
Final Initial Study/Mitigated Negative Declaration

for the

Water Service Extension for Existing Facilities at Shamrock Ranch

North Coast County Water District
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Date:
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1.0 INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the North Coast County Water District (NCCWD or District) and the County of San Mateo (County). This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from the NCCWD providing water to serve existing facilities on Shamrock Ranch (proposed project).

The NCCWD is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project. The purpose of the project is for the NCCWD to provide water service outside its jurisdictional boundaries to the existing development on a portion of Shamrock Ranch.

2.0 PROJECT INFORMATION

2.1 Project Title

Water Service Extension for Existing Facilities at Shamrock Ranch

2.2 Lead Agency Name and Address

North Coast County Water District
Attn: Cari Lemke
2400 Francisco Boulevard
Pacifica, California 94044

2.3 Contact Person and Phone Number

Cari Lemke, General Manager
clemke@nccwd.com
(650) 355-3462

2.4 Project Location

The project site is located southwest of the City of Pacifica in unincorporated San Mateo County, just south of the Linda Mar neighborhood and is bounded by San Pedro Terrace Road, Peralta Road, Shamrock Ranch Road, and Highway 1 (see Figure 1, Project Area Location Map). The project site is located east of Highway 1 and is outside of Coastal Commission jurisdiction. The project site consists of one parcel (identified by the Assessor's Parcel Numbers [APNs]): 023-741-020. As shown in Figure 2 (NCCWD Existing Service Area), Shamrock Ranch is located just outside of the District's jurisdictional boundaries, which are similar but not identical to the Pacifica City limits. The project site consists of hilly terrain and generally slopes south and east (see Figure 3, Views of the Project Site). The existing development on Shamrock Ranch consists of eight single family homes, seven one-room cabins, one duplex, one triplex, two horse stables, eight dog kennels, and one dog bathing facility (collectively, "existing development"). No changes to existing development are proposed as part of the project.



Figure 1. Project Area Location Map

Water Service Extension for Existing
Facilities at Shamrock Ranch
San Mateo County, California



0 500 1,000 2,000
Feet



Map Prepared Date: 3/22/2016
Map Prepared By: Fhourigan
Base Source: Esri Streaming - National Geographic
Data Source(s): WRA

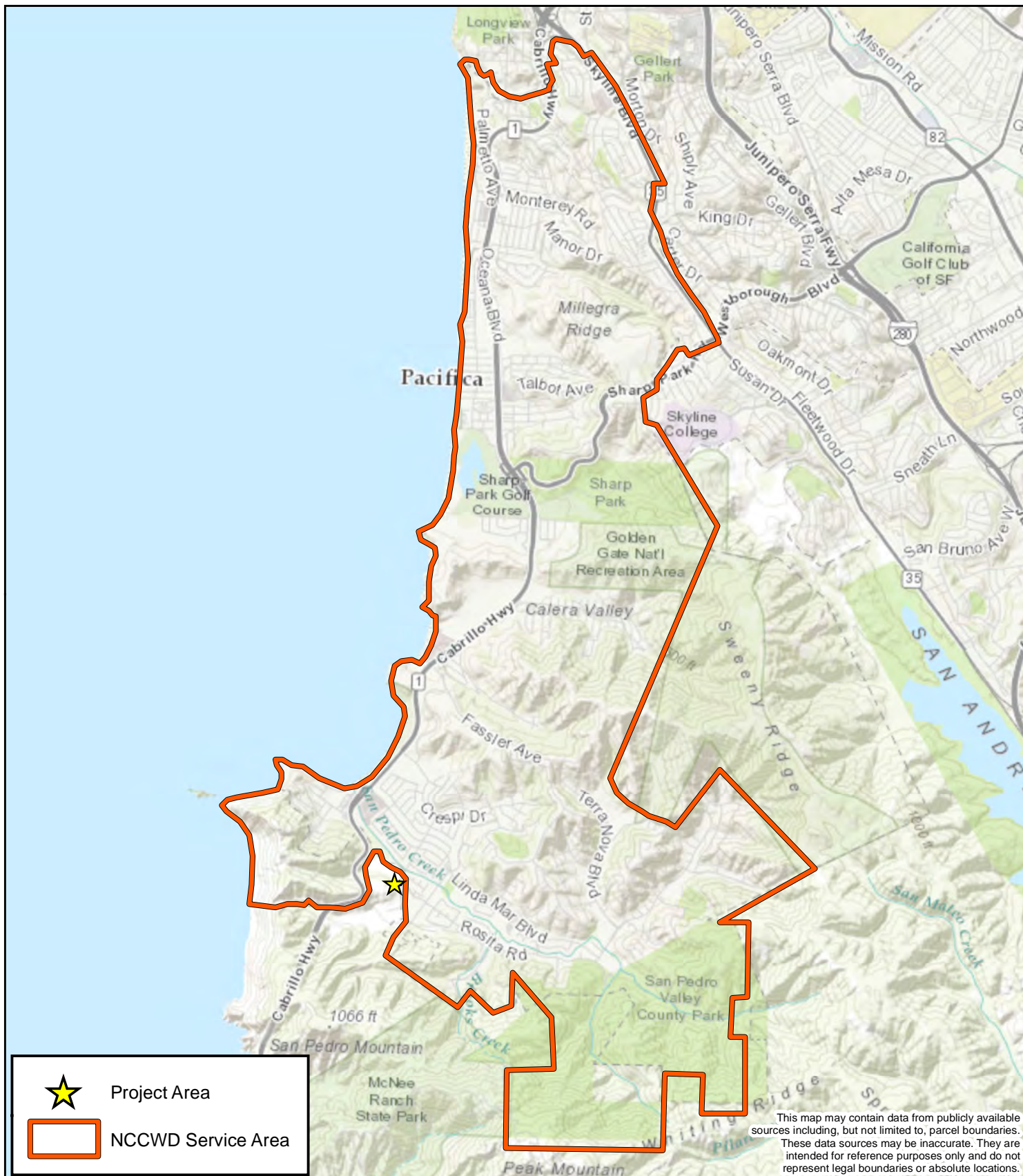


Figure 2. North Coast County Water District Existing Service Area

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



0 0.25 0.5 1
Miles

Map Prepared Date: 3/22/2016
Map Prepared By: Fhourigan
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA, NCCWD



View 1. View of the project site looking west towards the hill from Peralta Road.



View 2. View of the project site looking west from the base of the hill.



View 3. View of the project site looking east from the top of the hill.



View 4. View of the project area looking north from the existing water tanks.

Figure 3. Views of the Project Site

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



View 1. View looking south from Peralta Road towards Rosita Road.



View 3. View looking southwest from the existing water tanks towards the rest of the Shamrock Ranch property.



View 2. View looking east from the project site towards the residential neighborhood.



View 4. View looking north from the project site towards surrounding open space and San Pedro Terrace Road.

Figure 4. Views of Surrounding Land Uses

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California

2.5 General Plan Designation and Zoning District

General Plan Designation:

General Open Space (OS)

Zoning Designation:

Resource Management District (RM)

2.6 Surrounding Land Uses and Setting

Surrounding land uses near the project site include residential and open space uses (see Figure 4, Views of Surrounding Land Uses). Residential neighborhoods and Linda Mar Elementary School are located to the north and east and open space including the Pedro Point Headlands maintained by the Pacifica Land Trust to the south and west of the project site. There is a rehabilitation facility to the north of the project site on San Pedro Terrace Road.

3.0 PROJECT DESCRIPTION

3.1 Project Description

The proposed project will install a water service connection to allow the District to provide a reliable water source for existing development on the Shamrock Ranch property which is outside of NCCWD's jurisdictional boundary. Historically, residences and infrastructure on Shamrock Ranch have obtained water from naturally occurring on-site wells and a spring. However, in recent years water available from these naturally occurring sources has diminished and Caltrans has delivered water to the site via truck. Government Code Section 56133 allows a public agency to extend service outside jurisdictional boundaries to mitigate an existing or impending public health threat. This section requires that NCCWD apply to the San Mateo Local Agency Formation Commission (LAFCo) for approval to extend service. Shamrock Ranch seeks a water connection from NCCWD to provide a safe and reliable water supply for existing structures at the recommendation of the State Water Board and in response to failure of the Ranch's groundwater system following construction of the Tom Lantos Tunnel on Highway 1. As described in Section 2.4 above, the existing development on Shamrock Ranch includes eight single family homes, seven one-room cabins, one duplex, one triplex, two horse stables, eight dog kennels, and one dog bathing facility. In order to serve the existing development, the water service connection will require the following components:

- a 2-inch water meter installed in a meter box;
- a 2-inch water pipeline approximately 25-feet long from the District's existing 12-inch water main in Peralta Road to the water meter;
- approximately 770 feet of pipeline (also 2-inches in diameter) from the water meter to existing water tanks at the top of a hill on the parcel, including fittings necessary to connect the pipeline to the existing water tanks; and
- a backflow preventer and necessary fittings to connect the 25-foot water pipeline, water meter, and 770-foot water pipeline.

The District will install and own the 25-foot water pipeline, water meter and box, all of which will be constructed within Peralta Road and the public right of way. Shamrock Ranch will install and own the backflow preventer and 770-foot water pipeline connecting the water meter to three existing 5,000 gallon water storage tanks on the Shamrock Ranch property. The District will provide approval of the backflow preventer prior to the commencement of water service. The average daily water consumption at Shamrock Ranch is approximately 10,000 gallons per day. This water service connection would result in an approximately 0.3% increase in the average daily water deliveries for NCCWD, and is well within the capacity of existing water supply agreements between the NCCWD and the San Francisco Public Utilities Commission (SFPUC).¹

The elevation change from the water service connection on Peralta Road to the three existing 5,000 gallon storage tanks is approximately 162 feet. The water provided to these tanks will be used for the purposes of existing development or uses that require no greater water service than is required to serve the existing development. Pipe fittings are anticipated to facilitate a connection from the 770-foot water pipeline to the existing water storage tanks. The water tanks and existing development on Shamrock Ranch are not evaluated as part of this Initial Study because no changes are being made to these existing facilities. The infrastructure being installed as part of the project only has the capacity to serve existing development. Therefore, the proposed project would not support future growth.

The location of the water service connection and alignment of the 770-foot water pipeline are shown in Figure 5 (Water Service Project Components). A diagram of the water service connection and backflow preventer is provided in Figure 6 (Water Service Connection Details).

Grading

The proposed project will include a combination of trenching and directional boring for the installation of the water service connection and pipeline. Trench length is approximately 315 feet and the trench depth will be a maximum of 4 feet in depth and 18 inches in width. The length of directional boring will be approximately 415 feet and the depth of the directional boring will range from 3 feet to 15 feet. Total excavation required to construct the proposed project would be approximately 50 cubic yards of material which will be retained to backfill the pipeline trench. Approximately 35 cubic yards of sand bedding will be imported to fill the trenching near the tank and near the roadway.

Construction Schedule and Timing

Construction of the facilities to be owned and operated by the District will begin within 14 business days after the date the District receives written notification that LAFCo has approved the District application to provide water service outside the District's jurisdictional boundaries to the existing development on the project site. Construction of the facilities to be owned and operated by Shamrock Ranch will begin immediately following completion of the water meter and 25-foot pipeline.

¹ Stetson Engineers, Inc. North Coast County Water District 20-Year Long-Term Water Master Plan. 2016. <http://www.nccwd.com>

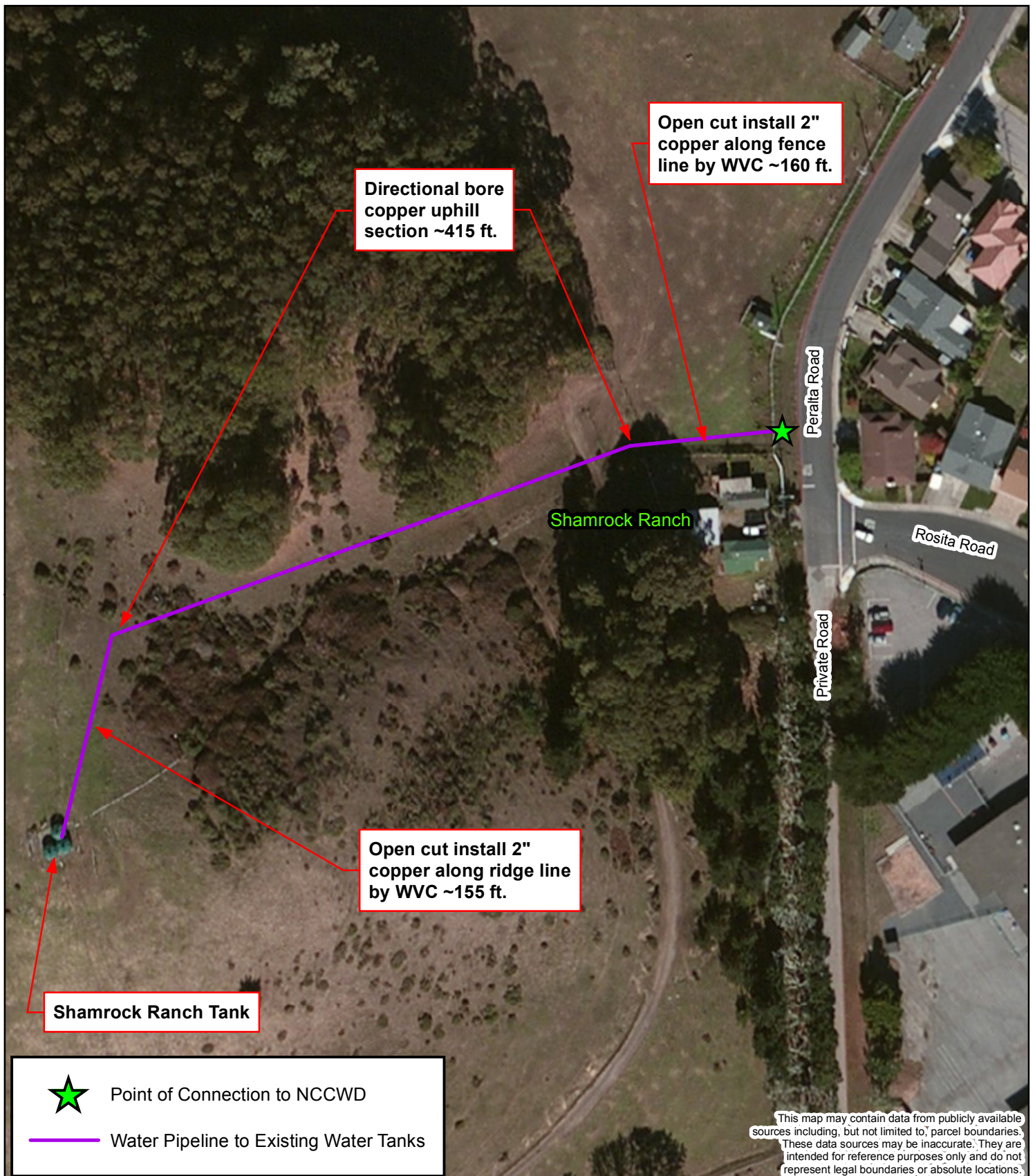


Figure 5. Water Service Project Components

Water Service Extension for Existing
Facilities at Shamrock Ranch
San Mateo County, California

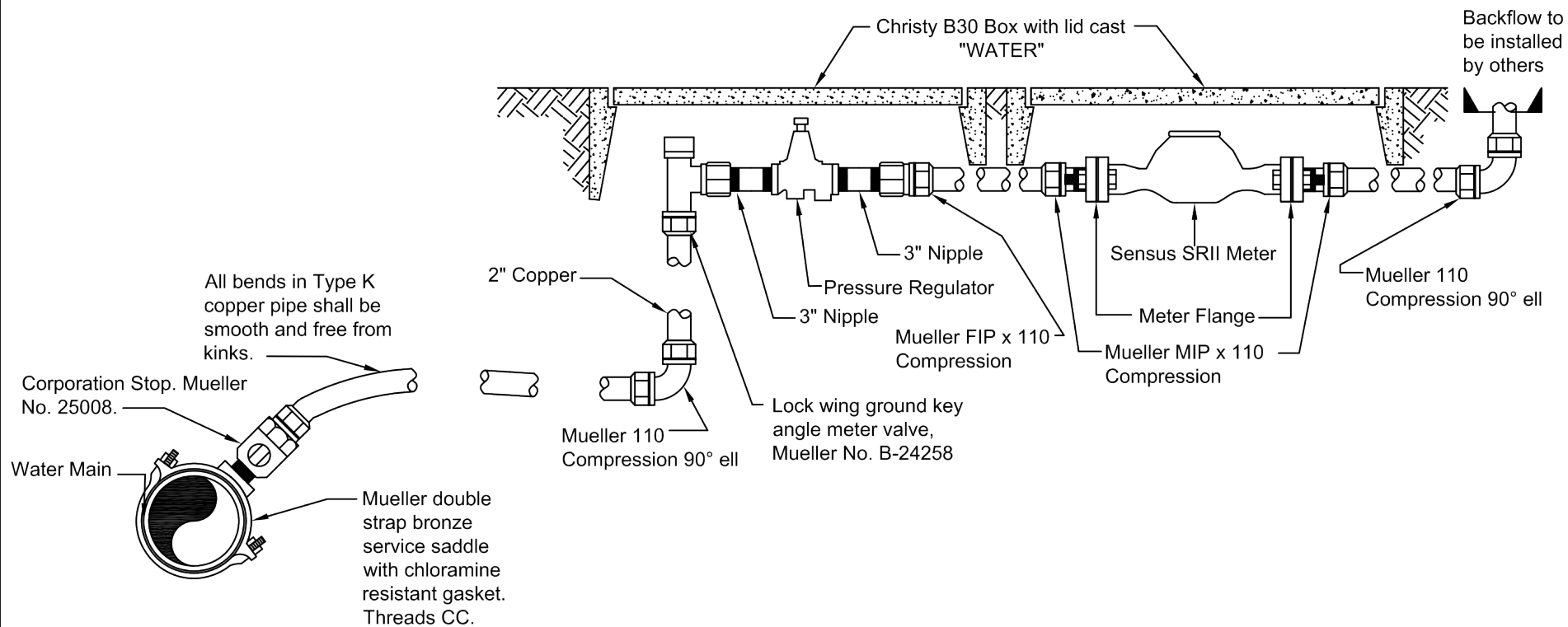


0 25 50 100
Feet



ENVIRONMENTAL CONSULTANTS

Map Prepared Date: 4/14/2016
Map Prepared By: Fhourigan
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA, NCCWD,
West Valley Construction (WVC)



No Scale

Figure 6. Water Service Connection Details

Water Service Connection for Existing Facilities at Shamrock Ranch
San Mateo County, California



Date: March 2016
Source: NCCWD

It is anticipated that construction of the proposed project would require approximately one month, beginning in October 2016, following approval by LAFCo. Project construction would take place Monday through Friday. The proposed hours of construction would not exceed what is stipulated in the County of San Mateo Noise Ordinance which allows construction activities to take place between the hours of 7:00 a.m. to 6:00 p.m. Monday to Friday.

3.2 Project –Related Approvals, Agreements, and Permits

The information contained in this Initial Study will be used by the District as it considers whether or not to approve the proposed project. If the project is approved, the Initial Study would be used by the District and responsible and trustee agencies in conjunction with various approvals and permits. These actions include, but may not be limited to, the following approvals by the agencies indicated:

San Mateo Local Agency Formation Commission (LAFCo)

- Approval to provide water service outside the District's jurisdictional boundaries (California Government Code Section 56133)

San Mateo County

- Plumbing permit

4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

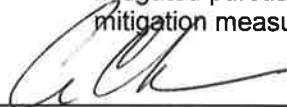
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is potentially significant unless mitigation is incorporated, as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Land Use/Planning
<input type="checkbox"/>	Agriculture and Forestry Resources	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Air Quality	<input checked="" type="checkbox"/>	Noise
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Population and Housing
<input checked="" type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Geology and Soils	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Transportation/Traffic
<input type="checkbox"/>	Hazards and Hazardous Materials	<input checked="" type="checkbox"/>	Utilities and Service Systems
<input checked="" type="checkbox"/>	Hydrology and Water Quality	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

- ☐ I find that the project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the project MAY have a "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 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

7/8/2016
Date

Name and Title: Cari Lemke, General Manager

Water Service Extension for Existing Facilities
at Shamrock Ranch
North Coast County Water District

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July 2016

Initial Study Checklist

This section describes the existing environmental conditions in and near the project site and evaluates environmental impacts associated with the proposed project. The environmental checklist, as recommended in the CEQA Guidelines (Appendix G), was used to identify environmental impacts that could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The cited sources are identified at the end of this section.

Each of the environmental categories was fully evaluated, and one of the following four determinations was made for each checklist question:

“No Impact” means that no impact to the resource would occur as a result of implementing the project.

“Less than Significant Impact” means that implementation of the project would not result in a substantial and/or adverse change to the resource, and no mitigation measures are required.

“Less than Significant with Mitigation Incorporated” means that the incorporation of one or more mitigation measures is necessary to reduce the impact from potentially significant to less than significant.

“Potentially Significant Impact” means that there is either substantial evidence that a project-related effect may be significant, or, due to a lack of existing information, could have the potential to be significant.

4.1 Aesthetics

AESTHETICS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,5
b) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
c) 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"/>	1
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

The project site is located southwest of the City of Pacifica in unincorporated San Mateo County, just south of the Linda Mar neighborhood and is bounded by San Pedro Terrace Road, Peralta Road, Shamrock Ranch Road, and Highway 1 (see Figure 1, Project Area Location Map). The project site consists of hilly terrain and generally slopes south and east. The existing development on Shamrock Ranch consists of eight single family homes, seven one-room cabins, one duplex, one triplex, two horse stables, eight dog kennels, and one dog bathing facility (collectively, "existing development"). No changes to existing development are proposed as part of the project.

Views of the project site and surrounding land uses are provided in Figures 3 and 4 (see Section 3.1, Project Description). Views of the project site are generally limited to the adjacent residential neighborhood and Linda Mar Preschool, from residents, motorists, and pedestrians along portions of Peralta Road, San Pedro Terrace Road, and Rosita Road adjacent to the project site. The surrounding hillside and trees inhibit views from along Peralta past Rosita Road and past San Pedro Terrace Road, and from Shamrock Ranch Road.

Views looking west, south and north from public viewing areas adjacent to the project site and from within the project site include one residence, an electrified fence for access to the property, a blue pole marking the location of the pipeline connection, eucalyptus stands, and vegetated open land in the foreground. The project site is situated on a hillside within a large private ranch, and therefore, the project site is not visible from any other public vantage points.

The project site is located within the Shamrock Ranch property, which is directly adjacent to Highway 1, which is listed as eligible for the Scenic Highway Program (California Department of Transportation 2012). However, due to the topography of the region, only the southwestern portion of Shamrock Ranch is visible from Highway 1. The proposed project would take place

on the northeastern portion of the project site. Existing land uses adjacent to the project site consist of various residential and recreational uses.

Discussion of Impacts

- a, b) ***Less than Significant Impact.*** For the purposes of this analysis, a scenic vista is defined as a vantage point with a broad and expansive view of a significant landscape feature (e.g., a mountain range, the Bay, lake, or coastline) or of a significant historical or architectural feature (e.g., views of a historic tower). Although portions of Shamrock Ranch are visible from Highway 1, a highway eligible for scenic designation under the California State Scenic Highway Program, the proposed project would be located on the northwestern portion of Shamrock Ranch which has little to no visibility from the Highway. The proposed project would include the installation of a pipeline and water service connection underground, and therefore, would not be visible from Highway 1 after construction. The water meter would be installed above ground but would only be visible from private residences along Peralta Road. According to the San Mateo County General Plan the project site is not located within a designated scenic corridor. No rock outcroppings or similar recognized visual resources exist on the site, and none would be damaged through construction of the proposed project. No trees or historic buildings would be removed. The proposed project would not significantly alter pre-construction conditions. Therefore, the project would have a less-than-significant impact on these resources.
- c) ***Less than Significant Impact.*** A significant impact would occur if a project were to introduce incompatible visual elements on the project site or visual elements that would be incompatible with the character of the project site or the area surrounding the site. The proposed project would not introduce an incompatible visual element to the site or the surrounding area. The project does not propose construction of any new buildings or changes to the project site other than the water infrastructure installation. During the construction phase, Peralta Road would be disturbed for the installation of the water meter and staging of pipeline materials for the water service connection. The activities are typical of pipeline installation and would only be viewed by limited motorists and private residences along Peralta Road. Once the pipeline and service connection are in place, views would be same as existing conditions. Therefore, the proposed project would not significantly impact the visual character or quality of the site or surroundings.
- d) ***No Impact.*** The project would not create a new permanent source of light or glare. The proposed project would involve vegetation and debris removal and trenching for the installation of the pipeline, water service connection, and backflow meter. No nighttime construction would take place.

4.2 Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, 3
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 3, 4
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use??	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

The project site does not contain any farmland or forestry land and is not designated for agricultural or forestry uses or Prime, Statewide, or Locally Important Farmland (California Department of Conservation 2010). The proposed project is located in a semi-developed area and follows existing roads, easements, and rights-of-way. Surrounding land is developed with residential, institutional, commercial, recreational, and open space uses.

Discussion of Impacts

- a-e) **No Impact.** According to the 2010 Farmland Mapping and Monitoring Program from the State Department of Conservation, the project site is located in an area that is designated as other land and the proposed project would, therefore, have no impact on agricultural uses. The project site is also not zoned for agricultural use, but rather a Resource Management District (RM). Shamrock Ranch is also considered a

Williamson Act (WA) Non Renewed APN, and is therefore not currently considered under WA contract. The proposed project involves the installation of water service infrastructure within an area that does not include any farmland and the project would not remove any trees. Therefore, the proposed project would not result in the conversion of forest land or farmland to a non-forest use or a non-agricultural use, and would thus have no impact on forestry or agricultural resources.

4.3 Air Quality

AIR QUALITY — Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Source
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7
c) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 7

Environmental Setting

The project site is located in the coastal portion of San Mateo County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}).

The Bay Area Air Quality Management District (BAAQMD) is the regional agency tasked with managing air quality in the region. At the State level, the California Air Resources Board (CARB, which a part of the California Environmental Protection Agency) oversees regional air district activities and regulates air quality at the State level.

Both the U.S. Environmental Protection Agency (EPA) and California have developed several ambient air quality standards (AAQS) which have become increasingly stringent over the last several decades. Although emissions and ambient air pollution concentrations have decreased considerably over that timeframe, the San Francisco Bay Area Air Basin (SFBAAB) is still

classified as “nonattainment” with respect to standards for ozone—most of which is formed in the atmosphere by chemical reactions between reactive organic gases (ROG) and oxides of nitrogen (NOx) rather than being emitted directly—and particulate matter (PM). For the Bay Area as a whole, BAAQMD has estimated average daily emissions in 2012 as 331 tons/day (662,000 lb/day) of ROG, 432 tons/day (864,000 lb/day) of NOx, 220 tons/day (441,000 lb/day) of respirable particulate matter (PM₁₀), and 89 tons/day (178,000 lb/day) of fine particulate matter (PM_{2.5}). The BAAQMD 2010 Clean Air Plan addresses these AAQS and evaluates cumulative impacts by considering emissions from all sources and projecting future activity.

There are multiple definitions of what project-level emissions increase would be considered “significant”. For temporary activities such as construction, if the project required Federal support or approvals, General Conformity regulations would require a quantitative, formal determination of General Conformity with State Implementation Plans (SIPs) if emissions of NOx, ROG, or CO were in excess of 100 tons per year (referred to as Federal de minimis levels). If a large (“major”) stationary source of air pollution were proposed for location at the project site, Federal New Source Review (NSR) regulations would define a “significant” emissions increase as 100 tons per year (TPY) of CO, 40 TPY of ROG or NOx., 25 TPY of PM₁₀ (respirable particulate matter), or 15 TPY of PM_{2.5} (fine particulate matter). For sources operating year-round (365 days/year), these four thresholds correspond to approximately 548 lb/day, 219 lb/day, 137 lb/day, and 82 lb/day, respectively.

In 2010, BAAQMD adopted quantitative thresholds of significance for CEQA purposes of 82 lb/day for exhaust PM₁₀ and 54 lb/day for exhaust PM_{2.5}, NOx, and ROG, and also identified that best management practices (BMPs) needed to be used for controlling fugitive dust from construction to avoid being considered “significant”. The BAAQMD’s June 2010 adopted thresholds of significance were challenged in a lawsuit. On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the thresholds. The court found that the adoption of the thresholds was a project under CEQA and ordered the BAAQMD to examine whether the thresholds would have a significant impact on the environment under CEQA before recommending their use. The court did not determine whether the thresholds are or are not based on substantial evidence and thus valid on the merits. The court issued a writ of mandate ordering the District to set aside the thresholds and cease dissemination of them until the BAAQMD had complied with CEQA. The court’s order permits the BAAQMD to develop and disseminate guidelines for CEQA compliance within the District, as long as they do not implement the 2010 thresholds of significance. In light of the court’s order, all references of the Air District’s June 2010 adopted thresholds, including related screening criteria, have been removed from the BAAQMD CEQA Guidelines. Hence, this analysis relies on thresholds described in the previous version of the BAAQMD CEQA Guidelines, published in 1999. Under the previous version, the thresholds of significance for emissions increases at stationary sources were 80 lb/day for PM₁₀, NOx, and ROG. The BMPs for controlling fugitive dust from construction in the 1999 thresholds are very similar to those identified in the 2010 version.

Although the 2010 BAAQMD CEQA Guideline thresholds are no longer recommended for generally applicable measures of impacts, they are conservative, given that they are more stringent than the earlier thresholds mentioned above. Therefore, emissions increases that are less than the 2010 thresholds will be considered less than significant for purposes of CEQA in this Initial Study.

A sensitive receptor is generally defined as a location where human populations, especially children, seniors, and sick persons, are located where there is a reasonable expectation of continuous human exposure to air pollutants. These typically include residences, hospitals, and schools. The primary sensitive receptors in the vicinity are residents, which may include children, elderly people, or people with respiratory illnesses and school children at Linda Mar Preschool located across Peralta Road.

For the proposed project, the only sources of emissions are those associated with construction; i.e., the proposed project does not involve the construction of a new air emissions source, or of developments which would attract motor vehicles with their associated air emissions.

Discussion of Impacts

- a, b) ***Less than Significant Impact.*** Construction activities would result in short-term increases in emissions from the use of heavy equipment that generates dust, exhaust, and tire-wear emissions; soil disturbance; materials used in construction; and construction traffic. Project construction would produce fugitive dust (PM₁₀ and PM_{2.5}) during ground disturbance and would generate carbon monoxide, ozone precursors, and other emissions from vehicle equipment and operation. The project site is approximately 0.69 acres and the actual ground disturbance acreage would be even smaller, as this acreage accounts for a buffer area around the pipeline route for construction access. Fugitive dust emissions from grading would be minimal due to the small area of ground disturbance and short construction period. The BAAQMD CEQA Guidelines do not contain thresholds of significance for Fugitive Dust, and these emissions would also be controlled by the implementation of the BAAQMD standard BMPs below. Construction emissions would be temporary, lasting approximately one month, and would not have long-term effects on air quality in the Bay Area.

As discussed in Section 3.0 (Project Description), approximately 35 cubic yards of sand bedding will be imported to fill the trenching near the tank and near the roadway. The average commercial dump truck can haul approximately 10-15 cubic yards of soil. The project would require approximately eight truck trips (four for equipment delivery and four for hauling sediment and drill slurry). Eight truck trips would not generate significant emissions in the context of existing air quality standards.

Because of the small area of disturbance (less than 0.69 acres), temporary nature of the emissions, small number of truck trips, and minimal construction equipment required, impacts on air quality would be less than significant and would comply with the Bay Area 2010 Clean Air Plan.

The contractor will be responsible for implementing the following standard Best Management Practices. These BMPs are recommended for all projects by BAAQMD whether or not construction-related emissions exceed applicable thresholds.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas) shall be watered two times per day, as appropriate; pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking area and staging areas.

- All haul trucks transporting soil, sand or other loose material off-site shall be covered.
- All paved access roads, parking areas and staging areas at the construction site shall be swept daily with water sweepers. 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.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications, and all equipment shall be checked by a certified visible emissions evaluator.
- A publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be posted in or near the project site. The contact person shall respond to complaints and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

c) ***Less than Significant Impact.*** As discussed under items a) and b) above, the proposed project would result in minor construction-related emissions. It would not result in a cumulatively considerable net increase of any criteria pollutant. The project would cause minimal short-term air quality impacts as a result of construction activities; and, it would result in less than significant long-term or cumulatively considerable increases in air quality pollutant emissions for which the Bay Area is currently in non-attainment (ozone and particulate matter). Implementation of the standard construction BMPs recommended by BAAQMD included in items a) and b) above would help ensure that the temporary increase in air pollutant emissions associated with construction activities would result in less than significant contributions to cumulative pollutant levels in the region.

d) ***Less than Significant Impact.*** The primary sensitive receptors in the vicinity are residents, which may include children, elderly people, or people with respiratory illnesses and children and employees at Linda Mar Preschool. Sensitive receptors located in close proximity to the construction area could be exposed to temporary air pollutants from construction activities, such as, fugitive dust, ozone precursors, and carbon monoxide. The duration of construction activities would be limited. Basic construction measures recommended by BAAQMD, listed in item a) above, would be implemented during construction to minimize air pollutants. New construction equipment has been subject to increasingly stringent emissions requirements at the Federal level (e.g., 40 CFR 89 and 1039), designated "Tier 1", "Tier 2", "Tier 3", etc.;

older construction equipment is subject to potential retrofit requirements required by the State of California (13 CCR 2449, 13 CCR 2450-2466, and 17 CCR 93116). As a result, sensitive receptors in the vicinity of the proposed project would not be exposed to substantial pollutant concentrations, and impacts would be less than significant.

- e) ***Less than Significant Impact.*** BAAQMD's CEQA Guidelines identify the following as potential sources of objectionable odors: wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The proposed project does not involve construction of any of those types of facilities. Construction activities would involve the use of diesel-powered equipment that emits exhaust gases and particulate matter, which can have objectionable odors. However, construction equipment is mobile (dispersing and diluting pollutants over a wider area than if they were fixed in place). The infrequency of the emissions, rapid dissipation of the exhaust and other odors into the air, and short-term nature of the construction activities would result in less than significant odor impacts.

4.4 Biological Resources

BIOLOGICAL RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 8
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 8
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 8
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 8
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 8
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 8

Environmental Setting

The analysis of potential biological impacts is based on the Biological Review Letter Report prepared for the proposed project (Appendix A of this Initial Study). For the purpose of describing biological resources, the project site is approximately 0.69 acre and is bounded to the east by Peralta Road, to the north and west by undeveloped land, and to the south by

undeveloped grazed pasture and a residence. In the greater vicinity of the project site, the Devil's Slide section of Highway 1 occurs to the west, Shamrock Ranch Road occurs to the south, and the developed residential community of Pacifica occurs to the north and east. .

Methods

Prior to the site visit, background literature was reviewed to determine potential presence of sensitive vegetation types, aquatic communities, and special-status plant and wildlife species. Resources reviewed for sensitive vegetation communities and aquatic features include aerial photography, mapped soil types, the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB), and the National Wetland Inventory (NWI; USFWS 2016). Background information regarding special-status plant and wildlife species was obtained through review of the CNDDB, California Native Plant Society (CNPS) Online Database (2016), available aerial photography, and species habitat requirements as noted in available literature.

On April 26, 2016, WRA traversed the project site on foot to evaluate the potential presence of sensitive vegetation communities and aquatic features, and evaluate on-site habitat to determine the potential for occurrence of special-status plant and wildlife species. Observed plant communities, aquatic features, and plant and wildlife species were noted. Site conditions were noted as they relate to habitat requirements of special-status plant and wildlife species known to occur in the vicinity as determined by the background literature research.

Results

Vegetation Communities

The project site contains five non-sensitive vegetation communities (see Figure 7). The majority of the project site is actively-used pasture supporting non-native grassland vegetation typical of the region. Additional habitats include Eucalyptus grove, developed/disturbed areas, northern coastal scrub, and California blackberry bramble.

Non-native grassland demonstrated evidence of recent grazing during the April 26, 2016 site visit and contained patches of bare ground. This community comprised approximately 0.51 acre of the project site and was dominated by non-native forbs including soft chess (*Bromus hordeaceus*) and foxtail barley (*Hordeum murinum*) and a mixture of native and non-native herbs including big heron bill (*Erodium botrys*), hawkbit (*Leontodon saxatilis*), scarlet pimpernel (*Lysimachia arvensis*), California poppy (*Eschscholzia californica*), and sun cup (*Taraxia ovata*). Within the project site, approximately 0.08 acre of Eucalyptus grove was dominated by blue gum (*Eucalyptus globulus*) with a French broom (*Genista monspessulana*) understory. Approximately 0.04 acre of developed and disturbed land consisted of dirt roads, existing water tanks and associated infrastructure, and Peralta Road. Approximately 0.04 acre of northern coastal scrub habitat within the project site was dominated by coyote brush (*Baccharis pilularis*) and California blackberry (*Rubus ursinus*), with an understory dominated by non-native grassland species, Pacific sanicle (*Sanicula crassicaulis*), and yarrow (*Achillea millefolium*). Within the project site, approximately 0.02 acre of California blackberry bramble was dominated by California blackberry and poison hemlock (*Conium maculatum*).

Potential Wetlands and Waters of the US

The project site does not support communities that would meet the definition of wetlands or "Waters of the US". No areas within the project site were dominated by facultative wetland vegetation, no indicators of wetland hydrology were observed, and the soils are composed of Candlestick-Barnabe complex, 30 to 50 percent slopes (California Soil Resource Lab 2016), which are not classified as hydric soils. No hydric soils indicators are present on the project site.

Special-Status Plant Species

Sixty different special-status plant species are known to occur in the vicinity (within a Montara Mountain and San Francisco South 7.5 minute U.S. Geologic Society [USGS] quadrangles) of the project site (CDFW 2016). No rare plant species were observed during the site visit, which occurred during the peak blooming period when plants are most readily identifiable. Figure 8 depicts special-status plant species documented within 5 miles of the project site.

The majority of the special-status plant species from this area occur on serpentine soils, in areas with direct coastal effect, in marsh or swamp habitats, seeps, cismontane woodland, or alkaline habitats which do not occur within the project site. Many special-status plant species from the vicinity of the project site that are noted in the literature as occurring in grasslands depend either on serpentine soils or heavy clay soils. Soils on the project site are loam soils, which do not support species that are dependent on heavy clay or serpentine soil types. Suitable habitat for some special-status plant species that are not dependent on specialized soil types is present in the project site. However, these plant species were not observed during the site visit, which occurred during the appropriate blooming period for these species. Based on the lack of appropriate habitat and observations from the site visit, there are no special-status plant species that have potential to occur on the project site.

Special-Status Wildlife Species

Of the known wildlife occurrences in CNDDB, 40 special-status wildlife species occur, or have been known to occur within the vicinity (within a Montara Mountain and San Francisco South 7.5 minute USGS quadrangles) of the project site (CDFW 2016). No special-status species were observed during the April 26, 2016 site visit. Figure 9 depicts special-status wildlife species documented within 5 miles of the project site. None of these species are likely occur within the project site, with the possible exception of the bird and bat species which may occasionally pass over the site or roost in the Eucalyptus grove or northern coastal scrub habitat. The potential for each of these species to occur within the project site is described in more detail below.

There is a known occurrence of California red-legged frog (CRLF, *Rana draytonii*) in a pond within Shamrock Ranch. The pond is located in the southern end of the valley up and over the hilltop from the project site. No direct dispersal corridors are present between the known occurrence and the project site, and no aquatic habitat is present within the project site or in directly adjacent areas. The project site is separated from the known occurrence by a dry, farmed valley and dry hillsides and hilltops. Although CRLF utilize upland habitats near aquatic features for breeding and/or wintering activities, this species is not expected to occur within or adjacent to the project site given the geographical distance and landscape barriers from existing occurrences. The project site did not contain any burrows that could provide shelter for CRLF,

and the steep landscape functions as a dispersal barrier to the CRLF. Based on these factors, CRLF is not expected to be present in the project site or directly adjacent areas.

Three special status butterfly species are known to occur in the vicinity of the project – Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*), San Bruno elfin blue butterfly (*Callophrys mossii bayensis*), and monarch butterfly (*Danaus plexippus*). Myrtle's silverspot butterfly and San Bruno elfin butterfly both depend on specific "host plant" species for laying eggs and larval development. The host plant species are not present in the project site. The local occurrence of Myrtle's silverspot is from historic records and is no longer known to occur south of the Golden Gate Bridge (Black and Vaughan 2005). San Bruno elfin blue butterfly persists locally, but is restricted to rocky outcrops and coastal bluffs – habitat types that are not present in the project site. While a small portion of the adjacent Eucalyptus grove is within the project site and could potentially support overwintering monarch butterflies, the Eucalyptus grove would not be impacted by the project and project activities would not affect the ability of the grove to support overwintering monarch butterflies.

No burrows were observed in the project site and no other evidence of core habitat for American badger was present. Many other species known from the vicinity are wholly aquatic species and no aquatic habitat is present in the project site. The project would result in only temporary impacts to existing grassland pasture and would not have any long term effects to the type or quality of habitat available for any species.

White-tailed kite, as well as other raptor and native bird species may utilize the Eucalyptus grove as well as any trees or shrubs within the project site. These features may also provide nesting habitat during the breeding season.

Pallid bat, Yuma myotis, and hoary bat may utilize the larger trees in the Eucalyptus grove. However, the Eucalyptus grove would not be impacted by the project and these species would not be affected by the proposed construction activities.

Discussion of Impacts

- a, d) **Less than Significant with Mitigation Incorporated.** Special-status plant species and special-status wildlife species would not be impacted by the proposed project as the project site does not contain suitable habitat for special-status plant or wildlife species. Therefore, no special-status plant or wildlife species have the potential to occur on the project site.

The only biological resources with potential to be impacted by project activities are breeding birds, which may nest in trees or shrubs within or directly adjacent to the project site. Common and special-status birds may be exposed to audible, vibratory, and/or visual disturbances during construction. Nesting birds are protected by the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. In compliance with these codes, if project activities occur during the avian breeding season (February 1 through August 31), a pre-construction breeding bird survey will be conducted by a qualified biologist prior to the initiation of ground disturbance or vegetation removal. The breeding bird survey will be conducted no more than 14 days prior to the initiation of work during the breeding season. If there is a break in construction of greater than 14 days, a new breeding bird survey will be conducted before work resumes. Vegetation removal and ground disturbance may be

conducted without a breeding bird survey during the non-breeding season (September 1 through January 31). While no trees would be removed as a result of the proposed project, trimming or removal of shrubs may be required.

Impact BIO-1: Breeding Birds

Noise disturbance from shrub removal and project activities may impact nesting birds if no avoidance measures are implemented. If shrub removal or trimming is required, implementation of Mitigation Measure BIO-1 would reduce this potential impact to less than significant.

Mitigation Measure BIO-1: Breeding Birds

The following avoidance measures shall be implemented to avoid disturbance of nesting birds within and adjacent to project construction: 1) a breeding bird survey shall be conducted by a qualified biologist within the project site and the surrounding 100-foot area, 2) the biologist shall establish suitable buffer areas around active nests (generally 50 feet for passerines and 100 feet for raptors, but these distances may be adjusted in the field by the biologist as appropriate), and 3) the biologist may either monitor the nest while work is conducted within the buffer area and determine whether or not the buffer area may be reduced, or work can be avoided in the buffer area entirely until the biologist determines that the nest has fledged or failed.

Impact BIO-2: California Red-Legged Frog

Although CRLF is not expected to occur within or adjacent to the project site, there is a remote potential for this species to disperse through the project site during construction occurring at times during and following rainfall events. Implementation of Mitigation Measure BIO-2 would reduce this potential impact to a less-than-significant level.

Mitigation Measure BIO-2: California Red-Legged Frog

To minimize disturbance to dispersing CRLF, no grading activity shall occur within 24 hours of a rainfall event totaling more than ½ inch over a 24-hour period. Alternatively, the grading and trenching may occur during or immediately after a rainfall event in the presence of a qualified biologist. If a CRLF individual is observed during construction, construction shall immediately cease and the individual shall be allowed to leave the area of its own accord.

- b) **No Impact.** There are no sensitive natural communities or riparian habitat located on the project site. Therefore, no impact would occur.
- c) **No Impact.** There are no federally protected wetlands located on the project site as defined by Section 404 of the CWA. Federally protected wetlands located outside of the project site would be entirely avoided.
- e) **Less than Significant Impact.** San Mateo County provides for the protection of “heritage trees” (Ordinance 2727) by requiring a permit for the removal of any tree, either Class 1 (designated by the Board of Supervisors) or Class 2 (species-specific

designated diameter at breast height (d.b.h.)). The County also provides protection for “significant trees” by requiring a permit for the removal of any native or non-native tree with a single stem or trunk of a circumference of 38” or more d.b.h. and having the inherent capacity of naturally producing one main axis continuing to grow more vigorously than later axes. The proposed project does anticipate impacts to or removal of any trees, but if a tree must be removed or impacts, the project would comply with the County’s tree ordinances by obtaining the necessary permits.

- f) **No Impact.** No Federal, State, or Regional Habitat Conservation Plans (HCPs) or Natural Community Conservation Plans (NCCPs) have been adopted for the project site.

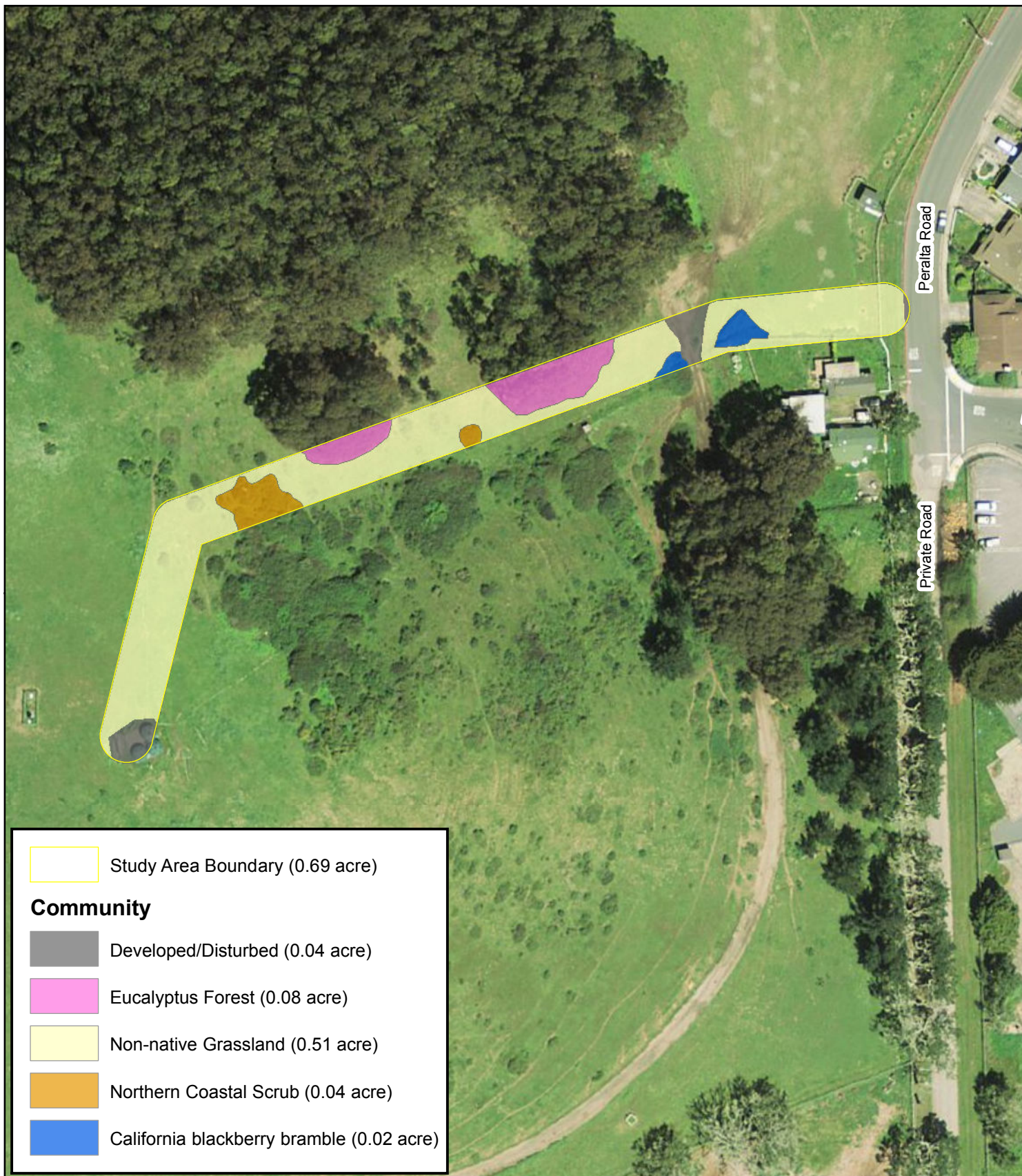


Figure 7. Biological Communities within the Project Site



ENVIRONMENTAL CONSULTANTS

Water Service Extension for Existing
Facilities at Shamrock Ranch
San Mateo County, California

0 25 50 100
Feet

Map Prepared Date: 5/4/2016
Map Prepared By: pkobylarz
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA, NCCWD,
West Valley Construction (WVC)

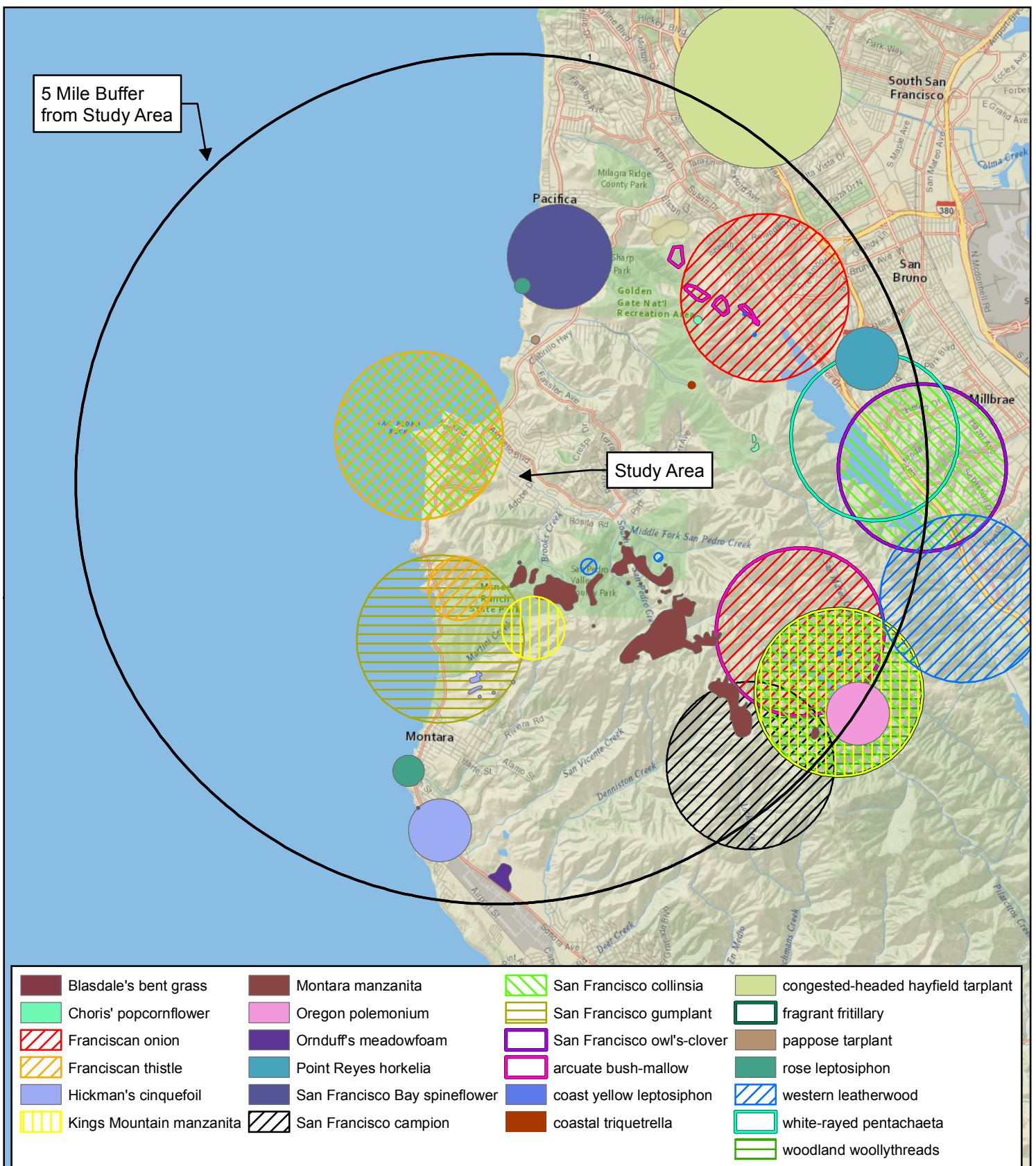


Figure 8. Special Status Plant Species within 5 miles of the Study Area

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



0 0.5 1 2
Miles



Map Prepared Date: 5/10/2016
Map Prepared By: thourigan
Base Source: National Geographic
Data Source(s): CNDDB (May 2016)

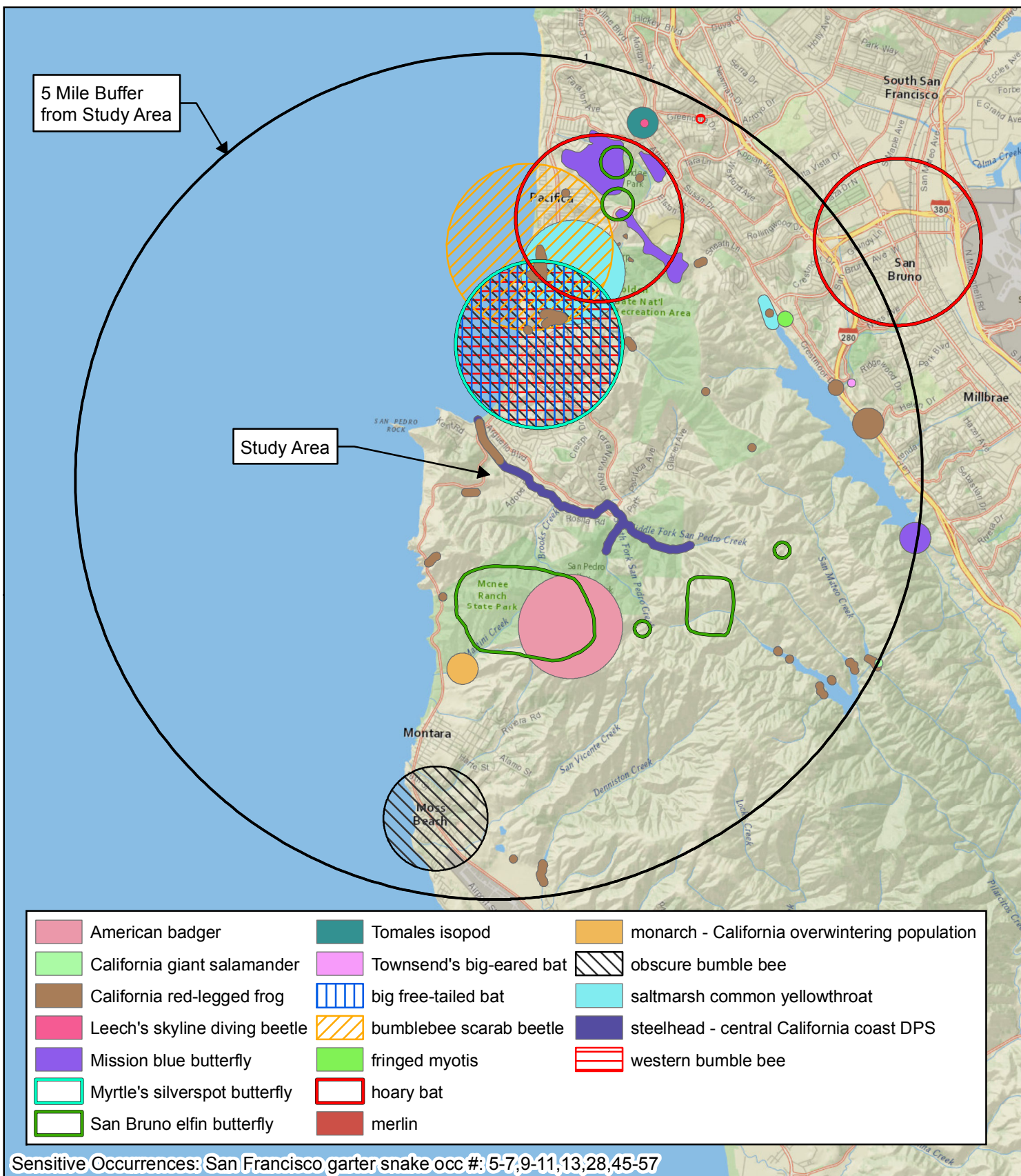


Figure 9. Special Status Wildlife Species within 5 miles of the Study Area

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



0 0.5 1 2
Miles



Map Prepared Date: 5/10/2016
Map Prepared By: thourigan
Base Source: National Geographic
Data Source(s): CNDDB (May 2016)

4.5 Cultural Resources

CULTURAL RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Cause a substantial adverse change in the significance of a historical resource as identified in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 9
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 9
c) 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"/>	1, 9
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1, 9

Background

Tom Origer & Associates (Origer) conducted a Historical Resources Survey Report (HRSR) for the proposed project, Appendix B. The report included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 15-1481), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the project site.

Environmental Setting

Archaeological evidence indicates that human occupation of California began at least 11,000 years ago (Erlandson et al. 2007). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion.

Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the project site was included in the territory controlled by the Ohlone, who are also referred to as Costanoans (Levy 1978:485-495). The Ohlone were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Levy 1978:485-495; Kroeber 1925:462-473). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain

seasons. Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant.

Historically, the project site is within the Rancho San Pedro (Sanchez) granted to Francisco Sanchez in 1839. When granted, it consisted of 8,926 acres of land that included what is now Pacifica and its surrounding communities (Hoover et al. 2002:394). Francisco Sanchez's adobe is located at 1000 Linda Mar Boulevard, approximately 1,600 feet east of the project site.

Native American Contact

The State of California's Native American Heritage Commission, the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Costanoan Rumsen Carmel Tribe, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the SF Bay Area, and The Ohlone Indian Tribe were contacted in writing. A log of contact efforts is provided in the Appendices of the HRSR. This contact represents notification regarding the project, to provide an opportunity to comment, and does not constitute consultation with tribes.

Archival Study Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 15-1481) 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. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the Office of Historic Preservation's Historic Property Directory (OHP 2012).

The Office of Historic Preservation has determined that structures in excess of 45 years of age should be considered potentially important historical resources, and former building and structure locations could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the project site. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO) to topographic maps issued by the United States Geological Survey (USGS) and the United States Army Corps of Engineers (USACE).

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

Archival Study Findings

Archival research found that the entire project site was surveyed in a previous study of the property (Archaeological Consulting and Research Services, Inc. 1978). No cultural resources were located within the project site during this study. However, two cultural resources were discovered nearby; an archaeological site with possibly both prehistoric and historical components, and the Shamrock Ranch building complex. Both of these resources are more than 500 feet away from the current project site.

There are no reported ethnographic sites within one mile of the project site (Levy 1978).

A review of 19th and 20th century maps shows no buildings within the project site; however, a building is shown just north of, but outside of, the project site as early as 1866 (Bromfield 1894; GLO 1860; USACE 1939, 1920; USCGS 1866; USGS 1896, 1899, 1915, 1949).

Based on the distribution of known cultural resources and their environmental settings, it was

anticipated that prehistoric archaeological sites could be found within the project site. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Procedures

An intensive field survey was completed by Eileen Barrow on April 28, 2016. The pipeline route was walked in a zig-zagging pattern approximately 10 meters wide with the route as the centerline, when possible. In some locations there was a great amount of Himalayan blackberry vines that impeded access. Ground visibility ranged from poor to excellent with vegetation being the chief hindrance.

Based on the results of the prefield research, it was anticipated that prehistoric and historic-period cultural resources could be found within the project site. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Findings

No historical or archaeological resources were located within the project site.

Paleontological Resources

Paleontological resources are mineralized or fossilized remains of prehistoric plants and animals, as well as mineralized impressions or trace fossils that provide indirect evidence of the form and activity of ancient organisms. Paleontological resources or prehistoric fossils have been discovered in exposed bluffs above the ocean bench along the coast in San Mateo County. These sites contained molluscan fossils from the Pleistocene Period.² The geology of the project site consists of a combination of Holocene and Paleocene deposits.

Discussion of Impacts

- a) ***No Impact.*** Pursuant to State CEQA guideline 15064.5, record searches, field surveys, and research were conducted to determine the potential presence of historic resources as part of the Historic Resources Survey Report (Origer 2016). The project site does not contain any resources listed on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest or identified as significant in

² San Mateo County, Environmental Services Agency, Planning and Building Division, County of San Mateo General Plan, Chapter 5 - Historical and Archaeological Resources, November 1986, page 5.5.

the HRSR. Nearby historical buildings would not be affected by the pipeline, because all disturbances would take place within the road right-of-ways and on private property, and the underground pipeline would not change the visual character of the roads near the historical buildings. Therefore, no impact would occur.

- b, c, d) ***Less than Significant with Mitigation Incorporated.*** The geology of the project site consists of a combination of Holocene and Paleocene deposits. The Holocene deposits of most concern are those located at the eastern end of the project site where the topography is flat. These deposits consist of alluvial soils that have a high possibility of containing buried prehistoric deposits. However, high sensitivity corresponds to a probability of approximately 3%- 5% for identifying a site per 24 acres (King 2004). While not within the project site, a monitoring study was conducted for the installation of the Rosita-San Pedro Transmission Pipeline project which is the main water line to which the proposed pipeline would connect. No buried resources were observed within Peralta Road in the area where the connection would be made (Bartoy *et al.* 2004).

Impact CULT-1: Accidental Discovery

The remaining Holocene deposits are located on the slope leading up to the water tanks and are unlikely to contain buried deposits. In addition, the Paleocene deposits predate accepted dates for human occupation of California; therefore, there is a very low likelihood of there being buried prehistoric deposits found within these geologic deposits. However, the limited potential still exists for project grading to impact unknown archaeological and/or paleontological resources at the site. These potentially significant impacts can be mitigated to less-than-significant levels via implementation of Mitigation Measure CULT-1.

Mitigation Measure CULT-1a: Cultural Resource Awareness Training

Prior to the initiation of the proposed project, a brief cultural resources training shall be provided to the construction crew by a professional archeologist. The training shall increase consciousness and knowledge of cultural resources and outline the appropriate protocols in the event of an inadvertent discovery (see Mitigation Measure CULT-1b below). Upon completion of the training, participants shall be able to define cultural resources, describe the policies and procedures for identifying and protecting cultural resources, know how to locate and receive assistance from the professional archeologist and coordinate with other sources, and describe steps to be taken if cultural resources are encountered during project implementation.

Mitigation Measure CULT-1b: Accidental Discovery Management

In the event of post-review discoveries of archaeological or paleontological resources the following recommendations apply:

- If any archaeological or paleontological deposits are encountered, all soil-disturbing work shall be halted immediately at the location of any discovery until a qualified archaeologist or paleontologist evaluates the significance of the find(s) and prepares a recommendation for further action. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination

of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

- In the event human remains are encountered, excavation or disturbance of the location shall be halted immediately in the vicinity of the find, and the county coroner shall be contacted. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission. The Native American Heritage Commission shall identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

4.6 Geology and Soils

GEOLOGY AND SOILS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 6
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 6
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 6
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 6
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2, 6
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

On-Site Geologic Conditions

Soils

The soil type found in the project site is Candlestick-Barnabe complex, 30 to 50 percent slope (Natural Resources Conservation Service 2012). The Candlestick-Barnabe series consists of very deep, well drained soils. Their characteristics vary, and in the project site, the soils are well-drained and gently sloping.

Seismicity

The San Francisco Bay area is one of the most seismically active areas in the country. While seismologists cannot predict earthquake events, the U.S. Geological Survey's Working Group on California Earthquake Probabilities (2003) estimates there is a 62 percent chance of at least one magnitude 6.7 earthquake occurring in the Bay Area region between 2003 and 2032. As seen with damage in San Francisco and Oakland due to the 1989 Loma Prieta earthquake that was centered about 50 miles south, significant damage can occur at considerable distances. Higher levels of shaking and damage would be expected for earthquakes occurring at closer distances. The faults considered capable of generating significant earthquakes in the area are generally associated with the well-defined areas of crustal movement, which trend northwesterly. Faults considered active by the State of California and located closest to the site include: San Andreas (5.5 miles, north of the site), and San Gregorio (3.9 miles south of the site). The project site is not located within a State-designated Alquist-Priolo Earthquake fault rupture zone.³

Liquefaction and Lateral Spreading

Liquefaction is the temporary transformation of a saturated granular soil layer to a liquefied state as a result of seismic ground shaking. In unique situations where this layer is at or near the surface, increased pressure rising groundwater may decrease load bearing capacity of the soil to a quicksand like consistency, causing buildings and foundations to sink downward. A subsurface layer which liquefies may serve as a sliding surface for overlying layers. Such a layer works like ball bearing by reducing friction to the point that landslides and lateral spreading may occur even on slight slopes. According to the Association of Bay Area Governments (ABAG), the project site is located in a low liquefaction susceptibility zone.⁴

Landslide

The project site has gentle slopes and hills. However, according to ABAG the project site would have a low susceptibility to earthquake-induced landslides or rainfall-induced landslides.⁵ This is due to the compacted soils and land uses in the area that do not provide sources of loose debris flows in their hazard situations.

Discussion of Impacts

- a-i, ii) ***Less than Significant Impact.*** No faults cross through the project site, and surface rupture associated with nearby faults is not anticipated in the surrounding area. Seismic activity associated with nearby faults could cause ground shaking on the project site and could create a risk for construction workers, if an earthquake happens during construction. Occasional ground shaking is common in the Bay Area, and construction workers would take the necessary precautions to maintain worker safety in the event of an earthquake. However, the construction phase of the proposed project is temporary and operation of the proposed project would be similar to existing conditions. In addition, design of project components would adhere to

³ California Geological Survey Alquist-Priolo Earthquake Fault Zone Maps. Available at: http://www.quake.ca.gov/gmaps/ap/ap_maps.htm. Accessed: December 30, 2012.

⁴ ABAG Geographic Information Systems: Hazard Maps. Available at: http://gis3.abag.ca.gov/Website/liq_scenario_maps/viewer.htm. Accessed January 22, 2013.

⁵ ABAG Geographic Information Systems: Hazard Maps. Available at: <http://gis.abag.ca.gov/website/LandslideDebrisFlow/index.html>. Accessed January 22, 2013.

California Building Code requirements specific to the area to minimize the potential for damage from earthquake activity in the future. Impacts associated with fault rupture and seismic ground shaking would be less than significant.

- a-iii, iv) ***Less than Significant Impact.*** Seismic-related ground failure is not anticipated in the project site, and the project would not expose people to these hazards. Liquefaction associated with ground shaking is unlikely given ABAG's hazard map. The potential for landslides from seismic activity is also considered low on the project site based on the geologic units and ABAG's hazard mapping. Impacts associated with seismic-related ground failure and landslides would be less than significant.
- b) ***Less than Significant Impact.*** Construction of the proposed project would involve ground disturbing activities for trenching and boring, which would temporarily expose soils to wind and water erosion. Approximately 50 cubic yards would be excavated, and used to backfill trenches. Another 35 cubic yards would be imported to the site to fill areas near the existing water tanks and Peralta Road. The construction phase of the project is required to include BMPs that are consistent with the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) which will ensure the project would not result in substantial soil erosion or the loss of topsoil. Impacts related to soil erosion and the loss of topsoil would be less than significant provided the project complies with the SMCWPPP.
- c, d) ***Less than Significant Impact.*** The potential for geologic and soil hazards from unstable or expansive soils on the project site is considered low based on the geologic units and soil types. However, occasional ground shaking is common in the Bay Area, and construction workers would take the necessary precautions to maintain worker safety in the event of an earthquake. The construction phase of the proposed project is temporary and operation of the proposed project would be similar to existing conditions. Additionally, the proposed project would not create substantial risk to life or property. The proposed project would install a water service connection for the District to provide water service to existing facilities on Shamrock Ranch. The proposed project is therefore not expected to be affected by such hazards, and construction workers would not be exposed to these hazards during construction.
- e) ***No Impact.*** The project does not involve construction of septic tanks or wastewater disposal systems.

4.7 Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS — Would the project:		<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a)	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"/>	1, 6
b)	Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 6

Environmental Setting

Assembly Bill 32, adopted in 2006, established the Global Warming Solutions Act of 2006 which requires the State to reduce greenhouse gas (GHG) emissions to 1990 levels by 2020. Senate Bill 97, adopted in 2007, required the Governor's Office of Planning and Research to develop CEQA guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions," and the Resources Agency certified and adopted the amendments to the guidelines on December 30, 2009.

GHGs are recognized by wide consensus among the scientific community to contribute to global warming/climate change and associated environmental impacts. The major GHGs released from human activity are carbon dioxide, methane, and nitrous oxide (Governor's Office of Planning and Research, 2008). The primary sources of GHGs are vehicles (including planes and trains), energy plants, and industrial and agricultural activities (such as dairies and hog farms).

Discussion of Impacts

- a) ***Less than Significant Impact.*** GHG emissions from the proposed project would be produced from construction-related equipment emissions and operation of the pipeline components. GHG emissions associated with the operations of the proposed project would consist of GHG emissions from electricity consumption to move water through the system. Given the nature of the proposed project and short duration of construction, GHG emissions resulting from construction activities would be minor and temporary. Construction activities would last one month and would utilize minimal equipment due to the small amount (less than 0.69 acres) of ground disturbance. The project would generate approximately eight truck trips for equipment delivery, sediment import, and drill slurry transport. Eight truck trips would not constitute a significant contribution to annual GHG emissions for the City of Pacifica or San Mateo County. While the proposed project would have an incremental contribution to GHG emissions within the context of the County and region, the individual impact of the project is considered less than significant.
- b) ***Less than Significant Impact.*** The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG

emissions. GHG emissions from off-road equipment and utility electrical usage are identified and planned for in the BAAQMD's 2010 Clean Air Plan as well as the BAAQMD's Source Inventory of Bay Area Greenhouse Gas Emissions (BAAQMD 2010a and 2010b). A primary objective of the 2010 Clean Air Plan is to reduce greenhouse gas emissions to 1990 levels by 2020 and 40% below 1990 levels by 2035. San Mateo County adopted an Energy Efficiency Climate Action Plan (CAP) in June 2013 and similarly the City of Pacifica adopted a CAP on July 14, 2014. Although the proposed project is not within the City of Pacifica, this CAP includes recommendations related specifically to the NCCWD. These CAPs includes policies to encourage water conservation through incentives and adoption of a water conservation ordinance. The project would not conflict with these policies and would extend the offering of water conservation incentives to a new facility. The project would generate emissions similar to existing conditions and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. Therefore, a less-than-significant impact would occur.

4.8 Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS — Would the project:		<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 10
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 10
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 10
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 10
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"/>	1, 2

HAZARDS AND HAZARDOUS MATERIALS — Would the project:		<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
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"/>	1, 2
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2
h)	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 checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2

Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined in Title 22 of the California Code of Regulations as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed (California Code of Regulations, Title 22, Section 66261.10).

Chemical and physical properties cause a substance to be considered hazardous. Such properties include toxicity, ignitability, corrosivity, and reactivity (as defined in California Code of Regulations, Title 22, Sections 66261.20-66261.24). The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. Under Government Code Section 65962.5, the California Department of Toxic Substances Control (DTSC) maintains a list of hazardous substance sites. This list, referred to as the "Cortese List," includes CALSITE hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination. No hazardous materials have been documented by the DTSC within the project alignment and there are no hazardous substances sites included on the Cortese List in the project vicinity.

Discussion of Impacts

- a, b, c) ***Less than Significant Impact.*** The project site is within 0.25 mile of one public school (Linda Mar Preschool). Linda Mar Preschool is located approximately 0.05 miles from the project site. Small amounts of hazardous materials would be used during construction activities (e.g., fuel and solvents). Use of hazardous materials would be limited to the construction phase and would comply with

applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Hazardous materials would not be stored or used, such as for equipment maintenance, where they could affect nearby residences or sensitive receptors. Therefore, impacts associated with the use or accidental spill of hazardous materials would be less than significant.

- d) **No Impact.** The proposed project site is not included on the list of hazardous material sites compiled pursuant to Government Code Section 65962.5.⁶⁷ Therefore, the proposed project would not result in impacts related to the being located on a site that is included on a list of hazardous material sites.
- e, f) **No Impact.** The project site is not located within two miles of public airport or private airstrip. Therefore, the project would not expose persons to a safety hazard related to airports or private airstrips.
- g) **Less than Significant Impact.** Emergency access to or evacuation from surrounding areas would not be restricted during construction because the proposed project is not located in an area that would block emergency response or evacuation and all equipment would be staged within the project site. All project work would take place within the Shamrock Ranch Property. Work along Peralta Road for the connection to the existing meter would be accomplished from the property and would not block road access. Impacts would be less than significant.
- h) **Less Than Significant Impact.** According to the Association of Bay Area Governments (ABAG) Wildland Urban Interface (WUI) Fire Threat map, portions of the project site are located within and adjacent to an area subject to wildland fires.⁸ However, the project involves the short-term construction of a water service connection and the long-term operation of the project would not increase the risk of wildfire near an urban area. Impacts would be less than significant.

⁶ California Department of Toxic Substances Control, 2007. *EnviroStor, Site/Facility Search Database*. <http://www.envirostor.dtsc.ca.gov/public/>.

⁷ U.S. Environmental Protection Agency (EPA), 2016. *Superfund Sites*. <https://www.epa.gov/superfund/search-superfund-sites-where-you-live>

⁸ ABAG. *ABAG Geographical Information Systems - Wildland Urban Interface (WUI) Fire Threat*. Accessed October 20, 2010. Available at: <http://quake.abag.ca.gov/wildfires/>. Accessed December 30, 2012.

4.9 Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
b) 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"/>	1, 2
c) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1, 2
d) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
e) Create or contribute runoff water that 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
g) 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"/>	1, 2
h) 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"/>	1, 2

HYDROLOGY AND WATER QUALITY — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
i) 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"/>	1
j) Inundation of seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,6

Environmental Setting

The project site is under the jurisdiction of the San Francisco Regional Water Quality Control Board (WRQCB) (Region 2). According to the RWQCB's Water Quality Control Plan the project site is located in the San Mateo Coastal Basin and the San Pedro Creek Watershed.⁹ The project site is covered with mostly pervious surfaces, with drainage flowing into existing street culverts. An unnamed perennial tributary to San Pedro Creek flows through the Shamrock Ranch property. San Pedro Creek is on the Clean Water Act (CWA) 2006 303(d) list due to impairment from coliform bacteria. Potential sources of bacteria include nonpoint sources and urban runoff/storm sewers. A Total Maximum Daily Load (TMDL)¹⁰ for coliform bacteria in San Pedro Creek is proposed to be completed by 2019. Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in unincorporated San Mateo County (as part of the Countywide Stormwater Pollution Prevention Program or SMCWPPP) are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, Order No. R2-2009-0074, NPDES Permit No. CAS612008, adopted October 14, 2009 (MRP). The MRP is overseen by the San Francisco Bay Regional Water Quality Control Board (Water Board).

The County has a Development Review Center that acts as a "one-stop" permitting center for projects in the County's jurisdiction. The center has project submittals reviewed by Building Inspection, Current Planning, and Public Works representatives. The Department of Public Works is specifically responsible for review of project submittals for compliance with the County's Water Management Plan and with the Watershed Protection Maintenance Standards. Along with the Planning Department, the Public Works Department also reviews projects for compliance with the NPDES Provision C.3. Most of the County's stormwater regulations are codified under Chapter 4, Section 100 of the San Mateo County Code, which includes provisions from the County's Ordinance 3633.

According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM), the project site is located within Zone X, areas determined to be outside of the

⁹ San Francisco Regional Water Quality Control Board. 2006. *Daly City and Vicinity*. http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/watershed/watershed.shtml

¹⁰ A TMDL is a written plan that describes how an impaired water body will meet water quality standards, which contains: (1) a measurable feature to describe attainment of the water quality standard(s); (2) a description of required actions to remove the impairment and; (3) an allocation of responsibility among dischargers to act in the form of actions or water quality conditions for which each discharger is responsible.

0.2% annual chance flood.¹¹ The project site is not subject to seiches and the project site is not located near any levees or dams. The project site is located outside of Coastal Zone, but is within approximately ¼ mile from a mapped tsunami inundation area according to ABAG hazard mapping.

Discussion of Impacts

- a) ***Less than Significant with Mitigation Incorporated.*** Project construction period activities could generate stormwater runoff that could cause or contribute to a violation of water quality standards or waste discharge requirements, provide additional sources of polluted runoff, or otherwise degrade the water quality of San Pedro Creek. Operation of the proposed project would be the same as existing conditions as the proposed project includes the installation of an underground pipeline for water supply.

Impact HYDRO-1: Erosion

In areas of active construction, soil erosion may result in discharges of sediment-laden stormwater runoff or directional drilling slurry into San Pedro Creek, if not properly controlled. Additional sediment input to the Creek from project construction activities could contribute to degradation of downstream water quality and impairment of beneficial uses. Sediment can also be a carrier for other pollutants, such as heavy metals, nutrients, pathogens, oil and grease, fuels and other petroleum products.

Mitigation Measure HYDRO-1: Erosion

The District would be required to implement BMPs consistent with SMCWPPP requirements for treatment and control of stormwater runoff from the site. As the proposed project includes the use of directional bores, the construction contractor shall include silt fencing and/or the use of tanks or reservoirs to contain directional boring slurry, in addition to all other BMPs implemented in compliance with the SMCWPPP.

- c, d, e) ***Less than Significant with Mitigation Incorporated.*** The proposed project would not cause a substantial change to the erosion and accretion patterns because the underground pipeline and infrastructure would not alter the existing drainage pattern of the site and surrounding area or increase stormwater runoff. Construction of the proposed project would involve ground-disturbing activities that could potentially create erosion. The proposed project would be required to conform to MCSWPPP erosion control BMPs that would ensure that significant erosion, siltation, and contamination impacts would not occur during short-term construction activities. Implementation of Mitigation Measure HYDRO-1 would ensure that erosion impacts due to the directional boring slurry are less than significant as well.

¹¹ Federal Emergency Management Agency. *Flood Insurance Rate Map. Community-Panel Number 06081C0109E. Effective October 16, 2012.*

All trenches would be filled and repaved to match the existing grade and surfaces. Any curbs, gutters, sidewalks, or other surface features damaged during construction would be replaced or repaired in kind. Therefore, impacts related to water quality, drainage, and erosion would be less than significant.

- b) **No Impact.** The project would not require use of groundwater supplies or affect groundwater recharge in the area.
- f) **No Impact.** The project would not have other water quality impacts beyond those discussed under item (a) above.
- g, h, i, j) **No Impact.** The project would not involve placement of housing or other structures in a flood zone and would not expose people or structures to risks from flooding or inundation by seiche, tsunami, or mudflow.

4.10 Land Use and Planning

LAND USE AND PLANNING – Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
b) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	2, 3
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

The project site is located adjacent to the City of Pacifica, in an unincorporated area of San Mateo County. This unincorporated area is comprised of Open Space Rural land use with Agricultural Rural and Public Recreation Rural land uses to the south and east. The project site encompasses a portion of the Shamrock Ranch property extending from three existing water tanks at the top of a hill, down the east-facing slope of the hill to the pipeline connection location on Peralta Road, approximately 30 feet north of the Rosita Road intersection. Included in the project site are three existing water tanks that provide water to the Shamrock Ranch. Existing pipelines from the tanks are present to the south of the project site. Surrounding land uses include the rest of the Shamrock Ranch property, residential neighborhoods to the north and east, and Linda Mar Preschool to the south.

The San Mateo County General Plan provides policies and implementation strategies for management of the resources and land uses in the County, and the County Codes provide restrictions and requirements to protect resources and comply with local, state, and federal laws. The proposed project is subject to the San Mateo County General Plan, San Mateo County Zoning Ordinance, and LAFCo statutes. No habitat conservation plans have been adopted for the area.

San Mateo County General Plan

The proposed project is subject to the following applicable General Plan policies:

General Land Use

The proposed project site is designated as General Open Space. This designation allows for the following uses: resource management and production including but not limited to agriculture, oil and gas exploration; recreation uses including but not limited to stables and riding

academies; residential uses including but not limited to non-transient housing; and service uses.

Policy 7.25: Encourage LAFCo, when conducting sphere of influence studies, to evaluate the suitability of retaining rural areas within city spheres of influence.

Visual Quality

Policy 4.29: Trees and Vegetation. Preserve trees and natural vegetation except where removal is required for approved development or safety. Replace vegetation and trees removed during construction wherever possible.

Policy 4.31: Public Utilities. Encourage the placement of new and existing public utility lines underground.

Water Supply

Policy 10.12: Encourage water providers to coordinate the planned capacity of their facilities commensurate with the level of development permitted by adopted land use plans and wastewater management plans.

Policy 10.13: Support efforts to improve water distribution and storage systems in unincorporated neighborhoods and communities.

Policy 10.17: Support, where local residents express interest, the possible consolidation of water systems under one management and pursue methods of financing this consolidation, such as assessment districts, Federal and State grants, and creation of new districts.

Man-Made Hazards

Policy 16.14: Noise Barriers Noise Control. Promote measure, which incorporate use of noise barriers into the design of new development, particularly within Noise Impact Areas. Noise barriers may include earth berms, walls, fencing, or landscaping.

San Mateo County Zoning Ordinance

The project site has the zoning designation of “RM” Resource Management District.

Sec. 6315: Permitted Uses. (f) Kennels or catteries, with a kennel/cattery permit.

Sec. 6163.6: Performance Standards. The maximum noise level permitted, measured at the building site boundary, shall be:

Table 1. Noise Ordinance Levels

Time of Day	Maximum Noise Level (dBA)		
	30 Minutes In Any Hour	15 Minutes In Any Hour	5 Minutes In Any Hour
7:00 a.m. – 10:00 p.m.	55	60	65
10:00 p.m. – 7:00 a.m.	50	55	60

Short-term construction noise may exceed these standards, providing that all construction activities are limited to weekdays between 7:00 a.m. and 5:00 p.m.

LAFCo Statutes

- V.5: District boundaries should not create islands or corridors unless these areas are designated or reserved for open space or regional facilities which are best left without the provision of services.
- V.11: Special districts are the appropriate agencies to provide essential services in areas in which only a limited range of services is required or, if a full range of urban services is required and where it is not feasible for those services to be provided by a single city.

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code 56000)

- 56001: The Legislature also finds that, whether governmental services are proposed to be provided by a single-purpose agency, several agencies, or a multipurpose agency, responsibility should be given to the agency or agencies that can best provide government services.
- 56133: (a) A city or district may provide new or extended services by contract or agreement outside its jurisdictional boundary only if it first requests and receives written approval from the commission. (b) The commission may authorize a city or district to provide new or extended services outside its jurisdictional boundary but within its sphere of influence in anticipation of a later change of organization. (c) If consistent with adopted policy, the commission may authorize a city or district to provide new or extended services outside its jurisdictional boundary and outside its sphere of influence to respond to an existing or impending threat to the health or safety of the public or the residents of the affected territory...

Discussion of Impacts

- a) ***No Impact.*** The project involves the installation of a water service connection within the private property of Shamrock Ranch and within the public right-of-way along Peralta Road. Therefore, the proposed project would not physically divide an established community.

- b) ***Less than Significant Impact.*** A proposed project would have a significant impact if it were to 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. The proposed project is subject to several local policies, plans, and regulations, as described above.

The proposed water service extension of the Shamrock Ranch to the NCCWD would not affect any existing land uses on the project site or the surrounding area. According to San Mateo LAFCo's latest Sphere of Influence (SOI) Study (2015), Shamrock Ranch is specifically called out, stating "NCCWD and the landowner should jointly study the fiscal and operation benefits of annexation of Shamrock Ranch to the District." The Shamrock Ranch property is outside of the NCCWD's SOI, but as the Ranch is a year round facility with year round residences, it requires an adequate, safe and reliable water supply. The current interruption of water is a threat to health and safety, and is therefore compliant with Government Code 56133. The District must seek the approval of LAFCO to provide new or extended service outside NCCWD's jurisdictional boundaries after completion and approval of this Initial Study.

The proposed project would not conflict with the land use designation for the project site and supports efforts to improve water supplies to unincorporated areas. The proposed project is consistent with all applicable land use plans, policies, and regulations, and therefore impacts would be less than significant.

- c) ***No Impact.*** No habitat conservation plans or natural community conservation plans have been adopted for the project site or surrounding areas.

4.11 Mineral Resources

MINERAL RESOURCES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	Source
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2

Environmental Setting

According to the San Mateo County General Plan, there are three active quarries, in unincorporated areas. These include: the Langley Hill Quarry in the Santa Cruz Mountains, Guadalupe Valley Quarry located on San Bruno Mountain, and Pilarcitos Quarry located in the Coastal Zone. The Pacifica Quarry and Mori Point were designated in 1987 as an area of

mineral significance. This is the only area of the City of Pacifica with such a designation and is located approximately, 2.5 miles north of the project site. There are no known mineral resources within the vicinity of the project site.

Discussion of Impacts

a, b) ***No Impact.*** The project site is not in or adjacent to any important mineral resource areas.

4.12 Noise

NOISE — Would the project result in:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) 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"/>	1,2
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
c) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
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 of 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"/>	1
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"/>	1

Environmental Setting

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady “background” noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from

individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq} – An L_{eq} , or equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{max} – The maximum instantaneous noise level experienced during a given period of time.
- L_{min} – The minimum instantaneous noise level experienced during a given period of time.
- CNEL – The Community Noise Equivalent Level is a 24-hour average L_{eq} with a 5 dBA “weighting” during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA “weighting” added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. For residential uses, environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70 dBA.¹² Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

It is widely accepted that in the community noise environment the average healthy ear can barely perceive CNEL noise level changes of 3 dBA. CNEL changes from 3 to 5 dBA may be noticed by some individuals who are extremely sensitive to changes in noise. A 5 dBA CNEL increase is readily noticeable, while the human ear perceives a 10 dBA CNEL increase as a doubling of sound.

¹² Office of Planning and Research, State of California General Plan Guidelines, October 2003 (in coordination with the California Department of Health Services).

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors, such as the weather and reflecting or barriers, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically “hard” locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically “soft” locations (i.e., the area between the source and receptor is normal earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels are also generally reduced by 1 dBA for each 1,000 feet of distance due to air absorption. Noise levels may also be reduced by intervening structures – generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The normal noise attenuation within residential structures with open windows is about 17 dBA, while the noise attenuation with closed windows is about 25 dBA.¹³

The San Mateo County Zoning Ordinance includes performance standards for noise (see Section 4.10, Land Use Planning, Table 1), with the exception that short-term construction noise are limited to weekdays between 7:00 a.m. and 5:00 p.m. Table 2 illustrates typical noise levels from construction equipment at a reference distance of 50 feet.

¹³ *National Cooperative Highway Research Program Report 117, Highway Noise: A Design Guide for Highway Engineers, 1971.*

Table 2. Construction Equipment Noise Generation

Equipment	Typical Noise Level (dBA) 50 ft from Source
Air Compressor	81
Backhoe	80
Ballast Equalizer	82
Ballast Tamper	83
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Impact Wrench	85
Jack Hammer	88
Loader	85
Paver	89
Pile-driver (Impact)	101
Pile-driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scarifier	83
Scraper	89
Shovel	82
Spike Driver	77
Truck	88
Source: Federal Transit Administration. <i>Transit Noise and Vibration Impact Assessment</i> , 2006	

Discussion of Impacts

- a, d) ***Less than Significant with Mitigation Incorporated.*** The proposed project construction is expected to last a total of one month. During that time, the most common noise experienced by the adjacent land uses would be from mobile diesel equipment such as an excavator, dozer, trucks, front end loader and compactor.

Table 2 illustrates typical noise levels from construction equipment at a reference distance of 50 feet. Noise levels from construction equipment attenuate at a rate of six (6) dBA per doubling of distance. Therefore, the noise levels at a distance of 100 feet would be 6 dBA less than those shown in Table 2.

Impact NOISE-1: Construction Noise

Construction equipment would generate maximum noise levels of approximately 89 decibels (dB) at 50 feet. Construction noise levels may periodically exceed noise standards in the existing Noise Ordinance. The temporary noise from construction would not cause a substantial increase in ambient noise or expose sensitive receptors to unacceptable noise levels for long periods of time. Impacts associated with construction noise would cause a significant, temporary increase in noise levels. Incorporation of Mitigation Measure NOISE-1 would reduce potentially significant noise impacts to a less-than-significant level.

Long-term operational noise impacts would be less than significant because the conditions would be similar to existing noise levels. The new pipeline would be underground and would not result in a long-term noise increase.

Mitigation Measure NOISE-1: Construction Noise

The District shall incorporate the following practices into the construction documents to be implemented by the project contractor:

- Construction hours shall be limited to 7:00 a.m. to 5:00 p.m. during which construction noise is exempted from the Performance Standards of the Zoning Ordinance.
- Notify businesses, residences, and noise-sensitive land uses adjacent to construction sites of the construction schedule in writing. Designate a "construction liaison" that is responsible for responding to any local complaints about construction noise. The liaison shall determine the cause of the noise complaints (for example starting too early, or a bad muffler) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the liaison at the construction site.
- Coordinate construction activities so that they cause the least interference with daytime activities in the community as practical. This is particularly important at the Linda Mar Preschool. Reasonable attempts should be made to conduct the most intensive construction activities closest to the school outside of school hours or during times when the school is not in session. If given adequate notification, the school may be able to schedule its activities

around the necessary construction schedule, or to concentrate activities in outdoor areas or buildings that are farther from the project site.

- Maximize the physical separation between noise generators and noise receptors.
- Minimize backing movements of equipment.
- Verify that equipment engines are fitted with appropriate mufflers that are in good operating condition.
- Prohibit unnecessary idling of internal combustion engines.

- b) ***Less than Significant Impact.*** Construction activities can generate groundborne vibration that is feelable (causes annoyance) and in extreme cases, causes physical damage to nearby buildings. Groundborne vibration is typically associated with blasting operations, the use of pile drivers, and large-scale demolition activities, none of which are anticipated for the construction or operation of the proposed project. As such, no excessive groundborne vibrations would be generated by the proposed project and these impacts would be less than significant.
- c) ***Less than Significant Impact.*** As stated in the response to Question 4.12 (a), the proposed project would not include major permanent noise generating facilities. Operation of the proposed project would be similar to existing ambient conditions. Therefore, the proposed project would not result in a permanent increase in ambient noise levels.
- e, f) ***No Impact.*** The project site is not within the vicinity of a public airport or private airstrip. Therefore, no impacts associated with excessive public airport or private airplane noise are expected.

4.13 Population and Housing

POPULATION AND HOUSING — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) 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"/>	<input checked="" type="checkbox"/>	1
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

The project site is located south and west of a developed residential neighborhood community of Pacifica. Surrounding land uses near the project site include residential and open space uses. Residential neighborhoods and Linda Mar Elementary School are located to the north and east and open space including the Pedro Point Headlands maintained by the Pacifica Land Trust to the south and west of the project site.

Discussion of Impacts

- a-c) ***No Impact.*** The project would provide water to existing facilities on Shamrock Ranch from the District, as a reliable source of water is no longer available from on-site wells. The proposed project is intended solely for existing facilities and is not designed to extend infrastructure to accommodate growth. The proposed project would be within existing easements and rights-of-way and would not displace people or housing and would not result in the addition of new housing or businesses.

4.14 Public Services

PUBLIC SERVICES — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:					
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

Environmental Setting

CAL FIRE is responsible for State Responsible Areas, and primarily fights wildland fires; CAL FIRE is not responsible for structural fires. The San Mateo-Santa Cruz Unit serves the project site. The unit is geographically divided into four battalions. Within the unit there are state and county paid stations, local government departments, fire protection districts, and volunteer companies.

The San Mateo County Sheriff's Office has designated patrol service for more than 70% of San Mateo County, within the unincorporated areas. The San Mateo County Sheriff's Office, which has jurisdiction over unincorporated areas of the county, provides police services to the proposed project site.

The project site is within 0.25-mile of one public school (Linda Mar Preschool). Other public schools in the area include the Cabrillo Elementary School (K-8) located approximately 1.1-miles north of the project site and Ortega Elementary School (K-5) located approximately 2.8 miles east of the project site.

The project site is located adjacent to the San Pedro Point Headlands, located directly on the west side of Highway 1. The project site is also located approximately one mile from Sanchez Adobe County Park.

Discussion of Impact

- a) **No Impact.** The construction phase of the proposed project would be temporary and therefore is not anticipated to require new or physically altered governmental facilities that could result in significant physical environmental impacts. The project would not involve any additional housing or businesses that could increase residents and/or employees on the project site. As such, the long-term operation of the proposed project also would not significantly increase the demand for public services or require construction of new governmental facilities.

4.15 Recreation

RECREATION — Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Source
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
b) 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"/>	1

Discussion of Impacts

- a, b) **No Impact.** The project would not involve any additional housing or businesses that could increase residents and/or employees on the project site. The temporary construction required for the installation of the pipeline underground would not affect recreational facilities or increase the use of nearby recreational facilities. The purpose of the project is to install a water service connection to allow the District to provide water to existing facilities on Shamrock Ranch and it does not require the construction or expansion of recreational facilities. No impacts would occur.

4.16 Transportation/Traffic

TRANSPORTATION/TRAFFIC — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
a) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
b) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
c) 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"/>	<input checked="" type="checkbox"/>	1
d) Substantially increase hazards 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"/>	<input checked="" type="checkbox"/>	1
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

Discussion of Impacts

- a) ***Less than Significant with Mitigation Incorporated.*** Construction traffic (equipment and materials transport and daily worker traffic) would result in a minor increase traffic on local roads during the construction phase. The temporary construction-related traffic is not expected to reduce the levels of service for the roads.

Impact TRAFFIC-1: Traffic Safety

Large vehicles transporting equipment and materials to the project site could cause slight delays for travelers adjacent to the project's access points as the construction vehicles stop to unload. However, lane and road closures are not expected because staging areas are located in the project site and not on the local roads. Mitigation Measure TRAFFIC-1 includes control measures to alert travelers to potential delays and ensure that construction-related impacts are less than significant.

Mitigation Measure TRAFFIC-1: Traffic Safety

- Use traffic cones, signs, lighted barricades, lights, and flagmen as described and specified in the Manual of Uniform Traffic Control Devices, current edition, California Supplement, Part 6 Temporary Traffic Control to provide for public safety and convenience during construction, if necessary.
- Maintain convenient access to driveways and buildings near the work area unless otherwise approved by the District in advance.
- Restore pavement, curbs, gutters, and sidewalks, as necessary, to pre-disturbance conditions or better.

- b) **Less than Significant Impact.** A significant impact may occur if the adopted California Department of Transportation (Caltrans) and San Mateo County Congestion Management Agency (CMA) thresholds for a significant project impact would be exceeded. To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111. The CMP designated a transportation network including all State highways and some arterials within the County to be monitored by local jurisdictions. If the Level of Service (LOS) standard deteriorates on the CMP network, then local jurisdictions must prepare a deficiency plan to be in conformance with the CMP program.

As discussed above, the proposed project would not permanently increase traffic on local roads or highways to a level that would affect intersection LOS. The project would maintain at least one lane of traffic in one direction at all times. The proposed project would not result in long-term traffic increases or impacts.

- c) **No Impact.** This question would apply to the proposed project only if it were an aviation-related use. The project site does not contain any aviation-related uses, and the proposed project would not include the development of any aviation-related uses. Therefore, the proposed project would not affect air traffic patterns and would have no effect on air traffic levels or safety.
- d) **No Impact.** A significant impact may occur if a project were to include a new roadway design, introduce a new land use or permanent project features into an area with specific transportation requirements and characteristics that have not been previously experienced in that area, or if project access or other features were designed in such a way as to create hazardous conditions. The project would not involve new road construction or activities that could increase hazards due to a

design feature or incompatible uses. Adequate sight distance would be available for motorists to access and depart the project site.

- e) **Less than Significant Impact.** Significant delays for emergency access to the residences adjacent to the work area are not expected. The proposed project would be staged off of local roads and within existing rights-of-way. Impacts relating to emergency access would be less than significant.
- f) **Less than Significant Impact.** The project would not significantly conflict with any adopted policies, plans or programs or affect alternative transportation routes in the project site. The project site is located within a residential neighborhood and is not adjacent to roadways identified in the San Mateo County Pedestrian and Bicycle Master Plan. The City of Pacifica Bicycle Plan includes Class II on street bicycle lanes adjacent to the project site from Peralta Road from its intersection with San Pedro Terrance Road to its eastern terminus at Higgins Way. During construction, equipment and material transport would take place along this stretch of roadway. However, staging would take place within the project site, off local roadways. Operation of the proposed project would result in the installation of an underground pipeline and water meter. Therefore, the proposed project would prevent the proposed bicycle paths and would not conflict with the adopted Bicycle Plan.

4.17 Utilities and Service Systems

UTILITIES AND SERVICE SYSTEMS — Would the project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Source
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
b)	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
c)	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"/>	<input checked="" type="checkbox"/>	1
d)	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 checked="" type="checkbox"/>	<input type="checkbox"/>	1

UTILITIES AND SERVICE SYSTEMS — Would the project:	<i>Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporated</i>	<i>Less than Significant Impact</i>	<i>No Impact</i>	<i>Source</i>
e) 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"/>	<input checked="" type="checkbox"/>	1
f) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	1
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

Environmental Setting

The project site is located adjacent to a developed area along Peralta Road, which contains existing utility distribution lines. Shamrock Ranch receives electricity and solid waste collection via existing utilities and service systems, but does not currently receive municipal water or wastewater services.

Water Service

Historically, residences and infrastructure on Shamrock Ranch have obtained water from naturally occurring on-site wells and a spring. In recent years, water available from these natural resources has diminished and Caltrans has delivered water to the site via truck. The proposed project is intended to install a water service connection to allow the District to provide water to the site.

Solid Waste

Solid waste is collected and sorted at the Ox Mountain Sanitary Landfill. Ox Mountain is a Class III Municipal Solid Waste Landfill which accepts all types of solid waste and is prohibited from accepting hazardous waste. The landfill is located at 12310 San Mateo Road (Highway 92) in Half Moon Bay. The most recently reported closure date and remaining capacity for the landfill is January 2018 and 44,646,148 cubic yards, respectively.

Discussion of Impacts

- a, c, e) **No Impact.** Neither construction nor operation of the proposed project would generate wastewater. The proposed project would not alter stormwater drainage, because once the new pipeline is installed, the trenches would be backfilled similar to existing conditions. As a result, the proposed project would have no impact related to the exceedance of wastewater treatment requirements, physical impacts from new storm drain facilities, or wastewater treatment capacity.

b) ***Less than Significant with Mitigation Incorporated.*** The proposed project consists of the installation of a new water service connection to existing water tanks and facilities on Shamrock Ranch. Potentially significant impacts have been identified in this Initial Study related to biological resources, cultural resources, noise and transportation and traffic. Implementation of the mitigation measures and required construction best management practices outlined in this Initial Study would reduce construction impacts of the new water service connection to less than significant. The proposed project does not include the construction of new water treatment facilities.

d) ***Less than Significant Impact.*** Historically, residences and infrastructure on Shamrock Ranch have obtained water from naturally occurring on-site wells and a spring. However, in recent years water available from these naturally occurring sources has diminished and Caltrans has delivered water to the site via truck. Government Code Section 56133 allows a public agency to extend service outside jurisdictional boundaries to mitigate an existing or impending public health threat. This section requires that NCCWD apply to LAFCo for approval to extend service. Shamrock Ranch seeks a water connection from NCCWD to provide a safe and reliable water supply for existing structures at the recommendation of the State Water Resources Control Board and in response to failure of Shamrock Ranch's groundwater system following construction of the Tom Lantos Tunnel.

The NCCWD provides drinking water to the residents of the City of Pacifica in San Mateo County, California. The District's service area covers approximately 11.3 square miles and water is provided to a population of approximately 39,000 people through approximately 12,000 water service connections. The District was formed in 1944 to acquire water from the San Francisco Water Department, predecessor to the San Francisco Public Utilities Commission ("SFPUC"). The District is one of the SFPUC's 26 Wholesale Customers that purchase water delivered from the San Francisco regional water system. The District receives approximately 3,300 acre-feet per year ("AFY") or an average of 2.9 million gallons of water per day ("MGD") from the SFPUC for use within the City of Pacifica (Stetson, 2016). As previously mentioned in Section 3.0 (Project Description), the average daily water consumption at Shamrock Ranch is approximately 10,000 gallons per day. Therefore, this water service connection would result in an approximately 0.3% increase in the average daily water deliveries for NCCWD. Average daily water deliveries for the NCCWD currently constitute approximately 77% of its supply as guaranteed in existing supply agreements with SFPUC. Therefore, this additional service is well within the District's capacity.

While there is no mention of this extension in the NCCWD's 20-Year Water Master Plan, according to San Mateo LAFCo's latest SOI Study (2015), Shamrock Ranch is specifically called out, stating "NCCWD and the landowner should jointly study the fiscal and operation benefits of annexation of Shamrock Ranch to the District."

f, g) ***Less than Significant Impact.*** The project may generate a small quantity of solid waste during construction, but all generated waste would be properly disposed or recycled in an approved landfill or disposal facility with capacity to receive the waste. The Cal Recycle Solid Waste Information System (SWIS) indicates solid waste from

the area is landfilled at the Ox Mountain Sanitary Landfill, located two miles northeast of Half Moon Bay. Any materials used during construction would be properly disposed of in accordance with federal, state, and local regulations. Impacts on solid waste facilities would be less than significant.

4.18 Mandatory Findings of Significance

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact	Source
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

Discussion

- a) **Less than Significant with Mitigation Incorporated.** The project would unlikely affect natural habitats or federally or state-listed species. Impacts on CRLF and breeding birds would be less than significant after implementation of avoidance, minimization, and mitigation measures. The project would not affect known historical resources and has a low potential to affect buried cultural deposits or human remains. Impacts on cultural resources would be less than significant after mitigation.
- b) **Less than Significant with Mitigation Incorporated.** The project includes mitigation measures to minimize the temporary impacts of construction activities, and no long-term adverse impacts are anticipated. With these measures, the project would result in individually minor impacts and would not contribute substantially to cumulative impacts in conjunction with the implementation of other projects in the area such as the Highway 1, San Pedro Creek Bridge Replacement and Creek Widening Project.

- c) ***Less than Significant with Mitigation Incorporated.*** Construction related impacts, including noise, transportation/traffic, and utilities and service systems, have the potential to cause substantial adverse impacts to human beings. With implementation of the various construction measures, BMPs, and Mitigation Measures included in this Initial Study, the proposed project would not result in substantial adverse effects to human beings, either directly or indirectly.

5.0 REFERENCES

Checklist Information Sources

1. Professional judgment and expertise of the environmental/technical specialists evaluating the project, based on a review of existing conditions and project details, including standard construction measures
2. San Mateo County General Plan
3. San Mateo County Zoning Map
4. California Department of Conservation, 2010
5. California Department of Transportation, 2012
6. Association of Bay Area Governments, 2015
7. Bay Area Air Quality Management District, 2011
8. Biological Review Letter Report, 2016
9. Historical Resources Survey Report, 2016
10. California Department of Toxic Substances, 2007

Setting References

[ABAG] Association of Bay Area Governments. 2012. Earthquake and Hazards Program. Available at: <http://gis.abag.ca.gov/website/Hazards/?hlyr=northSanAndreas&co=6097>> Accessed May 2016.

[BAAQMD] Bay Area Air Quality Management District. 2011. California Environmental Quality Act Air Quality Guidelines. <http://www.baaqmd.gov/~media/Files/Planning%20and%20Research/CEQA/BAAQMD%20CEQA%20Guidelines_May%202011_5_3_11.ashx> Accessed April 2016.

CAL FIRE. 2012. CAL FIRE Regions, Operational Units, and Contract Counties Map. Available at: < http://www.fire.ca.gov/downloads/new_regions_8_7_06.pdf>. Accessed May 2016.

[CDC] California Department of Conservation. 2008. Farmland Mapping and Monitoring Program: San Mateo County Important Farmland 2010. Available at: <<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2010/smt10.pdf>>. Accessed April 2016.

[CDFW] California Department of Fish and Wildlife. 2016. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.

[Caltrans] California Department of Transportation. 2012. Scenic highways: San Mateo County. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic_highways/smateo.htm>. Last updated 9/7/11. Accessed April 2016.

[CNPS] California Native Plant Society. 2016. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California.

California Soil Resource Lab. 2016. SoilWeb: An Online Soil Survey Browser. <http://casoilresource.lawr.ucdavis.edu/soilweb/>. Accessed April 2016.

City of Pacifica. 1978. General Plan. Available at: <<http://www.cityofpacifica.org>>. Accessed April 2016.

County of San Mateo. 1986. General Plan. Available at: <<http://planning.smcgov.org/sites/planning.smcgov.org/files/SMC-GP%201986.pdf>>. Accessed April 2016.

[DTSC] Department of Toxic Substances Control. 2011. EnviroStor database: San Mateo. Available at: <<http://www.envirostor.dtsc.ca.gov/public/>>. Accessed April 2016.

[FEMA] Federal Emergency Management Agency. 2012. Flood Insurance Rate Maps 06081C0109E. Available at: <http://map1.msc.fema.gov/idms/IntraList.cgi?displ=wsp/item_06081C0109E.txt>. Accessed May 2016.

Governor's Office of Planning and Research. 2008. Technical Advisory: CEQA and Climate Change: Addressing climate change through California Environmental Quality Act Review. Sacramento, CA. Available at: <<http://opr.ca.gov/docs/june08-ceqa.pdf>>. Accessed April 2016.

[LAFCo] San Mateo County Local Agency Formation Commission. 2015. North County Cities and Special Districts MSR/SOI Study. Available at: <http://lafco.smcgov.org/sites/lafco.smcgov.org/files/documents/files/North%20County%20MSR%20-%209-16-15_9.pdf> Accessed April 2016.

[NCCWD] North Coast County Water District. 2011. Urban Water Management Plan. Available at: <http://www.water.ca.gov/urbanwatermanagement/2010uwmps/North%20Coast%20County%20Water%20District/NCCWDUWMP2010_Final.pdf>. Accessed May 2016.

[NRCS] Natural Resources Conservation Service. 2012. Web Soil Survey for San Mateo Area. Available at: <<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>>. Accessed April 2016.

San Mateo County Sheriff's Office. 2000. Project Service Areas. Available at: <http://www.smcsheriff.com/sites/default/files/downloads/smcuninc_1.pdf> Accessed May 2016.

Stetson Engineers. 2016. NCCWD 20-Year Long-Term Water Master Plan. Available at: <http://www.nccwd.com/images/NCCWD_20-YR_WMP_v19_FINAL_REPORT_with_FIGS__ATTCHMTS.pdf> Accessed May 2016.

[SWRCB] State Water Resources Control Board. 2002. California Porter-Cologne Water Quality Control Act. Available at: <http://www.waterboards.ca.gov/laws_regulations/docs/portercologne.pdf>. Accessed April 2016.

[USFWS] United States Fish and Wildlife Service. 2016. National Wetlands Inventory. <http://www.fws.gov/wetlands/index.html>. Accessed April 2016.

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6.0 RESPONSE TO COMMENTS ON THE DRAFT INITIAL STUDY/MITIGATION NEGATIVE DECLARATION

Introduction

On June 7, 2016 the North Coast County Water District (Lead Agency) released for public review a Draft Initial Study/Mitigated Negative Declaration for the Proposed Water Service Extension for Existing Facilities at Shamrock Ranch (SCH# 2016062021). The 30-day public review and comment period on the Draft Initial Study began on June 7, 2016 and closed at 4:30 p.m. on July 7, 2016.

The Draft Initial Study/Mitigated Negative Declaration and any response to comments on the Draft Initial Study/Mitigated Negative Declaration are informational documents prepared by the Lead Agency that must be considered by decision-makers before approving the proposed project and that must reflect the Lead Agency's independent judgment and analysis (CEQA Guidelines, Section 15090).

This section usually summarizes and responds to the comments and questions on the Draft Initial Study/Mitigated Negative Declaration circulated by the District to public agencies and the public as required by CEQA. However, as no comments were submitted on the Draft Initial Study/Mitigated Negative Declaration during the public review period, no responses to comments or edits to the Draft Initial Study/Mitigated Negative Declaration are required.

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7.0 MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to CEQA Guidelines (California Code of Regulations, Title 14), which state the following:

In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both.

Table 1 lists the potentially significant impacts and mitigation measures identified in the Final Initial Study/Mitigated Negative Declaration. Table 1 describes the timing of implementation of the mitigation measures (i.e., when the measure will implemented) and the North Coast County Water District (District) staff or individual responsible for ensuring implementation of the mitigation measures. Finally, Table 1 describes the District staff or individual responsibility for monitoring the mitigation measures.

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Table 1
Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
BIOLOGICAL RESOURCES				
<p>Impact BIO-1: Breeding Birds Noise disturbance from shrub removal and project activities may impact nesting birds if no avoidance measures are implemented. If shrub removal or trimming is required, implementation of Mitigation Measure BIO-1 would reduce this potential impact to less than significant.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>	<p>Mitigation Measure BIO-1: Breeding Birds</p> <p>The following avoidance measures shall be implemented to avoid disturbance of nesting birds within and adjacent to project construction: 1) a breeding bird survey shall be conducted by a qualified biologist within the project site and the surrounding 100-foot area, 2) the biologist shall establish suitable buffer areas around active nests (generally 50 feet for passerines and 100 feet for raptors, but these distances may be adjusted in the field by the biologist as appropriate), and 3) the biologist may either monitor the nest while work is conducted within the buffer area and determine whether or not the buffer area may be reduced, or work can be avoided in the buffer area entirely until the biologist determines that the nest has fledged or failed.</p>	<p>Implementation Responsibility: Project Manager from District or District Staff Biologist or Consulting Biologist</p> <p>Monitoring Frequency: Prior and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>
<p>Impact BIO-2: California Red-Legged Frog (CRLF) Although CRLF is not expected to occur within or adjacent to the project site, there is a remote potential for this species to disperse through the project site during construction occurring at times during and following rainfall events. Implementation of Mitigation Measure BIO-2</p>	<p>Mitigation Measure BIO-2: California Red-Legged Frog</p> <p>To minimize disturbance to dispersing CRLF, no grading activity shall occur within 24 hours of a rainfall event totaling more than ½ inch over a 24-hour period. Alternatively, the grading and trenching may occur during or immediately after a rainfall event in the presence of a qualified biologist. If a CRLF individual is observed during construction, construction shall immediately cease and the individual shall be allowed to leave the area of its own accord.</p>	<p>Implementation Responsibility: Project Manager from District or District Staff Biologist or Consulting Biologist</p> <p>Monitoring Frequency: Prior and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>would reduce this potential impact to a less-than-significant level.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>				
CULTURAL RESOURCES				
<p>Impact CULT-1: Accidental Discovery</p> <p>The remaining Holocene deposits are located on the slope leading up to the water tanks are unlikely to contain buried deposits. In addition, the Paleocene deposits predate accepted dates for human occupation of California; therefore, there is a very low likelihood of there being buried prehistoric deposits found within these geologic deposits. However, the limited potential still exists for project grading to impact unknown archeological and/or paleontological resources at the site. Potential impacts on unknown cultural resources or human remains would be less than</p>	<p>Mitigation Measure CULT-1a: Cultural Resource Awareness Training</p> <p>Prior to the initiation of the proposed project, a brief cultural resources training shall be provided to the construction crew by a professional archeologist. The training shall increase consciousness and knowledge of cultural resources and outline the appropriate protocols in the event of an inadvertent discovery (see Mitigation Measure CULT-1b below). Upon completion of the training, participants shall be able to define cultural resources, describe the policies and procedures for identifying and protecting cultural resources, know how to locate and receive assistance from the professional archeologist and coordinate with other sources, and describe steps to be taken if cultural resources are encountered during project implementation.</p> <p>Mitigation Measure CULT-1b: Accidental Discovery Management</p> <p>In the event of post-review discoveries of archeological or paleontological resources the following recommendations</p>	<p>Implementation Responsibility: Project Manager from District</p> <p>Monitoring Frequency: Prior and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>significant with compliance with Mitigation Measure CULT-1.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>	<p>apply:</p> <ul style="list-style-type: none"> If any archaeological or paleontological deposits are encountered, all soil disturbing work shall be halted immediately at the location of any discovery until a qualified archaeologist or paleontologist evaluates the significance of the find(s) and prepares a recommendation for further action. Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps). 			
Hydrology and Water Quality				
<p>Impact HYDRO-1: Erosion</p> <p>In areas of active construction, soil erosion may result in discharges of sediment laden stormwater runoff or directional drilling slurry into San Pedro Creek, if not properly controlled. Additional sediment input to the Creek from project construction activities could contribute to degradation of downstream water quality and impairment of beneficial uses. Sediment can also be a carrier for other</p>	<p>Mitigation Measure HYDRO-1: Erosion</p> <p>The District shall be required to implement BMPs consistent with SMCWPPP requirements for treatment and control of stormwater runoff from the site. As the proposed project includes the use of directional bores, the construction contractor shall include silt fencing and/or the use of tanks or reservoirs to contain directional boring slurry, in addition to all other BMPs implemented in compliance with the SMCWPPP.</p>	<p>Implementation Responsibility: Project Manager from District</p> <p>Monitoring Frequency: Prior and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>pollutants, such as heavy metals, nutrients, pathogens, oil and grease, fuels and other petroleum products. Potential impacts from erosion would be less than significant with compliance with Mitigation Measure HYDRO-1.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>				
Noise				
<p>Impact NOISE-1: Construction Noise</p> <p>Construction equipment would generate maximum noise levels of approximately 89 decibels (dB) at 50 feet. Construction noise levels may periodically exceed noise standards in the existing Noise Ordinance. The temporary noise from construction would not cause a substantial increase in ambient noise or expose sensitive receptors to unacceptable noise levels for long periods of time. Impacts associated with construction noise would cause</p>	<p>Mitigation Measure Noise-1: Construction Noise</p> <p>The District shall incorporate the following practices into the construction documents to be implemented by the project contractor:</p> <ul style="list-style-type: none"> • Construction hours shall be limited to 7:00 a.m. to 5:00 p.m. during which construction noise is exempted from the Performance Standards of the Zoning Ordinance. • Notify businesses, residences, and noise-sensitive land uses adjacent to construction sites of the construction schedule in writing. Designate a “construction liaison” that is responsible for responding to any local complaints about construction noise. The liaison shall determine the cause of the noise complaints (for example starting too early, or a bad muffler) and institute reasonable measures to correct the problem. Conspicuously post a telephone number for the 	<p>Implementation Responsibility: Project Manager from District</p> <p>Monitoring Frequency: Prior and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>a significant, temporary increase in noise levels.</p> <p>Incorporation of Mitigation Measure NOISE-1 would reduce potentially significant noise impacts to a less-than-significant level.</p> <p>Long-term operational noise impacts would be less than significant because the conditions would be similar to existing noise levels. The new pipeline would be underground and would not result in a long-term noise increase.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>	<p>liaison at the construction site.</p> <ul style="list-style-type: none"> • Coordinate construction activities so that they cause the least interference with daytime activities in the community as practical. This is particularly important at the Linda Mar Preschool. Reasonable attempts should be made to conduct the most intensive construction activities closest to the school outside of school hours or during times when the school is not in session. If given adequate notification, the school may be able to schedule its activities around the necessary construction schedule, or to concentrate activities in outdoor areas or buildings that are farther from the project site. • Maximize the physical separation between noise generators and noise receptors. • Minimize backing movements of equipment. • Verify that equipment engines are fitted with appropriate mufflers that are in good operating condition. • Prohibit unnecessary idling of internal combustion engines. 			
Transportation and Traffic				
<p>Large vehicles transporting equipment and materials to the project site could cause slight delays for travelers adjacent to the project's access points as the construction vehicles stop to unload. However, lane and road closures are not expected</p>	<p>Mitigation Measure TRAFFIC-1: Traffic Safety</p> <ul style="list-style-type: none"> • Use traffic cones, signs, lighted barricades, lights, and flagmen as described and specified in the Manual of Uniform Traffic Control Devices, current edition, California Supplement, Part 6 Temporary Traffic Control to provide for public safety and convenience during construction, if necessary. 	<p>Implementation Responsibility: Project Manager from District</p> <p>Monitoring Frequency: Prior and during</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>because staging areas are located in the project site and not on the local roads. Mitigation Measure TRAFFIC-1 includes control measures to alert travelers to potential delays and ensure that construction-related impacts are less than significant.</p> <p>Significance of Impact Before Mitigation: Potentially Significant</p> <p>Significance of Impact After Mitigation: Less than Significant</p>	<ul style="list-style-type: none"> • Maintain convenient access to driveways and buildings near the work area unless otherwise approved by the District in advance. • Restore pavement, curbs, gutters, and sidewalks, as necessary, to pre-disturbance conditions or better. 	ground disturbance		
Utilities and Service Systems				
<p>Impact UTIL-1: New Water Service Connection</p> <p>The proposed project consists of the installation of a new water service connection to existing water tanks and facilities on Shamrock Ranch. Potentially significant impacts have been identified in this Initial Study related to biological resources, cultural resources, noise and transportation and traffic. Implementation of the mitigation measures and required construction best management practices outlined</p>	<p>See Mitigation Measures BIO-1, BIO-2, CULT-1a, CULT-1b, NOISE-1, and TRAFFIC-1.</p>	<p>Implementation Responsibility: Project Manager from District</p> <p>Monitoring Frequency: During and during ground disturbance</p>	<p>Monitoring Responsibility: Construction Inspector; District</p>	<p>Initials _____</p> <p>Date _____</p>

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
<p>in this Initial Study would reduce construction impacts of the new water service connection to <i>less than significant</i>. The proposed project does not include the construction of new water treatment facilities.</p> <p><i>Significance of Impact Before Mitigation:</i> Potentially Significant</p> <p><i>Significance of Impact After Mitigation:</i> Less than Significant</p>				

APPENDIX A

**BIOLOGICAL REVIEW LETTER REPORT
WRA, INC.
MAY 2016**



May 10, 2016

Cari Lemke
North Coast County Water District
2400 Francisco Boulevard
Pacifica, CA 94044

Re: Biological Review of the North Coast County Water District Shamrock Ranch Water Service, Pacifica, California

Dear Cari:

The purpose of this letter is to inform you of the results of the biological resources review for the District Shamrock Ranch Water Service Project (Project) located in unincorporated San Mateo County, California. The WRA site visit took place on April 26, 2016 and reviewed an approximately 0.69-acre area, bounded to the east by Peralta Road, to the north and west by undeveloped land, and to the south by undeveloped grazed pasture and a residence. Shamrock Ranch is a ranch offering horse stables and dog kennels located in unincorporated San Mateo County at the margins of the City of Pacifica (Study Area). In the greater vicinity of the Study Area, the Devil's Slide section of Highway 1 occurs to the west, Shamrock Ranch Road occurs to the south, and the developed residential community of Pacifica occurs to the north and east.

The North Coast County Water District (NCCWD) proposes to provide water service to provide a reliable water source for existing development on the Shamrock Ranch property. Historically, residences and infrastructure on Shamrock Ranch have obtained water from naturally occurring on-site wells and a spring. However, in recent years water available from these naturally occurring sources has diminished and Caltrans has delivered water to the site via truck. The NCCWD water service connection is necessary to ensure water availability for existing infrastructure at Shamrock Ranch. Surface disturbance necessary to install the water connection includes trenching for the installation of a 2-inch water line for approximately 795 linear feet from the existing NCCWD water service connection to the existing Shamrock Ranch water tanks at the top of a hill on the parcel. NCCWD will install the infrastructure necessary for the connection to the existing NCCWD force main on Peralta Road, including 25 feet of 2-inch water pipeline. Shamrock Ranch will install the remainder of the 2-inch water line between the water service connection and the water tanks. This letter analyzes the potential for these activities to affect sensitive biological resources as defined by the California Environmental Quality Act (CEQA).

Methods

Prior to the site visit, background literature was reviewed to determine potential presence of sensitive vegetation types, aquatic communities, and special-status plant and wildlife species. Resources reviewed for sensitive vegetation communities and aquatic features include aerial photography, mapped soil types, the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB), and the National Wetland Inventory (NWI;

USFWS 2016). Background information regarding special-status plant and wildlife species was obtained through review of the CNDDDB, California Native Plant Society (CNPS) Online Database (2016), available aerial photography, and species habitat requirements as noted in available literature.

On April 26, 2016, WRA traversed the Study Area on foot to evaluate the potential presence of sensitive vegetation communities and aquatic features, and evaluate on-site habitat to determine the potential for occurrence of special-status plant and wildlife species. Observed plant communities, aquatic features, and plant and wildlife species were noted. Site conditions were noted as they relate to habitat requirements of special-status plant and wildlife species known to occur in the vicinity as determined by the background literature research.

Results

Vegetation Communities

The Study Area contains five non-sensitive vegetation communities (see attached Figure 1). The majority of the Study Area is actively-used pasture supporting non-native grassland vegetation typical of the region. Additional habitats include Eucalyptus grove, developed/disturbed areas, northern coastal scrub, and California blackberry bramble.

Non-native grassland demonstrated evidence of recent grazing during the April 26, 2016 site visit and contained patches of bare ground. This community comprised approximately 0.51 acre of the Study Area and was dominated by non-native forbs including soft chess (*Bromus hordeaceus*, FACU) and foxtail barley (*Hordeum murinum*, FACU) and a mixture of native and non-native herbs including big heron bill (*Erodium botrys*, FACU), hawkbit (*Leontodon saxatilis*, FACU), scarlet pimpernel (*Lysimachia arvensis*, FAC), California poppy (*Eschscholzia californica*, UPL), and sun cup (*Taraxia ovata*, UPL). Within the Study Area, approximately 0.08 acre of Eucalyptus grove was dominated by blue gum (*Eucalyptus globulus*, UPL) with a French broom (*Genista monspessulana*, UPL) understory. Approximately 0.04 acre of developed and disturbed land consisted of dirt roads, existing water tanks and associated infrastructure, and Peralta Road. Approximately 0.04 acre of northern coastal scrub habitat within the Study Area was dominated by coyote brush (*Baccharis pilularis*, UPL) and California blackberry (*Rubus ursinus*, FACU), with an understory dominated by non-native grassland species, Pacific sanicle (*Sanicula crassicaulis*, UPL), and yarrow (*Achillea millefolium*, FACU). Within the Study Area, approximately 0.02 acre of California blackberry bramble was dominated by California blackberry and poison hemlock (*Conium maculatum*, FAC).

Potential Wetlands and Waters of the US

The Study Area does not support communities that meet the definition of wetlands or "Waters of the US". No areas within the Study Area were dominated by facultative wetland vegetation, no indicators of wetland hydrology were observed, and the soils are composed of Candlestick-Barnabe complex, 30 to 50 percent slopes (California Soil Resource Lab 2016), which are not classified as hydric soils. No hydric soil indicators are present in the Study Area.

Special-Status Plant Species

Sixty different special-status plant species are known to occur in the vicinity (within a Montara Mountain and San Francisco South 7.5 minute U.S. Geologic Society [USGS] quadrangles) of the Study Area (CDFW 2016). No rare plant species were observed during the site visit, which occurred during the peak blooming period when plants are most readily identifiable. The attached Figure 2 depicts special-status plant species documented within 5 miles of the Study Area.

The majority of the special-status plant species from this area occur on serpentine soils, in areas with direct coastal effect, in marsh or swamp habitats, seeps, cismontane woodland, or alkaline habitats which do not occur within the Study Area. Many special-status plant species from the vicinity of the Study Area that are noted in the literature as occurring in grasslands depend either on serpentine soils or heavy clay soils. Soils in the Study Area are loam soils, which do not support species that are dependent on heavy clay or serpentine soil types. Suitable habitat for some special-status plant species that are not dependent on specialized soil types is present in the Study Area. However, these plant species were not observed during the site visit, which occurred during the appropriate blooming period for these species. Based on the lack of appropriate habitat and observations from the site visit, there are no special-status plant species that have potential to occur in the Study Area.

Special-Status Wildlife Species

Of the known wildlife occurrences in CNDDB, 40 special-status wildlife species occur, or have been known to occur within the vicinity (within a Montara Mountain and San Francisco South 7.5 minute USGS quadrangles) of the Study Area (CDFW 2016). No special-status species were observed during the April 26, 2016 site visit. Figure 3 depicts special-status wildlife species documented within 5 miles of the Study Area. None of these species are likely occur within the Study Area, with the possible exception of the bird and bat species which may occasionally pass over the site or roost and/or nest in the Eucalyptus grove or northern coastal scrub habitat. The potential for each of these species to occur within the Study Area is described in more detail below.

There is a known occurrence of California red-legged frog (CRLF, *Rana draytonii*) in a pond within Shamrock Ranch. The pond is located in the southern end of the valley up and over the hilltop from the Study Area. No direct dispersal corridors are present between the known occurrence and the Study Area, and no aquatic habitat is present within the Study Area or in directly adjacent areas. The Study Area is separated from the known occurrence by a dry, farmed valley and dry hillsides and hilltops. Although CRLF utilize upland habitats near aquatic features for breeding and/or wintering activities, this species is not expected to occur within or adjacent to the Study Area given the geographical distance and landscape barriers from existing occurrences. The Study Area did not contain any burrows that could provide shelter for CRLF, and the steep landscape functions as a dispersal barrier to the CRLF. Based on these factors, CRLF is not expected to be present in the Study Area or directly adjacent areas.

Three special status butterfly species are known to occur in the vicinity of the project – Myrtle's silverspot butterfly (*Speyeria zerene myrtleae*), San Bruno elfin blue butterfly (*Callophrys mossii bayensis*), and monarch butterfly (*Danaus plexippus*). Myrtle's silverspot butterfly and San Bruno elfin butterfly both depend on specific "host plant" species for laying eggs and larval

development. The host plant species are not present in the Study Area. The local occurrence of Mrytle's silverspot is from historic records and is no longer known to occur south of the Golden Gate Bridge (Black and Vaughan 2005). San Bruno elfin blue butterfly persists locally, but is restricted to rocky outcrops and coastal bluffs – habitat types that are not present in the Study Area. While a small portion of the adjacent Eucalyptus grove is within the Study Area and could potentially support overwintering monarch butterflies, the Eucalyptus grove will not be impacted by the project and project activities will not affect the ability of the grove to support overwintering monarch butterflies.

No burrows were observed in the Study Area and no other evidence of core habitat for American badger was present. Many other species known from the vicinity are wholly aquatic species and no aquatic habitat is present in the Study Area. The project will result in only temporary impacts to existing grassland pasture and will not have any long term effects to the type or quality of habitat available for any species.

White-tailed kite, as well as other raptor and native bird species may utilize the Eucalyptus grove as well as any trees or shrubs within the Study Area. These features may also provide nesting habitat during the breeding season.

Tree removal and noise disturbance from project activities may impact nesting birds if no avoidance measures are implemented. If tree or shrub removal or trimming is anticipated avoidance measures include the following: 1) a breeding bird survey should be conducted by a qualified biologist within the Study Area and the surrounding 100-foot area, 2) the biologist should establish suitable buffer areas around active nests (generally 50 feet for passerines and 100 feet for raptors, but these distances may be adjusted in the field by the biologist as appropriate), and 3) the biologist may either monitor the nest while work is conducted within the buffer area and determine whether or not the buffer area may be reduced, or work can be avoided in the buffer area entirely until the biologist determines that the nest has fledged or failed.

Pallid bat, Yuma myotis, and hoary bat may utilize the larger trees in the Eucalyptus grove. However, the Eucalyptus grove will not be impacted by the project and these species will not be affected by the proposed construction activities.

Conclusions and Recommendations Summary

Based on the results of the site visit, the Study Area does not contain jurisdictional wetlands or "Waters of the US", nor does it contain habitat for special-status plants or wildlife species. Provided that the existing project plans are implemented without substantial changes, no biological or aquatic resource permits would be required.

The only biological resources with potential to be impacted by project activities are breeding birds, which may nest in trees or shrubs within or directly adjacent to the Study Area. Nesting birds are protected by the federal Migratory Bird Treaty Act and California Fish and Game Code. If project activities occur during the avian breeding season (February 1 through August 31), a pre-construction breeding bird survey should be conducted by a qualified biologist prior to the initiation of ground disturbance or vegetation removal. The breeding bird survey should be conducted no more than 14 days prior to the initiation of work during the breeding season. If there is a break in construction of greater than 14 days, a new breeding bird survey should be

May 10, 2016

Page 5

conducted before work resumes. Vegetation removal and ground disturbance may be conducted without a breeding bird survey during the non-breeding season (September 1 through January 31).

Additionally, while CRLF is unlikely to disperse through the Study Area, avoidance measures should be implemented including limiting ground disturbance activities to the dry season and avoiding work during and immediately preceding precipitation events.

Please feel free to contact me or Justin Semion if you have any questions or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephanie Freed', with a stylized flourish at the end.

Stephanie Freed
Biologist
freed@wra-ca.com

Enclosures:

Figure 1. Biological Communities within the Study Area

Figure 2. Special-Status Plant Species documented within 5-miles of the Study Area

Figure 3. Special-Status Wildlife Species documented within 5-miles of the Study Area

Literature Cited:

Black, S. H., and D. M. Vaughan. 2005. Species Profile: Speyeria zerene myrtleae. In Shepherd, M. D., D. M. Vaughan, and S. H. Black (Eds). Red List of Pollinator Insects of North America. CD-ROM Version 1 (May 2005). Portland, OR: The Xerces Society for Invertebrate Conservation.

[CDFW] California Department of Fish and Wildlife. 2016. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.

[CNPS] California Native Plant Society. 2016. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California.

California Soil Resource Lab. 2016. SoilWeb: An Online Soil Survey Browser. <http://casoilresource.lawr.ucdavis.edu/soilweb/>. Accessed April 2016.

[USFWS] United States Fish and Wildlife Service. 2016. National Wetlands Inventory. <http://www.fws.gov/wetlands/index.html>. Accessed April 2016.



Figure 1. Biological Communities within the Study Area

Water Service Extension for Existing
Facilities at Shamrock Ranch
San Mateo County, California



0 25 50 100
Feet



Map Prepared Date: 5/4/2016
Map Prepared By: pkobylarz
Base Source: Esri Streaming - NAIP 2014
Data Source(s): WRA, NCCWD,
West Valley Construction (WVC)

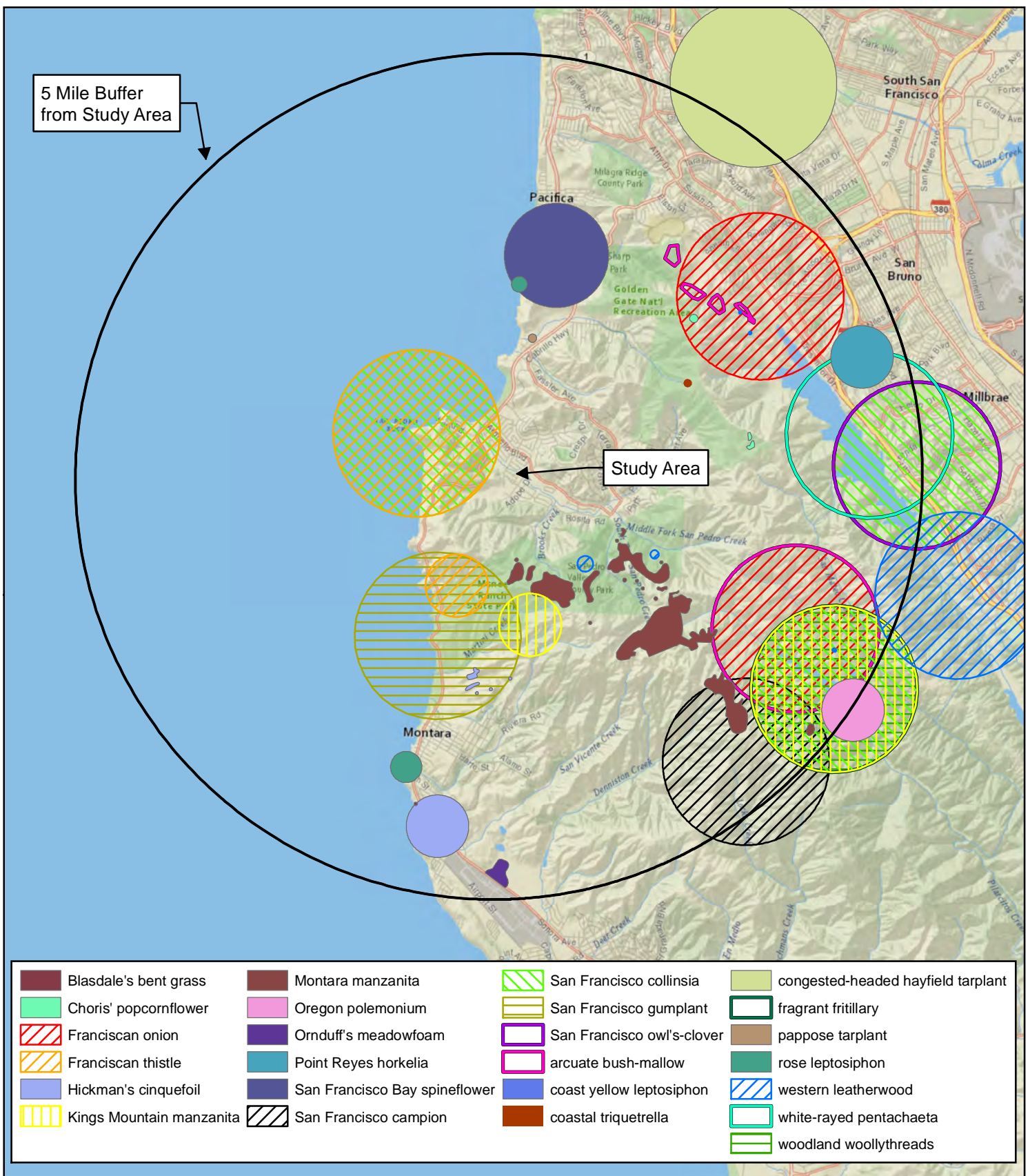


Figure 2. Special-Status Plant Species within 5 miles of the Study Area

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



0 0.5 1 2
Miles



Map Prepared Date: 5/10/2016
Map Prepared By: fhourigan
Base Source: National Geographic
Data Source(s): CNDDB (May 2016)

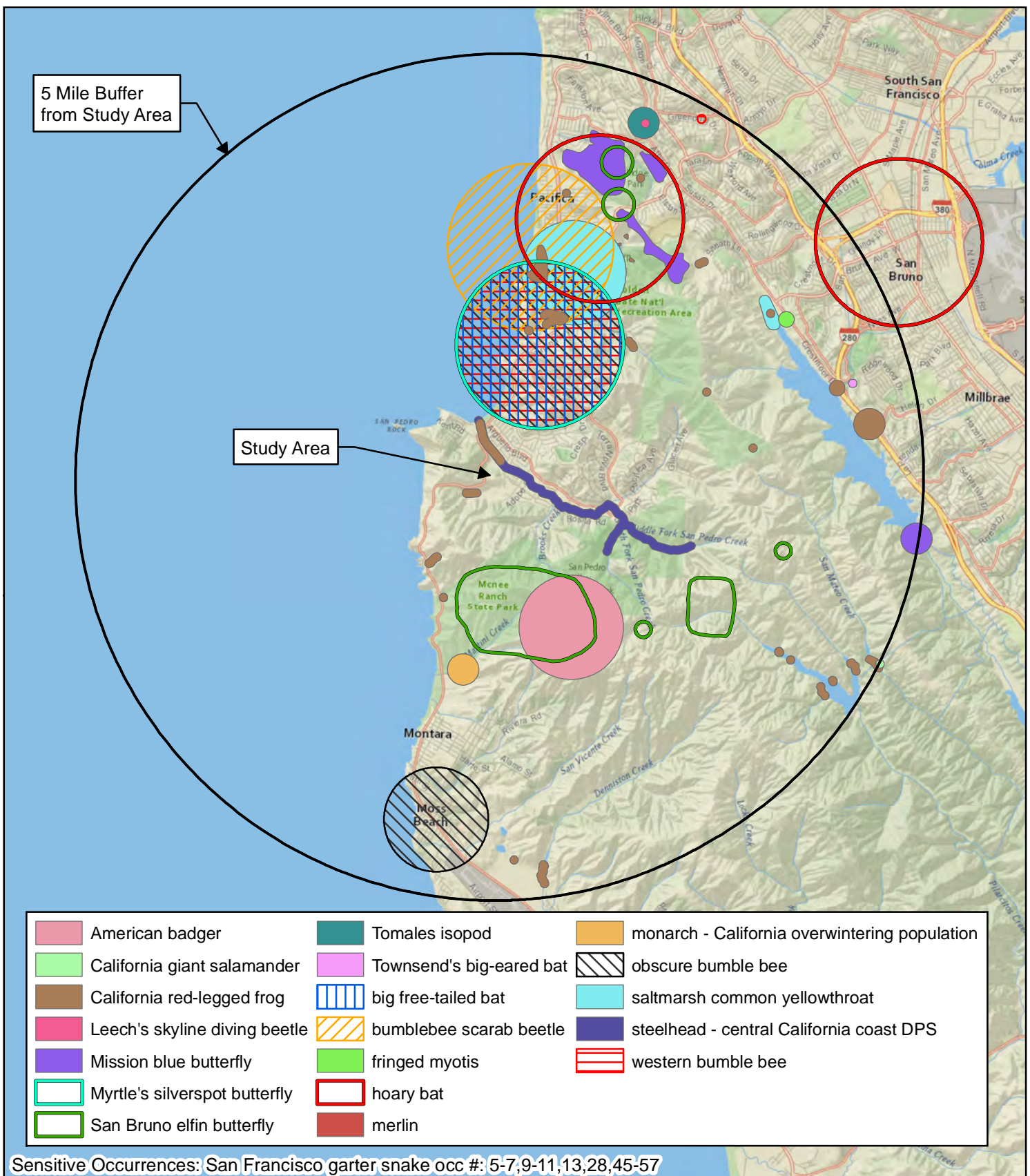


Figure 3. Special-Status Wildlife Species within 5 miles of the Study Area

Water Service Extension for Existing Facilities at Shamrock Ranch
San Mateo County, California



0 0.5 1 2
Miles



Map Prepared Date: 5/10/2016
Map Prepared By: thourigan
Base Source: National Geographic
Data Source(s): CNDDB (May 2016)

APPENDIX B

**HISTORICAL RESOURCES SURVEY REPORT (HRSR)
TOM ORIGER & ASSOCIATES
MAY 2016**

**An Historical Resources Survey for the
North Coast County Water District
Shamrock Ranch IS/MND #25285
Pacifica, San Mateo County, California**

Eileen Barrow, M.A.

May 3, 2016



**An Historical Resources Survey for the
North Coast County Water District
Shamrock Ranch IS/MND #25285
Pacifica, San Mateo County, California**

Prepared by:



Eileen Barrow, M.A.

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May 3, 2016

ABSTRACT

Tom Origer & Associates conducted an historical resources survey of a portion of the Shamrock Ranch, located at 100 Shamrock Ranch Road, Pacifica, San Mateo County, California. The study was requested and authorized by WRA, Inc., to meet the requirements of the California Environmental Quality Act and those of the North Coast County Water District. The proposed project includes installation of an approximately 730-foot long pipe from an existing water line to existing water tanks on Shamrock Ranch. The pipeline will supply fresh water to the ranch.

This study included archival research at the Northwest Information Center, Sonoma State University (NWIC File No. 15-1481), examination of the library and files of Tom Origer & Associates, Native American contact, and field inspection of the study area. No historical resources were found within the study area. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2016-054S).

Synopsis

Project:	North Coast County Water District Shamrock Ranch IS/MND #25285
Location:	100 Shamrock Ranch Road, Pacifica, San Mateo County
Quadrangles:	Montara Mountain 7.5' series
Study Type:	Intensive
Scope:	Approximately 730-feet
Finds:	None

Project Personnel

Eileen Barrow conducted all aspects of this study. Mrs. Barrow has been with Tom Origer & Associates since 2005. She holds a Master of Arts in cultural resources management from Sonoma State University. Mrs. Barrow's experience includes work that has been completed in compliance with local ordinances, CEQA, NEPA, and Section 106 (NHPA) requirements. Her professional affiliations include the Society for California Archaeology, the Cotati Historical Society, the Sonoma County Historical Society, Western Obsidian Focus Group and the Register of Professional Archaeologists.

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INTRODUCTION

This report describes an historical resources survey for the North Coast County Water District, Shamrock Ranch, IS/MND #25285, located at 100 Shamrock Ranch Road, Pacifica, San Mateo County, California. The study was requested and authorized by WRA, Inc., in compliance with requirements of the California Environmental Quality Act and those of the North Coast County Water District. The proposed project includes installation of a 730-foot pipeline from an existing water line to existing tanks on Shamrock Ranch. The pipeline will supply water to the ranch. Documentation pertaining to this study is on file at Tom Origer & Associates (File No. 2016-054S).

REGULATORY CONTEXT

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).

This historical resources survey was designed to satisfy environmental issues specified in the CEQA and its guidelines (Title 14 CCR §15064.5) by: (1) identifying all historical resources within the project area; (2) offering a preliminary significance evaluation of the identified cultural resources; (3) assessing resource vulnerability to effects that could arise from project activities; and (4) offering suggestions designed to protect resource integrity, as warranted.

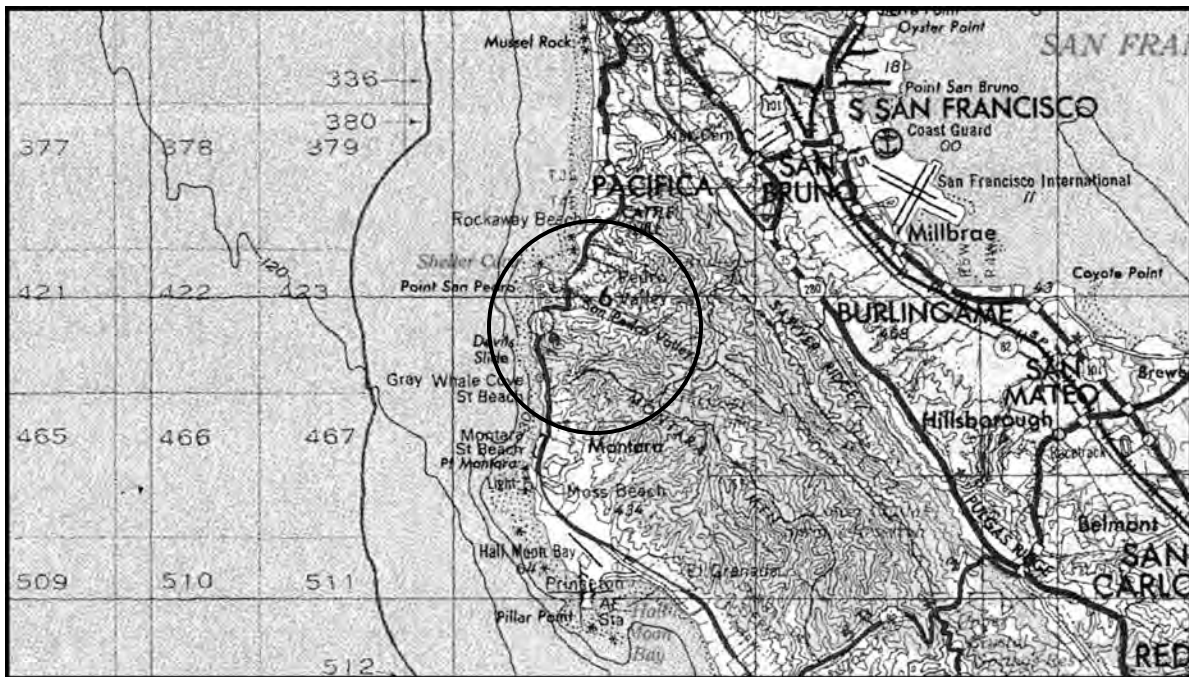


Figure 1. Project vicinity (adapted from the 1971 San Francisco 1:250,000-scale USGS map).

Resource Definitions

Historical resources are classified by the State Office of Historic Preservation (OHP) as sites, buildings, structures, objects and districts, and each is described by OHP (1995) as follows.

Site. A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

Building. A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail, or a house and barn.

Structure. The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Object. The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

District. A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

Significance Criteria

When a project might affect an historical resource, the project proponent is required to conduct an assessment to determine whether the effect may be one that is significant. Consequently, it is necessary to determine the importance of resources that could be affected. The importance of a resource is measured in terms of criteria for inclusion on the California Register of Historical Resources (Title 14 CCR, §4852(a)) as listed below. A resource may be important if it meets any one of the criteria below, or if it is already listed on the California Register of Historical Resources or a local register of historical resources.

An important historical resource is one which:

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

4. Has yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation.

In addition to meeting one or more of the above criteria, eligibility for the California Register requires that a resource retains sufficient integrity to convey a sense of its significance or importance. Seven elements are considered key in considering a property's integrity: location, design, setting, materials, workmanship, feeling, and association.

Additionally, the OHP advocates that all historical resources over 45 years old be recorded for inclusion in the OHP filing system (OHP 1995:2), although the use of professional judgment is urged in determining whether a resource warrants documentation.

PROJECT SETTING

Study Area Location and Description

The study area is located on a portion of the property at 100 Shamrock Ranch Road, Pacifica, San Mateo County, as shown on the Montara Mountain 7.5' USGS topographic map (Figure 2). The pipeline route will run from a connection located on Peralta Road, to existing water tanks on Shamrock Ranch. The route is approximately 730 feet long. The water line climbs approximately 170 feet from the connection to the water tanks, therefore the majority of the study area is fairly steep.

Soils within the study area belong to the Candlestick-Barnabe complex and Urban land (Kashiwagi and Hokholt 1991:Sheet 5). Candlestick-Barnabe soils are found on coastal uplands. This soil type is a well-draining, fine, sandy loam. In a natural state this soil supports the growth of coastal brush, forbs, and annual grasses. Historically, parcels containing Candlestick-Barnabe soils are used for watershed, wildlife habitat, or for recreational and urban development (Kashiwagi and Hokholt 1991:21). Urban land is where the ground surface is more than 85% covered by asphalt, concrete, buildings, and other structures (Kashiwagi and Hokholt 1991:35). Although a small portion of the eastern end of the study area is shown to consist of this soil type, field observations showed that all but the very small portion of the study area where the pipeline will connect to the main water line was undeveloped and not covered with anything except vegetation.

The study area is located on a combination of a sandstone, shale, and conglomerate formation from the Paleocene epoch (66 to 56 million years ago), slope wash, ravine fill, coarse-grained alluvium, and colluvium from the Holocene era (11,700 to present [Pampeyan 1994]).

The closest source of naturally occurring fresh water is San Pedro Creek, located approximately 450 feet north of the eastern end of the study area.

The project area and its surroundings include a nearby fresh water source and well-drained soils that could have supported a variety of plants that in turn could have served as food and cover for animals. The presence of these natural attributes suggests that the study area could have been a desirable place for prehistoric people to live and gather resources.

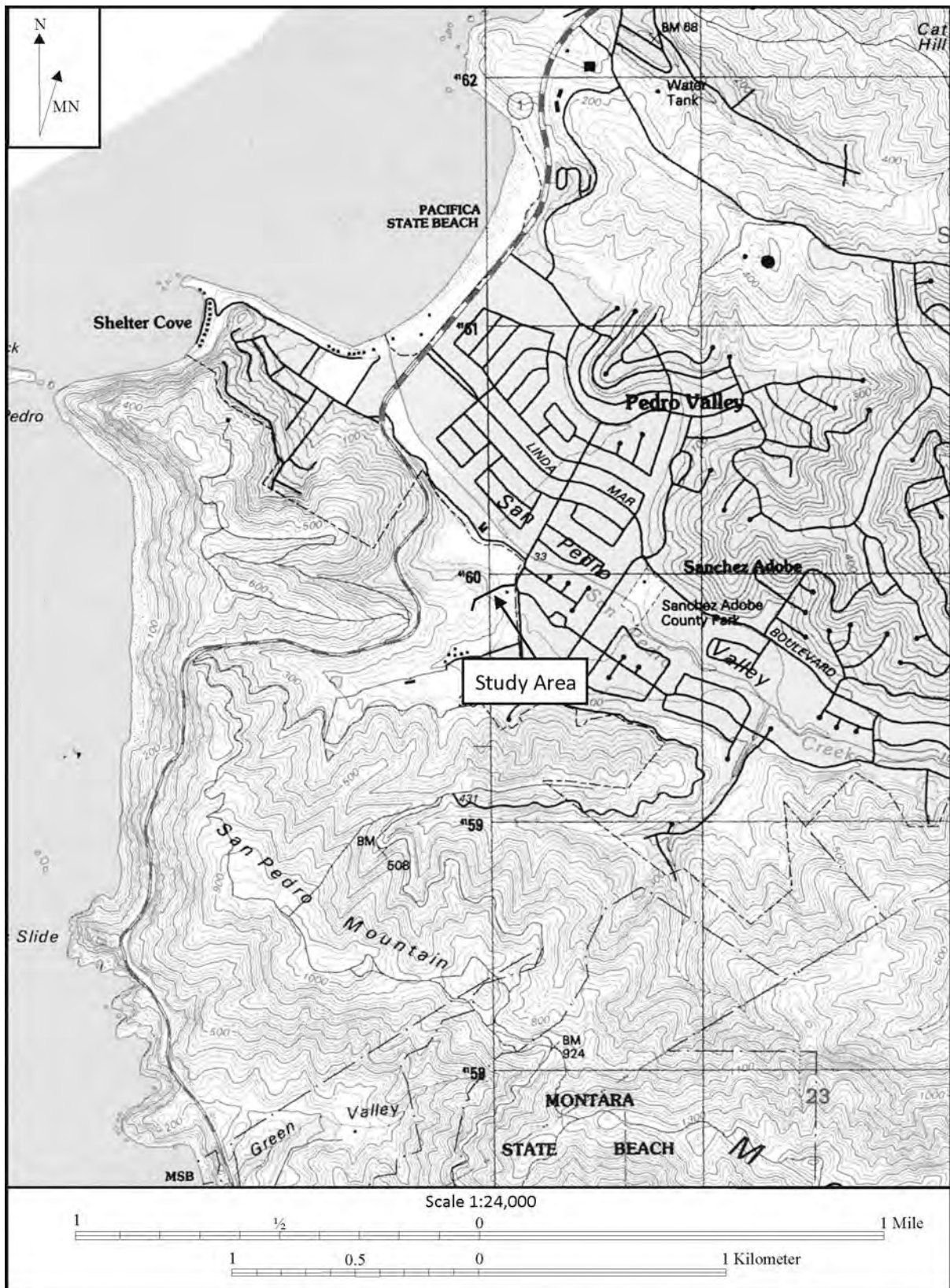


Figure 2. Study area location (adapted from the 1997 USGS Montara Mountain 7.5' USGS topographic map).

Cultural Setting

Archaeological evidence indicates that human occupation of California began at least 11,000 years ago (Erlandson *et al.* 2007). Early occupants appear to have had an economy based largely on hunting, with limited exchange, and social structures based on the extended family unit. Later, milling technology and an inferred acorn economy were introduced. This diversification of economy appears to be coeval with the development of sedentism and population growth and expansion.

Sociopolitical complexity and status distinctions based on wealth are also observable in the archaeological record, as evidenced by an increased range and distribution of trade goods (e.g., shell beads, obsidian tool stone), which are possible indicators of both status and increasingly complex exchange systems.

At the time of European settlement, the study area was included in the territory controlled by the Ohlone, who are also referred to as Costanoans (Levy 1978:485-495). The Ohlone were hunter-gatherers who lived in rich environments that allowed for dense populations with complex social structures (Levy 1978:485-495; Kroeber 1925:462-473). They settled in large, permanent villages about which were distributed seasonal camps and task-specific sites. Primary village sites were occupied throughout the year and other sites were visited in order to procure particular resources that were especially abundant or available only during certain seasons. Sites often were situated near fresh water sources and in ecotones where plant life and animal life were diverse and abundant.

Historically, the study area is within the Rancho San Pedro (Sanchez) granted to Francisco Sanchez in 1839. When granted, it consisted of 8,926 acres of land that included what is now Pacifica and its surrounding communities (Hoover *et al.* 2002:394). Francisco Sanchez's adobe is located at 1000 Linda Mar Boulevard, approximately 1,600 feet east of the study area.

STUDY PROCEDURES AND FINDINGS

Native American Contact

The State of California's Native American Heritage Commission, the Amah Mutsun Tribal Band of Mission San Juan Bautista, the Costanoan Rumsen Carmel Tribe, the Indian Canyon Mutsun Band of Costanoan, the Muwekma Ohlone Indian Tribe of the SF Bay Area, and The Ohlone Indian Tribe were contacted in writing. A log of contact efforts is provided at the end of this report (Appendix A). This contact represents notification regarding the project, to provide an opportunity to comment, and does not constitute consultation with tribes.

Archival Study Procedures

Archival research included examination of the library and project files at Tom Origer & Associates. A review (NWIC File No. 15-1481) 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. Sources of information included but were not limited to the current listings of properties on the National Register of Historic Places, California Historical Landmarks, California Register of Historical Resources, and California Points of Historical Interest as listed in the Office of Historic Preservation's *Historic Property Directory* (OHP 2012).

The Office of Historic Preservation has determined that structures in excess of 45 years of age should be considered potentially important historical resources, and former building and structure locations

could be potentially important historic archaeological sites. Archival research included an examination of historical maps to gain insight into the nature and extent of historical development in the general vicinity, and especially within the study area. Maps ranged from hand-drawn maps of the 1800s (e.g., GLO) to topographic maps issued by the United States Geological Survey (USGS) and the United States Army Corps of Engineers (USACE).

In addition, ethnographic literature that describes appropriate Native American groups, county histories, and other primary and secondary sources were reviewed. Sources reviewed are listed in the "Materials Consulted" section of this report.

Archival Study Findings

Archival research found that the entire study area was surveyed in a previous study of the property (Archaeological Consulting and Research Services, Inc. 1978). No cultural resources were located within the study area during this study. However, two cultural resources were discovered nearby; an archaeological site with possibly both prehistoric and historical components, and the Shamrock Ranch building complex. Both of these resources are more than 500 feet away from the current study area.

There are no reported ethnographic sites within one mile of the survey area (Levy 1978).

A review of 19th and 20th century maps shows no buildings within the study area; however, a building is shown just north of, but outside of, the study area as early as 1866 (Bromfield 1894; GLO 1860; USACE 1939, 1920; USCGS 1866; USGS 1896, 1899, 1915, 1949.).

Based on the distribution of known cultural resources and their environmental settings, it was anticipated that prehistoric archaeological sites could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and handstones, and mortars and pestles; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Procedures

An intensive field survey was completed by Eileen Barrow on April 28, 2016. The pipeline route was walked in a zig-zagging pattern approximately 10 meters wide with the route as the centerline, when possible. In some locations there was a great amount of Himalaya berry vines that impeded access. Ground visibility ranged from poor to excellent with vegetation being the chief hindrance.

Based on the results of the prefield research, it was anticipated that prehistoric and historic-period cultural resources could be found within the study area. Prehistoric archaeological site indicators expected to be found in the region include but are not limited to: obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed items plus fragments of bone, shellfish, and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

Field Survey Findings

No historical resources were located within the survey area.

RECOMMENDATIONS

Known Resources

No archaeological resources were observed; therefore no resource specific recommendations are required.

Accidental Discovery

The geology of the study area consists of a combination of Holocene and Paleocene deposits. The Holocene deposits of most concern are those located at the eastern end of the study area where the topography is flat. These deposits consist of alluvial soils that have a high possibility of containing buried prehistoric depots. However, high sensitivity corresponds to a probability of approximately 3% - 5% for identifying a site per 24 acres (King 2004). While not within the study area, a monitoring study was conducted for the installation of the Rosita-San Pedro Transmission Pipeline project which is the main water line to which the proposed pipeline will connect. No buried resources were observed within Peralta Road in the area where the connection will be made (Bartoy *et al.* 2004)

The remaining Holocene deposits are located on the slope leading up to the water tanks and are unlikely to contain buried deposits. In addition, the Paleocene deposits predate accepted dates for human occupation of California; therefore, there is a very low likelihood of there being buried prehistoric deposits found within these geologic deposits.

In keeping with the CEQA guidelines, if archaeological remains are uncovered, work at the place of discovery should be halted immediately until a qualified archaeologist can evaluate the finds (§15064.5 [f]). Prehistoric archaeological site indicators include: obsidian and chert flakes and chipped stone tools; grinding and mashing implements (e.g., slabs and handstones, and mortars and pestles); bedrock outcrops and boulders with mortar cups; and locally darkened midden soils. Midden soils may contain a combination of any of the previously listed items with the possible addition of bone and shell remains, and fire-affected stones. Historic period site indicators generally include: fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains such as building foundations and discrete trash deposits (e.g., wells, privy pits, dumps).

The following actions are promulgated in the CEQA Guidelines Section 15064.5(d) and pertain to the discovery of human remains. If human remains are encountered, excavation or disturbance of the location must be halted in the vicinity of the find, and the county coroner contacted. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. The Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The most likely descendent makes recommendations regarding the treatment of the remains with appropriate dignity.

SUMMARY

Tom Origer & Associates completed an historical resources study for the North Coast County Water District Shamrock Ranch IS/MND #25285 project located on a portion of the property at 100

Shamrock Ranch Road, Pacifica, San Mateo County, California. The study was requested and authorized by WRA, Inc., in compliance with CEQA requirements and those of the North Coast County Water District. No historical resources were found within the study area and therefore no resource-specific recommendations are warranted. Documentation pertaining to this study is on file at the offices of Tom Origer & Associates (File No. 2016-054S).

MATERIALS CONSULTED

Alexander, P.

1916 *History of San Mateo County*. Burlingame Publishing, Burlingame.

Alley, B.

1883 *History of San Mateo County, California*. B.F. Alley, San Francisco.

Archaeological Consulting and Research Services, Inc.

1978 Cultural Resource Inventory, Shamrock Ranch, Pacifica, California. Document S-3079 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.

Bartoy, K., D. Sterling, and J. Holson

2004 *Archaeological Monitoring Report for the Rosita-San Pedro Transmission Pipeline Project, Pacifica, San Mateo County, California*. Document S-27936 on file at the Northwest Information Center, Sonoma State University, Rohnert Park.

Bean, L. (Editor)

1994 *The Ohlone Past and Present*. Ballena Press, Menlo Park.

Bromfield, D.

1894 *Official Map of San Mateo County*. Schmidt Label & Lith. Co. San Francisco.

Department of Parks and Recreation

1976 *California Inventory of Historical Resources*. State of California, Sacramento.

Erlandson, J. T. Rick, T. Jones, J. Porcasi

2007 One if by Land, Two if by Sea: Who Were the First Californians? In: *California Prehistory: Colonization, Culture, and Complexity*. (pp 53-62) T. Jones and K. Klar, editors. AltaMira Press. Lanham, MD.

General Land Office (GLO)

1860 *Plat of the Rancho San Pedro (Sanchez)*. Department of the Interior, Washington, D.C.

Hoover, M., H. Rensch, E. Rensch, and W. Abeloe

1966 *Historic Spots in California*. 3rd edition. Stanford University Press, Stanford.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe, and D. Kyle

1990 *Historic Spots in California*. 4th edition. Stanford University Press, Stanford.

Hoover, M., H. Rensch, E. Rensch, W. Abeloe, and D. Kyle

2002 *Historic Spots in California*. 5th edition. Stanford University Press, Stanford.

Kashiwagi, J. and L. Hokholt

- 1991 *Soil Survey of San Mateo County, Eastern Part, and San Francisco County, California*. U.S. Department of Agriculture in co-operation with the University of California Agricultural Experiment Station.

King, J.

- 2004 Archaeological Sensitivity Maps. In *Landscape Evolution and the Archaeological Record: A Geoarchaeological Study of the Southern Santa Clara Valley and Surrounding Region*, Edited by J. Rosenthal and J. Meyer. Center for Archaeological Research at Davis, University of California.

Kroeber, A.

- 1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C.

Levy, R.

- 1978 Costanoan. In *California* edited by R. Heizer, pp. 485-495. Handbook of North American Indians, Vol. 8, W. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Margolin, M.

- 1978 *The Ohlone Way*. Heyday Books, Berkeley.

Moratto, M.

- 1984 *California Archaeology*. Academic Press, San Francisco.

Moore and DePue

- 1878 *Moore and DePue's Illustrated History of San Mateo County, California*. G.T. Brown, San Francisco.

Office of Historic Preservation

- 1995 *Instructions for Recording Historical Resources*. California Office of Historic Preservation, Sacramento.
- 2012 *Historic Property Directory*. Office of Historic Preservation, Sacramento.

Pampeyan, E.

- 1994 *Geologic Map of the Montara Mountain and San Mateo 7-1/2' Quadrangles, San Mateo County, California*. United States Geologic Survey, Menlo Park, California.

Rosenthal, J. and J. Meyers

- 2004 *Landscape Evolution and the Archaeological Record: A Geoarchaeological Study of the Southern Santa Clara Valley and Surrounding Region*. Center for Archaeological Research at Davis, University of California.

United States Army Corps of Engineers

- 1939 San Mateo 15' map. U.S. Army, Washington, D.C.

United States Coast and Geodetic Survey

- 1866 Coast between Pt. San Pedro and Pillar Pt., California. Chart T01019. Department of the Interior, Washington, D.C.

United States Geological Survey

- 1896 San Mateo, California. 15' map. Geological Survey, Washington, D.C.
- 1899 San Mateo, California. 15' map. Geological Survey, Washington, D.C.
- 1915 San Mateo, California. 15' map. Geological Survey, Washington, D.C.
- 1949 Montara Mountain, California 7.5' map. Geological Survey, Washington, D.C.

APPENDIX A

Native American Contact

Copies of Correspondence

Native American Contact Efforts
North Coast County Water District Shamrock Ranch IS/MND #25285 Project
Pacifica, San Mateo County

Organization	Contact	Letters	Results
Native American Heritage Commission	Sharaya Souza	04/22/16	The NAHC responded with a list of additional contacts and recommendations.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Irene Zwierlein	04/22/16	No response received as of the date of this report.
Costanoan Rumsen Carmel Tribe	Tony Cerda	04/22/16	No response received as of the date of this report.
Indian Canyon Mutsun Band of Costanoan	Ann Marie Sayers	04/22/16	No response received as of the date of this report.
Muwekma Ohlone Indian Tribe of the SF Bay Area	Rosemary Cambra	04/22/16	No response received as of the date of this report.
The Ohlone Indian Tribe	Andrew Galvan	04/22/16	No response received as of the date of this report.

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 FAX



April 27, 2016

Eileen Barrow
Tom Origer & Assoc.

Sent by Email: eileen@orgier.com
Number of Pages: 3

RE: North Coast Water District, Shamrock Ranch, San Mateo County

Dear Ms. Barrow:

Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above referenced counties. Please note that the intent above reference codes is to mitigate impacts to tribal cultural resources, as defined, for California Environmental Quality Act (CEQA) projects.

As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose mitigating impacts to tribal cultural resources:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code Section 21080.3.1(d))

The law does not preclude agencies from initiating consultation with the tribes that are culturally and traditionally affiliated with their jurisdictions. The NAHC believes that in fact that this is the best practice to ensure that tribes are consulted commensurate with the intent of the law.

In accordance with Public Resources Code Section 21080.3.1(d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC believes that agencies should also include with their notification letters information regarding any cultural resources assessment that has been completed on the APE, such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources have already been recorded on or adjacent to the APE;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - Whether the records search indicates a low, moderate or high probability that unrecorded cultural resources are located in the potential APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code Section 6254.10.

3. The results of any Sacred Lands File (SFL) check conducted through Native American Heritage Commission. A search of the SFL was completed for the USGS quadrangle information provided with negative results.
4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS is not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the case that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at my email address: Sharaya.souza@nahc.ca.gov

Sincerely,



Sharaya Souza
Staff Services Analyst

**Native American Heritage Commission
Tribal Consultation List
San Mateo County
April 26, 2016**

Amah Mutsun Tribal Band of Mission San Juan Bautista
Irenne Zwielerlein, Chairperson
789 Canada Road Ohlone/Costanoan
Woodside , CA 94062
amahmutsuntribal@gmail.com
(650) 400-4806 Cell

Coastanoan Rumsen Carmel Tribe
Tony Cerda, Chairperson
244 E. 1st Street Ohlone/Costanoan
Pomona , CA 91766
rumisen@aol.com
(909) 524-8041 Cell
(909) 629-6081

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
P.O. Box 28 Ohlone/Costanoan
Hollister , CA 95024
ams@indiancanyon.org
(831) 637-4238

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
P.O. Box 360791 Ohlone / Costanoan
Milpitas , CA 95036
muwekma@muwekma.org
(408) 314-1898
(510) 581-5194

The Ohlone Indian Tribe
Andrew Galvan
P.O. Box 3152 Ohlone/Costanoan
Fremont , CA 94539 Bay Miwok
chochenyo@AOL.com Plains Miwok
(510) 882-0527 Cell Patwin

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed North Coast Water District, Shamrock Ranch, San Mateo County.

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: North Coast County Water District - Shamrock Ranch IS/MND #25285
County: San Mateo

USGS Quadrangle

Name: Montara Mountain OE W

Township T4S Range R6W Section(s) N/A MDBM (within the San Pedro (Sanchez) land grant)

Date: April 22, 2016

Company/Firm/Agency: Tom Origer & Associates

Contact Person: Eileen Barrow

Address: PO Box 1531

City: Rohnert Park

Zip: 94927

Phone: (707) 584-8200

Fax: (707) 584-8300

Email: eileen@origer.com

Project Description:

The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch for use on the ranch.

Tom Origer & Associates

Archaeology / Historical Research

April 22, 2016

Irene Zwierlein
Amah Mutsun Tribal Band of Mission San Juan Bautista
789 Canada Road
Woodside, CA 94062

RE: North Coast County Water District - Shamrock Ranch IS/MND #25285, San Mateo County, California.

Dear Ms. Zwierlein:

I write to notify you of a proposed project within San Mateo County, for which our firm is conducting a cultural resources study. The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch to supply water for use on the ranch. The San Mateo County Local Agency Formation Commission is reviewing this project for CEQA compliance.

This letter does not constitute formal initiation of consultation under Assembly Bill 52.

Enclosed is a portion of the Montara Mountain, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

April 22, 2016

Ann Marie Sayers
Indian Canyon Mutsun Band of Costanoan
P.O. Box 28
Hollister, CA 95024

RE: North Coast County Water District - Shamrock Ranch IS/MND #25285, San Mateo County, California.

Dear Ms. Sayers:

I write to notify you of a proposed project within San Mateo County, for which our firm is conducting a cultural resources study. The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch to supply water for use on the ranch. The San Mateo County Local Agency Formation Commission is reviewing this project for CEQA compliance.

This letter does not constitute formal initiation of consultation under Assembly Bill 52.

Enclosed is a portion of the Montara Mountain, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

April 22, 2016

Rosemary Cambra
Muwekma Ohlone Indian Tribe of the SF Bay Area
P.O. Box 360791
Milpitas, CA 95036

RE: North Coast County Water District - Shamrock Ranch IS/MND #25285, San Mateo County, California.

Dear Ms. Cambra:

I write to notify you of a proposed project within San Mateo County, for which our firm is conducting a cultural resources study. The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch to supply water for use on the ranch. The San Mateo County Local Agency Formation Commission is reviewing this project for CEQA compliance.

This letter does not constitute formal initiation of consultation under Assembly Bill 52.

Enclosed is a portion of the Montara Mountain, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

April 22, 2016

Andrew Galvan
The Ohlone Indian Tribe
P.O. Box 3152
Fremont, CA 94539

RE: North Coast County Water District - Shamrock Ranch IS/MND #25285, San Mateo County, California.

Dear Mr. Galvan:

I write to notify you of a proposed project within San Mateo County, for which our firm is conducting a cultural resources study. The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch to supply water for use on the ranch. The San Mateo County Local Agency Formation Commission is reviewing this project for CEQA compliance.

This letter does not constitute formal initiation of consultation under Assembly Bill 52.

Enclosed is a portion of the Montara Mountain, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

Tom Origer & Associates

Archaeology / Historical Research

April 22, 2016

Tony Cerda
Costanoan Rumsen Carmel Tribe
244 East 1st Street
Pomona, CA 91766

RE: North Coast County Water District - Shamrock Ranch IS/MND #25285, San Mateo County, California.

Dear Mr. Cerda:

I write to notify you of a proposed project within San Mateo County, for which our firm is conducting a cultural resources study. The project proponent is planning on running an approximately 730-foot pipeline from the North Coast County Water District line to existing tanks on Shamrock Ranch to supply water for use on the ranch. The San Mateo County Local Agency Formation Commission is reviewing this project for CEQA compliance.

This letter does not constitute formal initiation of consultation under Assembly Bill 52.

Enclosed is a portion of the Montara Mountain, Calif. 7.5' USGS topographic quadrangle showing the project location.

Sincerely,



Eileen Barrow
Senior Associate

