systems resulting from implementation of the proposed project.

Mitigation Measures

No adverse environmental impacts to utilities and service systems have been identified; therefore, no mitigation is required.

XVIV MANDATORY FINDINGS OF SIGNIFICANCE

- a. Does the project have the potential to 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, 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?

With implementation of the mitigation measures provided in this document, the project is not expected to have a significant adverse impact on the habitat of any plant or animal species or humans. Furthermore, the project would not substantially degrade the environment or reduce the level of an endangered or otherwise important plant or animal population below self-sustaining levels. This impact is considered less than significant with incorporation of the proposed mitigation measures.

- 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)?

Implementation of the proposed mitigation measures would reduce impacts to less than significant levels. Because no impact is considered to be individually significant, there would be no contribution to a significant cumulative effect. Therefore, this impact is less than significant with incorporation of the proposed mitigation measures.

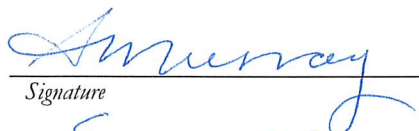
- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?


With implementation of the mitigation measures provided in this document, the project is not expected to have a significant adverse impact on humans. Furthermore, the project would not substantially degrade the environment. This impact is considered less than significant with incorporation of the proposed mitigation measures.

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 measures 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.



Signature


Printed Name



Date
For:
City of Santa Rosa

DOCUMENT PREPARATION AND SOURCES

A Historical Resources Survey for the Cobblestone Drive Zone R2-R4 Water Main Connection Project. Tom Origer & Associates. July 12, 2018.

Biological Resources Assessment Cobblestone Drive R2-R4 Water Main Connection Project. WRA, Inc. August 2018.

California Environmental Quality Act Guidelines. 2017.

California Environmental Quality Act Air Quality Guidelines. Bay Area Air Quality Management District. May 2017.

City of Santa Rosa GIS

Comprehensive Airport Land Use Plan for Sonoma County. 2016. Airport Land Use Commission.

Fault-rupture Hazard Zones in California. Special Publication 42. Revised 1997. Department of Conservation, Division of Mines and Geology. Revised Santa Rosa Quadrangle. 1983.

Municipal Operations Climate Action Plan. City of Santa Rosa. August 6, 2013.

Paleontological Collecting. 1987. National Academy Press. Washington, DC.

Sonoma County Important Farmland—2014. California Resources Agency. Department of Conservation.

Tree Survey Report, Cobblestone Drive R2-R4 Water Main Connection Project. WRA Environmental Consultants. August 2018.

Prepared by:

Justin Witt—Environmental Planner

APPENDIX A: MITIGATION MONITORING AND REPORTING PLAN

Cobblestone Drive Zone R2-R4 Water Main Connection

June 2019

Pursuant to Section 21081.6 of the State CEQA Guidelines¹, the mitigation measures listed in this Mitigation Monitoring and Reporting Plan (MMRP) are to be implemented as part of the proposed project. The MMRP identifies the time at which each mitigation measure is to be implemented and the person or entity responsible for implementation. The initials of the designated responsible person will indicate completion of their portion of the mitigation measure. The City of Santa Rosa (City) project manager's signature on the Certification of Compliance will indicate complete implementation of the MMRP.

The mitigation measures included in the MMRP are considered conditions of approval of the proposed project. The City agrees to implement the mitigation measures proposed in the MMRP. Implementation of the mitigation measures included in the MMRP is expected to avoid, minimize, rectify, reduce, or compensate potentially significant impacts to a less than significant level.

TIME OF IMPLEMENTATION

Project Design: The mitigation measure will be incorporated into the project design and/or included in the project specifications and contract special provisions prior to issuing final permits.

Pre-construction: The mitigation measure will be implemented prior to project construction.

Construction: The mitigation measure will be implemented during construction.

RESPONSIBLE PERSONS AND DEPARTMENTS

The City as Lead Agency will be responsible for the overall implementation of the MMRP. The City's project manager will oversee the project's compliance with the MMRP. The City's project manager will sign off on the mitigation measures included in the MMRP. Periodically, other City staff, consultants or regulatory agencies will be involved in the implementation of specific mitigation measures. In these instances, the staff, department, or agency will be identified in the MMRP.

CERTIFICATION OF COMPLIANCE

The City will be responsible for providing signatures on the Certification of Compliance. The Certification of Compliance is a double-check to ensure that the MMRP was fully implemented.

RECORD KEEPING

The City's project manager will maintain the records of the MMRP. When the MMRP is fully implemented, the original signed copy will be maintained by the City.

¹ California Code of Regulations Title 14.

CERTIFICATION OF COMPLIANCE

Complete the Certification of Compliance after mitigation measures have all been initialed. Use this Certification of Compliance to ensure the full implementation of each mitigation measure.

Project Design

The City’s project manager has reviewed the project design, the plans, and the contract special provisions to verify that designated mitigation measures have been incorporated.

Signature & title *Date*

Pre-construction

The City’s project manager has verified that designated mitigation measures were implemented prior to construction.

Signature & title *Date*

Construction

The City’s project manager has verified that designated mitigation measures were implemented during construction.

Signature & title *Date*

AIR QUALITY

AQ1 *The following Feasible Control Measures, as described by the Bay Area Air Quality Management District, shall be implemented during construction to minimize fugitive dust and emissions:*

- *All 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 mph.*
- *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.*
- *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 [CCR]). 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.*
- *Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.*

Implementation & Monitoring

Project Design: The City's project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Construction: The City's project manager or City grading inspector and building inspector(s) shall ensure that Mitigation Measure AQ1 is being complied with during construction. Failure to comply shall result in issuance of a stop work order until corrective action has been taken.

Initials *Date*

BIOLOGICAL RESOURCES

BIO1 *Special-Status Plants: The project potentially will impact special-status plant species. One special-status plant species, narrow-anthered brodiaea, was observed in the western portion of the project area. Six additional special-status plant species have a moderate or high potential to occur: Franciscan onion, bent-flowered fiddleneck, Jepson's leptosiphon, Mt. Diablo cottonweed, Brewer's milk vetch, and bristly leptosiphon. Two follow-up protocol-level rare plant surveys shall be conducted during the peak blooming periods of these species (April and May) to determine presence or absence within the project area, and to document the full extent of narrow-anthered brodiaea in the project area.*

Following the spring plant surveys, special-status species that are determined to be within the limit of grading and adversely impacted shall be replaced by expanding population in suitable adjacent areas. A qualified biologist shall determine the level of impacts and develop a habitat mitigation and monitoring plan (HMMP) to offset the impacts to special-status plant species. This plan would likely recommend using unoccupied and preserved portions of the project area to maintain or expand populations of the special-status plants that may occur on-site. The HMMP shall include but not be limited to collection, salvage, storage, reintroduction, and monitoring of existing special-status plant populations. With the implementation of measures outlined in an HMMP to offset special-status plant impacts, this impact would be less-than-significant.

Implementation & Monitoring

Project Design: The City's project manager will verify that the mitigation measure is implemented and results are incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials

Date

Pre-construction: The City's project manager shall ensure that Mitigation Measure BIO1 is being complied with prior to construction.

Initials

Date

BIO2 *Special-Status and Non-Status Nesting Birds: The following measures shall be implemented to avoid impacts to white-tailed kite, oak titmouse, Allen's hummingbird, Nuttall's woodpecker, and other nesting birds protected by the MBTA and CFGC:*

- If ground disturbance or vegetation removal is initiated in the non-breeding season (September 1 through January 31), no pre-construction surveys for nesting birds are required and no adverse impact to birds would result.*
- If ground disturbance or removal of vegetation occurs in the breeding bird season (February 1 through August 31), pre-construction surveys shall be performed by a qualified biologist no more than 14 days prior to commencement of such activities to determine the presence and location of nesting bird species. If active nests are present, temporary no-work buffers shall be placed around active nests to prevent adverse impacts to nesting birds. Appropriate buffer distance shall be determined by a qualified biologist and is dependent on species, surrounding vegetation, and topography. Once active nests become inactive, such as when young fledge the nest or the nest is subject to predation, work shall continue in the buffer area and no adverse impact to birds will result.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Pre-construction: The City’s project manager shall ensure that Mitigation Measure BIO2 is being complied with prior to construction. Failure to comply shall result in inspections or issuance of a stop work order until corrective action is taken to comply.

Initials *Date*

BIO3 *Special-Status Bat Species: The following measures shall be implemented to avoid impacts to special-status bat species:*

- *Pre-construction roost assessment survey: A qualified biologist shall conduct a roost assessment survey of trees located within the project area. The survey will assess use of the trees and cavities for roosting as well as potential presence of bats. If the biologist finds no evidence of, or potential to support bat roosting, no further measures are recommended. If evidence of bat roosting is present, additional measures described below shall be implemented:*
 - *Work activities outside the maternity roosting season: If evidence of bat roosting is discovered during the pre-construction roost assessment and tree removal is planned August 1 through February 28 (outside the bat maternity roosting season), a qualified biologist shall implement passive exclusion measures to prevent bats from re-entering the tree cavities. After sufficient time to allow bats to escape and a follow-up survey to determine if bats have vacated the roost, tree removal may continue and impacts to special-status bat species will be avoided.*
 - *Work activities during the maternity roosting season: If a pre-construction roost assessment discovers evidence of bat roosting in the trees during the maternity roosting season (March 1 through July 31), and determines maternity roosting bats are present, removal of maternity roost trees shall be avoided during the maternity roosting season or until a qualified biologist determines the roost has been vacated.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Pre-construction: The City’s project manager shall ensure that Mitigation Measure BIO3 is being complied with prior to construction. Failure to comply shall result in inspections or issuance of a stop work order until corrective action is taken to comply.

Initials *Date*

BIO4 *Ephemeral Drainage: A wetland verification request shall be submitted to USACE prior to project construction. If USACE concurs that the feature is non-jurisdictional, no further permit from USACE would be required. If the feature is determined to be a Waters of the U.S. by USACE, the project shall obtain a CWA Section 404 permit and adhere to all permit conditions and mitigation requirements. The project shall also obtain a WDR permit from the Regional Board for temporary impacts to the ephemeral drainage. Potential impacts to water quality would be avoided and minimized by adhering to the BMPs and permit conditions established by the Regional Board.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is completed prior to commencing construction and that permit conditions, if any, are incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Pre-construction: The City’s project manager shall ensure that any permit conditions associated with Mitigation Measure BIO4 are being complied with during construction. Failure to comply shall result in inspections or issuance of a stop work order until corrective action is taken to comply.

Initials *Date*

CULTURAL RESOURCES

CRI *The project plans and specifications shall provide that in the event prehistoric-era or historic-era archaeological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. Prehistoric-era archaeological site indicators could include chipped chert and obsidian tools and tool manufacture waste flakes, grinding implements such as mortars and pestles, and locally darkened soil containing the previously mentioned items as well as fire altered stone and dietary debris such as bone and shellfish fragments. Historic-era archaeological site indicators could include items of ceramic, glass and metal, and features such as structural ruins, wells and pits containing such artifacts. After cessation of excavation, the contractor shall immediately contact the City. The City shall contact a qualified professional archaeologist immediately after the find. Such archaeologist shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The City shall also contact Buffy McQuillen, Tribal Heritage Preservation Officer (THPO) of the Federated Indians of Graton Rancheria, 6400 Redwood Drive, Suite 300, Rohnert Park, CA 94928, (707)566-2288 ext. 137. The contractor shall not resume construction activities until authorization to proceed is received from the City.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals. City shall confirm that tribal consultation has resulted in the required monitoring plan.

Initials

Date

Construction: The City’s project manager will verify that the mitigation measure is implemented during construction through routine inspections of during ground disturbing work. Failure to comply shall result in issuance of a stop work order until corrective action is taken.

Initials

Date

CR2 *The project plans and specifications shall provide that in the event paleontological site indicators are unearthed during the course of grading, excavation and/or trenching, all ground disturbing work in the vicinity of the discovery shall cease and all exposed materials shall be left in place. After cessation of excavation, the contractor shall immediately contact the City. The City shall contact a qualified professional geologist or paleontologist immediately after the find. Such consultant shall conduct an evaluation of significance of the site, and assess the necessity for mitigation. The contractor shall not resume construction activities until authorization to proceed is received from the City.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Construction: The City’s project manager will verify that the mitigation measure is implemented during construction through routine inspections of during ground disturbing work. Failure to comply shall result in issuance of a stop work order until corrective action is taken.

Initials *Date*

CR3 *If human remains are encountered during grading, excavation or trenching, all construction activity shall cease and the contractor shall immediately contact the City and the Sonoma County Coroner’s Office. If the remains are determined by the Coroner’s Office to be of Native American origin, the Native American Heritage Commission shall be contacted and the procedures outlined in CEQA §15064.5 (d) and (e) shall be implemented by the City or its designee.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Construction: The City’s project manager will ensure that required measures are followed in the event of discovery of human remains.

Initials *Date*

GEOLOGY AND SOILS

GSI *The City shall prepare an erosion control plan for the project. Appropriate BMPs will be implemented by the project to minimize construction-related erosion and runoff. BMPs include, but are not limited to:*

- *Schedule construction activities during dry weather. Keep grading operations to a minimum during the rainy season (October 1 through April 30).*
- *Protect and establish vegetation.*
- *Stabilize construction entrances and exits to prevent tracking onto roadways.*
- *Protect exposed slopes from erosion through preventative measures. Cover the slopes to avoid contact with storm water by hydroseeding, applying mulch or using plastic sheeting.*
- *Install straw wattles and silt fences on contour to prevent concentrated flow. Straw wattles should be buried 3 to 4 inches into the soil, staked every 4 feet, and limited to use on slopes that are no steeper than 3 units horizontal to 1 unit vertical. Silt fences should be trenched 6 inches by 6 inches into the soil, staked every 6 feet, and placed 2 to 5 feet from any toe of slope.*
- *Designate a concrete washout area to avoid wash water from concrete tools or trucks from entering gutters, inlets or storm drains. Maintain washout area and dispose of concrete waste on a regular basis.*
- *Establish a vehicle storage, maintenance and refueling area to minimize the spread of oil, gas and engine fluids. Use oil pans under stationary vehicles.*
- *Protect drainage inlets from receiving polluted storm water through the use of filters such as fabrics, gravel bags or straw wattles.*
- *Check the weather forecast and be prepared for rain by having necessary materials onsite before the rainy season.*
- *Inspect all BMPs before and after a storm event. Maintain BMPs on a regular basis and replace as necessary.*

Implementation & Monitoring

Project Design: The City's project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials

Date

Construction: The City's project manager or inspector(s) shall verify that the mitigation measure is implemented during construction periods and respond to any erosion issues.

Initials

Date

HAZARDS/HAZARDOUS MATERIALS

HMI The contractor shall be required to follow the provisions of § 5163 through 5167 of the General Industry Safety Orders (California Code of Regulations, Title 8) to protect the project area from being contaminated by accidental release of any hazardous materials. If hazardous materials are encountered during construction or occur as a result of an accidental spill, the contractor shall halt construction immediately, notify the City, and implement remediation in accordance with the project specifications and applicable requirements of the North Coast Regional Water Quality Control Board. Disposal of all hazardous materials shall be in compliance with current California hazardous waste disposal laws.

Implementation & Monitoring

Project Design: The City's project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Construction: The City's project manager will verify that the mitigation measure is incorporated into project construction, as appropriate.

Initials *Date*

NOISE

N1 *The following measures shall be implemented at the construction site to reduce the effects of construction noise on adjacent residences:*

- *Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way shall generally be restricted to the hours of 7:00 a.m. to 7:00 p.m., or as allowed by City code. Any work outside of these hours should require a special permit from the City Engineer. There should be a compelling reasons for permitting construction outside the designated hours.*
- *The City shall provide notice to all residences within 500 feet of the construction activities at least 48 hours prior to commencing construction. The notice shall include the contact information for the City's noise disturbance coordinator and the anticipated construction schedule.*
- *Equip all internal combustion engine driven equipment with intake and exhaust mufflers which are in good condition and appropriate for the equipment.*
- *Unnecessary idling of internal combustion engines shall be strictly prohibited.*
- *Staging of construction equipment and all stationary noise-generating construction equipment, such as air compressors and portable power generators, shall be staged as far as practical from existing sensitive noise receptors.*
- *Utilize "quiet" air compressors and other stationary noise sources where technology exists.*
- *Control noise from construction workers' radios to the point where radio noise is not audible at existing residences bordering the project site.*
- *A sign providing contact information for the construction manager shall be posted onsite of construction-related questions/ complaints.*

Implementation & Monitoring

Project Design: The City's project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Construction: The City's project manager or inspectors shall verify that the mitigation measure is implemented during construction periods and respond to any noise complaints.

Initials *Date*

TRAFFIC/TRANSPORTATION

TTI *The contractor shall develop and submit an appropriate Traffic Control Plan (TCP) in accordance with the California Manual of Uniform Traffic Control Devices (MUTCD) for review and approval by the City for those portions of the project that impact traffic circulation. The TCP shall ensure thru traffic, and temporary driveway access during periods where active construction is not taking place. Emergency access shall be maintained at all times.*

Implementation & Monitoring

Project Design: The City’s project manager will verify that the mitigation measure is incorporated into the project design and included in the project documents prior to issuing final project approvals.

Initials *Date*

Preconstruction: The City’s project manager shall review and approve the Traffic Control Plan prior to construction.

Initials *Date*

Construction: The City’s project manager or inspectors shall verify that the mitigation measure is implemented during construction periods.

Initials *Date*