Final Initial Study/
Mitigated Negative Declaration
for the
Meadow Way Bridge Replacement Project

TOWN OF FAIRFAX, MARIN COUNTY, CALIFORNIA

Prepared by:
WRA on behalf of the
Town of Fairfax
142 Bolinas Road
Fairfax, California 94930

Contact:
Garrett Toy
Town Manager
(415) 453-1584
gtoy@townoffairfax.org

Geoff Reilly
WRA – Senior Environmental Planner
reilly@wra-ca.com

February 2020

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AAQS	ambient air quality standards
ABAG	Association of Bay Area Governments
APE	Area of Potential Effects
ASR	Archaeological Survey Report
BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
CaTNAP	Caltrans Traffic Noise Analysis Protocol
CCC	Central California Coastal
CCR	California Code of Regulations
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
CMA	Congestion Management Agency
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2	Carbon dioxide
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel scale
DOT	Department of Transportation
EFH	Essential Fish Habitat
EMS	Emergency Service Vehicles
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Federal Insurance Rate Maps
FPD	Fairfax Police Department

GHGs	Greenhouse Gases
HPSR	Historical Property Survey Report
HRER	Historical Resources Evaluation Report
LOS	Level of Service
MCE	Maximum Credible Earthquake
MCSTOPPP	Marin County Stormwater Pollution Prevention Program
MLD	Most Likely Descendant
MMWD	Marin Municipal Water District
MND	Mitigated Negative Declaration
NAHC	Native American Heritage Commission
NBI	National Bridge Inventory
NES	Natural Environment Study
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
NO_x	Oxides of nitrogen
NSR	New Source Review
NRHP	National Register of Historic Places
O3	Ozone
OHW	Ordinary High Water
PM	Particulate matter
PRC	Public Resources Code
ROG	reactive organic gases
RVFD	Ross Valley Fire Department
RWQCB	Regional Water Quality Control Boards
SFBAAB	San Francisco Bay Area Air Basin
SIP	State Implementation Plan
SWPPP	Storm Water Prevention Program
SWQCB	State Water Quality Control Board
TPY	tons per year
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
WDR	Waste Discharge Requirement
WUI	Wildland Urban Interface

1.0 INTRODUCTION AND PURPOSE

This Final Initial Study/Proposed Mitigated Negative Declaration of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA) Statute and Guidelines (California Code of Regulations 15000 et. seq.). This Final Initial Study/Proposed Mitigated Negative Declaration evaluates the potential environmental impacts which might reasonably be anticipated to result from implementation of the *Meadow Way Bridge Replacement Project* (proposed project). The Town of Fairfax (Town) is the Lead Agency as defined under CEQA Guidelines Section 15050.

The purpose of an Initial Study is to provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report or a Negative Declaration for the proposed project. A Negative Declaration briefly describes the reason that a proposed project would not result in a significant effect on the environment, and the basis of the decision not to prepare an EIR. This Initial Study describes the Town's efforts to ensure that all resources impacts are reduced to less-than-significant level with mitigation incorporated, qualifying for a Proposed Mitigated Negative Declaration.

This Final Initial Study/Proposed Mitigated Negative Declaration provides the Town and the public with an understanding of the potential environmental impacts associated with the proposed project. The purpose of the proposed project is to replace the Meadow Way Bridge in the Town of Fairfax. The project will replace a dilapidated wooden bridge, which ensures the residents will continue to have public safety access and utility service to their neighborhood for the foreseeable future. The existing bridge continues to deteriorate, which has required the Town to incur significant costs to make interim repairs to maintain public access to the bridge.

2.0 PROJECT INFORMATION

2.1 Project Title

Meadow Way Bridge Replacement Project

2.2 Lead Agency Name and Address

Town of Fairfax
142 Bolinas Road
Fairfax, California 94930

2.3 Contact Person and Phone Number

Comments can be made via email to:

Garrett Toy
Town Manager
(415) 453-1584
gtoy@townoffairfax.org

Geoff Reilly
WRA – Senior Environmental Planner
reilly@wra-ca.com

2.4 Project Location

The project site is located in a developed area of the Town of Fairfax in Marin County (Figure 1 and Figure 2). The project site consists of Meadow Way Bridge, California Department of Transportation (Caltrans) Bridge Number 27C-0008, which is located over San Anselmo Creek between Cascade Drive and Meadow Way within the western portion of the Town. The project site consists of Assessor's Parcel Numbers (APNs) 003-102-18 and 003-122-41.

The project site is located within a single-family residential neighborhood and is surrounded by single-family residential land uses. San Anselmo Creek and its channel are the only other land uses present within the immediate vicinity of the project site. Views of the project site and surrounding land uses are provided in Figures 3 and 4, below.

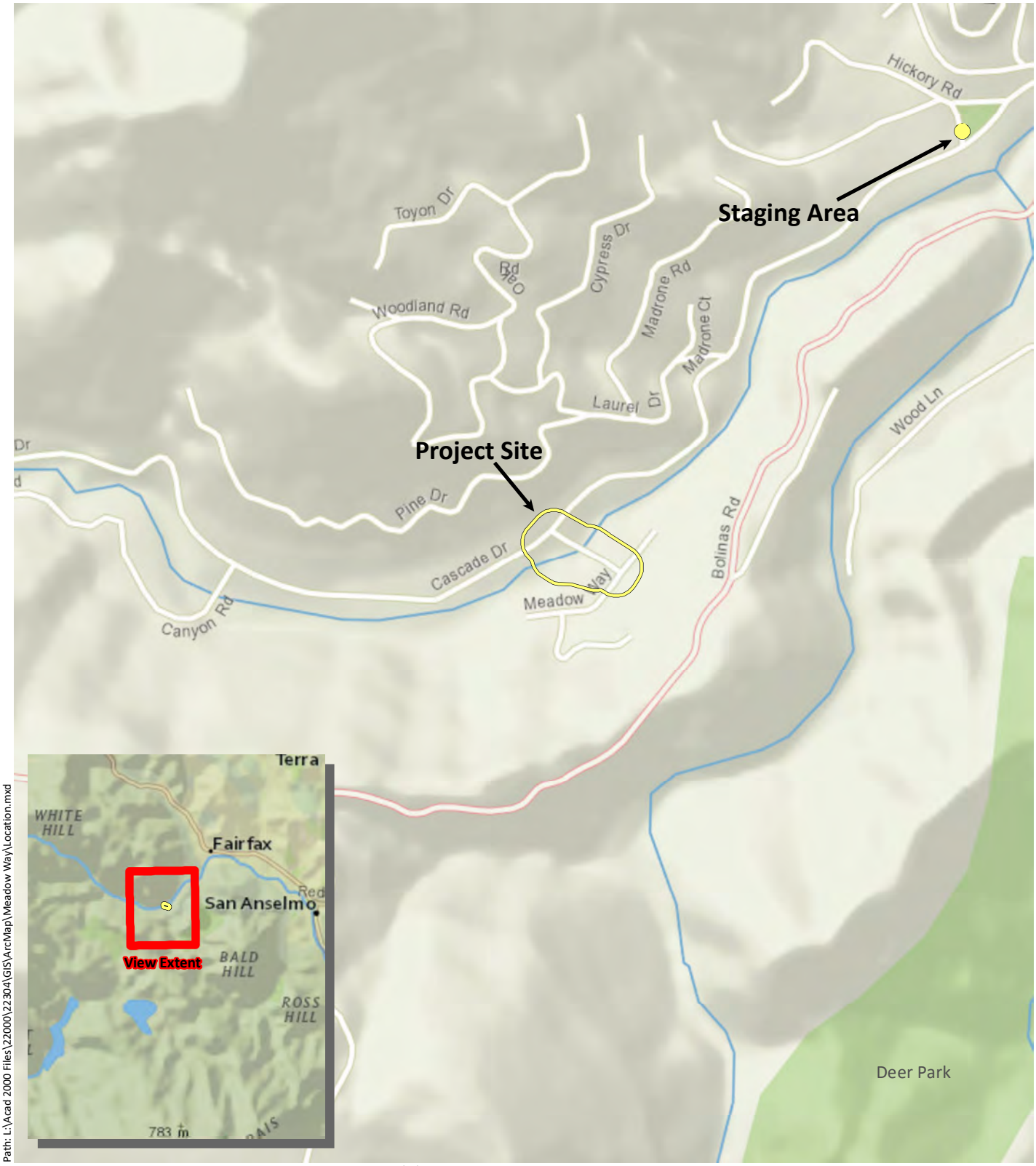
2.5 General Plan Designation and Zoning District

General Plan Designation

- Residential 1-6 dwelling units per acre

Zoning District

- RS -6 Single Family Residential



Path: L:\Acad 2000 Files\22000\22304\GIS\ArcMap\Meadow Way\Location.mxd

Sources: National Geographic, WRA | Prepared By: njander, 1/3/2019

Figure 1. Project Location Map

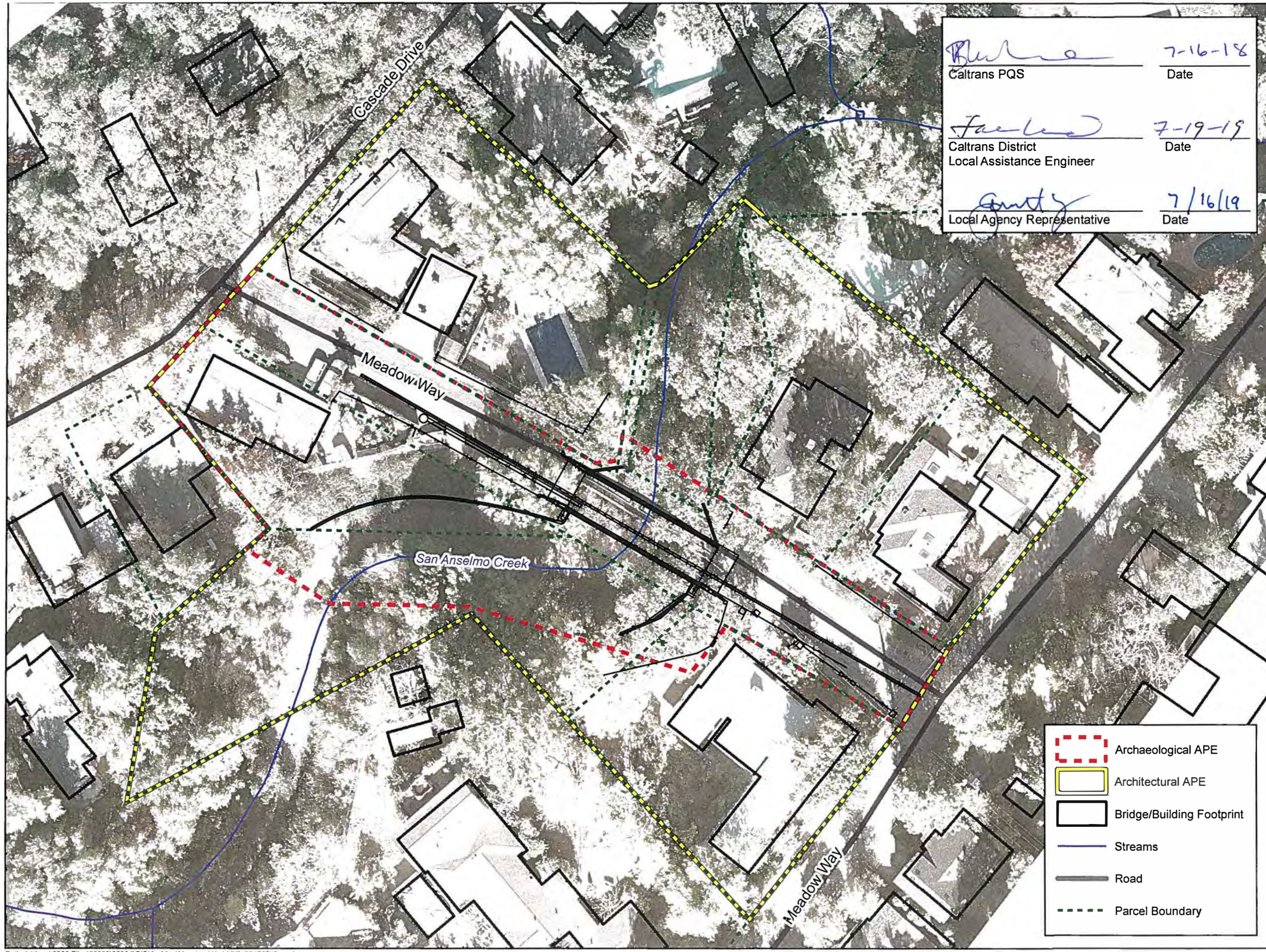
Meadow Way Bridge
Town of Fairfax, Marin County, California

0 500 1,000 Feet

N

wra
ENVIRONMENTAL CONSULTANTS

This page intentionally left blank.



Caltrans PQS — Date: 7-16-18

Caltrans District Local Assistance Engineer — Date: 7-19-19

Local Agency Representative — Date: 7/16/19

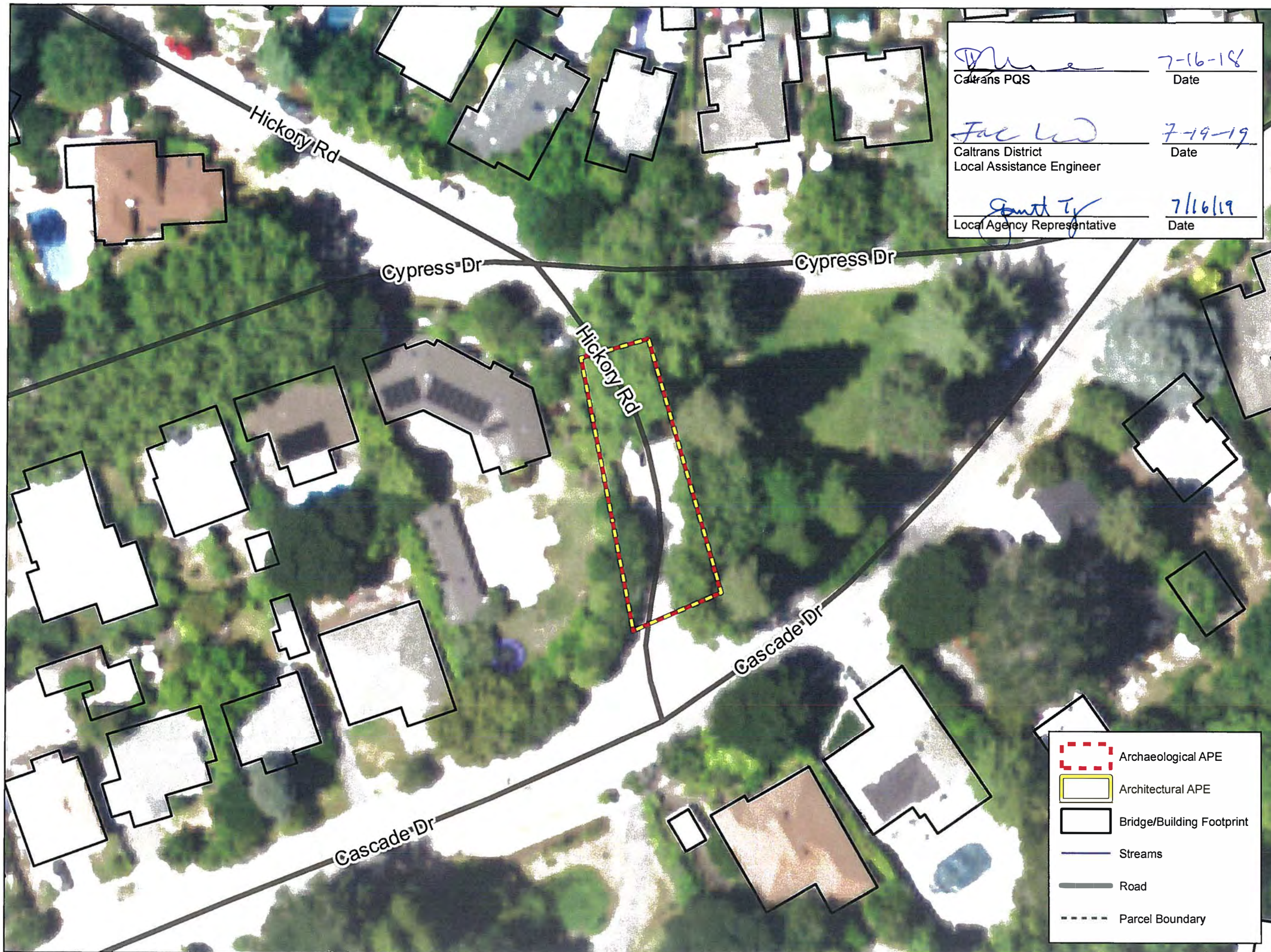
wra
ENVIRONMENTAL CONSULTANTS

Meadow Way
Marin County, California

Figure 2. Area of Potential Effects Map
Meadow Way Bridge
Bridge: No 27C-0008
Town of Fairfax, California
BRLO-5277(025)

Map Prepared Date: 7/18/2017
Map Prepared By: czumwalt
Base Source:
Data Source(s): WRA, Marin County

Path: L:\Acad 2000 Files\22000\22304\GIS\ArcMap\Meadow Way\APE_20170718.mxd



Caltrans PQS — Date: 7-16-18

Caltrans District Local Assistance Engineer — Date: 7-19-19

Local Agency Representative — Date: 7/16/19

wra
ENVIRONMENTAL CONSULTANTS

Meadow Way
Marin County, California

Figure 2. Area of Potential Effects Map
Meadow Way Bridge
Bridge: No 27C-0008
Town of Fairfax, California
BRLO-5277(025)

N W E S

0 20 40 60
Feet

Map Prepared Date: 7/16/2019
Map Prepared By: njander
Base Source:
Data Source(s): WRA, Marin County

Path: L:\Acad 2000 Files\22000\22304\GIS\ArcMap\Meadow Way\APE_Staging20190716.mxd

3.0 PROJECT DESCRIPTION

3.1 Project Description

The existing Meadow Way Bridge is reported to have been constructed in the 1950s over San Anselmo Creek in the Town of Fairfax by the U.S. Army Corps of Engineers (Corps). The existing, primarily wood, bridge has five spans with four bents in the creek, is approximately 70 feet long and 14 feet wide, and supports a narrow single travel lane and a narrow adjacent pedestrian path approximately 20 feet above the creek bed. The bridge runs in a northwest-southeast direction while the creek flows towards the northeast under it. The bridge serves as the only egress and ingress facility for nearly two dozen homes on Meadow Way across the creek from Cascade Drive. The bridge is supported at four locations within the creek banks, two of which are in the creekbed, and at each location, there are three 12-inch diameter wooden piles driven into the ground to an unknown depth. Some of the wooden bridge timbers have been preserved with creosote.

San Anselmo Creek runs through a relatively wide and deep section of the waterway and an S-bend at the bridge location. The bridge is labeled as Structurally Deficient (SD) by Caltrans and will be replaced with a similar, one-lane single-span bridge. The site/bridge configuration has caused historic bank erosion and bridge foundation scour at the site, which would also be corrected by the proposed project so that it would not affect the new bridge. The existing structure is not eligible for placement in the National Register of Historic Places (NRHP).

Construction Schedule

Construction would take two seasons and work in the creek would be performed only after June 1 and must end prior to October 15 in order to avoid the spawning and migration season for the protected California Central Coast (CCC) steelhead (Oncorhynchus mykiss). Work near or above the top of bank and at the roadway level may occur outside this work window. Therefore, the bridge would be installed in its temporary location during one season, and the project would be completed within the following season. In compliance with the Town's Noise Ordinance, construction activities would be limited to the hours of 8:00 a.m. to 5:00 p.m. on weekdays, and 9:00 a.m. to 5:00 p.m. on Saturdays, with no noise-generating construction on Sundays or Holidays. Placement of the new bridge in its permanent location would be the one exception regarding construction hours. As traffic would need to be shut down in order to move the bridge to its permanent location, this would occur in one evening after 5:00 p.m. in order to provide the least disruption for local residences that depend on this bridge for access.

View 1. View of Meadow Way Bridge upper driving structure, side rails, and road junction.

View 2. View of Meadow Way Bridge structure. The gaurd rail for the upper driving structure is visible in the photo.

View 3. View of Meadow Way Bridge lower wood beam connecting structure to foundation.

Figure 3. Views of the Project Site

Meadow Way Bridge Replacement Project, Fairfax, California

P:\Projects\22000\22304\1.0_Meadow Way Bridge\Figures\PhotoPlates
Date: October 2015

View 1. View of surrounding residential land use looking southeast from Meadow Way Bridge.

View 2. View of surrounding residential land use looking northwest from Meadow Way Bridge.

View 3. View of San Anselmo Creek looking north from below Meadow Way Bridge.

Figure 4. Views of Surrounding Land Uses

P:\Projects\22000\2304\1.0_Meadow Way Bridge\Figures\PhotoPlates
Date: October 2015

Bridge Design

The new bridge would be designed to clear the greater of the 50-year flows and two feet of freeboard, or the 100-year design flows, the former controlling in this case. It would be a 70-foot long single-span concrete arch bridge supported on two new abutments and no additional supports in the creek. The abutments would connect with wingwalls and retaining walls of varying lengths and heights at its four corners. See Figure 5 (Site Plan) for the proposed bridge design. The existing bridge is only 14-feet wide and Caltrans has determined the bridge is currently too narrow for both automobiles and pedestrians to use the bridge safely. The replacement bridge would be 21.5-feet wide to allow safe passage for both automobiles and pedestrians. The proposed replacement bridge would also include raised reflective pavement markers at proper intervals to alert the drivers and pedestrians of the two separate travel zones. The new bridge would comply with federal and state design codes and weight limits and would do away with the deficiencies of the existing bridge.

Construction Phasing

Where the existing bridge sits tucked up against the northern boundary of the Town's right-of-way (ROW), the new bridge would be located in the middle of the ±40-foot-wide ROW. Despite this, the footprints of the existing and new bridge would overlap. For this reason, the new bridge would be built on the south side of the existing bridge while the existing bridge remains in service, and moved sideways to its permanent location after the existing bridge is removed. Thus, the existing bridge would be replaced in stages, as follows:

<u>Stage 1 Construction</u>

The first season of construction would be spent on Stage 1 of the improvements. During this stage, traffic would continue using the existing bridge. The southern halves of each of the two new cast-in-place concrete abutments would be constructed approximately in line with the existing bridge abutments. These are only portions of the permanent abutments, and are designed to support the new bridge in its temporary location adjacent to and south of the existing bridge during Stage 1.

For Stage 1 construction, an access ramp to the creek would be necessary. This earthen ramp would be used to transport of materials and heavy equipment, such as pile drilling rigs, dump trucks cranes, loaders, excavators, large containers, etc., to the creek bed elevation and back. The ramp would be located on the southwest quadrant of the bridge between two proposed retaining walls, one which connects with the bridge. These walls are needed to stop the historic erosion taking place here adjacent to Abutment 1 (western abutment), threatening to undermine the abutment and private properties on both north and south sides of the bridge. The lower wall will be a conventional concrete retaining wall, supported on piles, and upper wall will be a concrete tieback wall with tieback elements placed in drilled holes stretching 40-50 feet from the wall face under the private property.

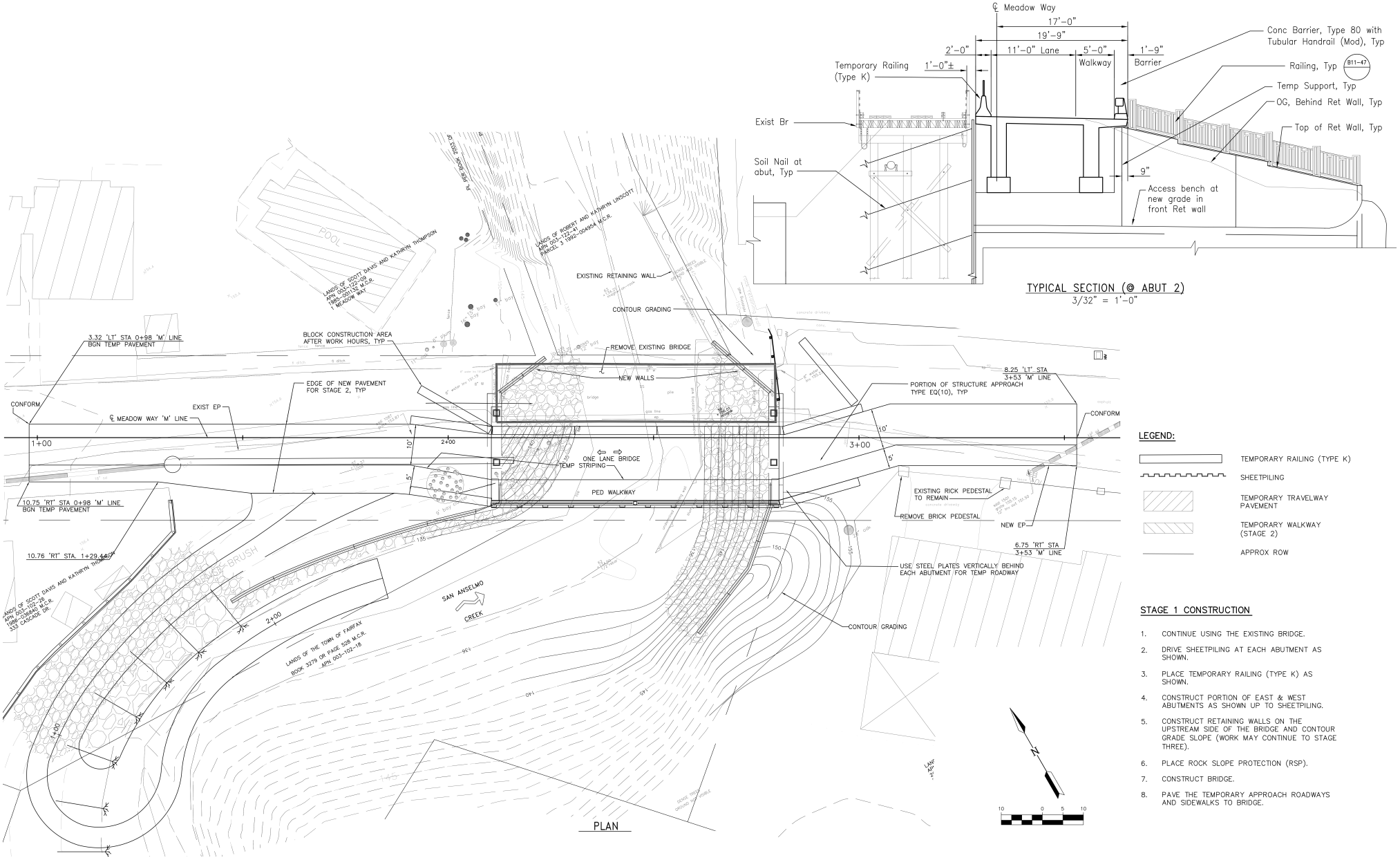


Figure 5. Project Site Plan

wra
ENVIRONMENTAL CONSULTANTS

Meadow Way Bridge
Town of Fairfax, Marin County, California

Source: CIC

This page intentionally left blank.

The access road would be an approximately ±230-foot-long ramp at 10% grade, half of which would be behind the above-referenced lower retaining wall, the rest winding around the wall's lower end and doubling back on the creek bed in front of the wall. For the second half of the ramp, temporary fill on the creek bed would be necessary. This ramp would facilitate the equipment for wall and abutment foundation excavations on both sides of the creek. To build the ramp, temporary earth retention, using soil nails next to private property and the inside edge of the ramp, would be necessary.

Excavation spoils, required for backfilling later on, would be stored in containers placed on the creek bed temporarily due to lack of space above at the roadway level. The remainder of the spoils would be hauled away on a daily basis. Any creosote treated timber piles or surrounding contaminated soils will be disposed of at an appropriate facility permitted to handle hazardous waste.

Removal of a California bay tree (Umbellularia Californica) and invasive Himalayan blackberry (Rubus armeniacus) bushes on the southwest corner of the new bridge as well as pruning of other trees and removal of other vegetation in the construction zones would be necessary. According to the Town's Municipal Code Chapter 8.36 (Trees), a tree removal permit is required for the removal of any tree within the Town.

The creek bed in the Area of Potential Effect (APE) would be used by the construction operations. Very little to no creek flow is expected during the peak summer construction months. However, the contractor will be required to install a bypass pipe to convey certain minimum low-flow volumes through the construction site and release downstream of the bridge. This will be accomplished through installation of a low dam across the creek bed upstream of the bridge to collect the summer flows and guide it to the pipe. Turbidity and water quality tests will be performed regularly, as required by permits. Any water collected in excavation pits or pools on the creek bed will be run through sediment control tanks, such as a Baker Tank, before being released to the creek.

To construct the initial halves of the new abutments, the approach embankments in front, behind, and next to the current abutments would also need to be excavated. Approximately, half of the unreinforced concrete and wood fortification in front of the future Abutment 2 (eastern abutment) will be removed. The Abutment 2 location has a deeply undercut bank. The new abutment wall will be behind the removed fortification, protected by a course of sloping heavy rock riprap, topped with 3 feet of sloping native creek bed materials in front. In order to avoid undermining the approach roadways and abutments of the existing bridge while it is still in operation, the embankments behind and in front of the existing abutments will be retained temporarily with soil nails parallel and perpendicular to the roadway alignment. Traffic will be separated from the construction area with temporary concrete barrier railings (Type K) during this stage.

Since geotechnical borings and investigations have been conducted at the site, it is known that the bridge abutments and retaining walls attached to the abutments will need to be supported on piles. To minimize disturbance to the residents, 24-inch diameter cast-in-drilled-hole (CIDH) concrete piles, which are significantly quieter to install than driven piles, will be used to support the walls. For this, the creek bed would be excavated approximately eight feet deep to reach the approximate elevation of the concrete pile heads. After completing the excavations, drilling rigs would be called upon to drill the 24-inch-diameter CIDH piles supporting the future structural elements. The drilling auger would be mounted on a truck that can negotiate the access road and be capable of drilling deep holes with augers added on progressively. The drilling spoils would be spun loose from the auger, dumped in containers, and hauled away.

Due to the riverine environment of the operations, underground and surface water may seep into the drilled holes and excavations, potentially threatening their collapse and/or contamination of the concrete that would be poured later on. For this reason, the contractor would use various wet-drilling hole stabilization techniques, such as driving a steel pipe sleeve into the hole all the way to the bottom, simultaneous with drilling. In this case, the reinforcement cage is placed in the hole using a crane and the concrete is pumped from the bottom of the hole up using a tremie pipe. This way, any water in the hole is displaced to the top, and then vacuumed and collected in containers. At the same time of the concrete pour, the steel sleeve is extracted, leaving behind a deep hole filled with steel rebar and clean concrete. Another wet-drilling technique would be filling the hole with slurry, such as a drilling polymer, that displaces the water and provides hole wall stability through hydrostatic pressure before concrete is poured in. In the case of slurry displacement method, the steel cage is placed in the slurry, the heavier concrete is again pumped from the bottom up, pushing the lighter slurry up, which is then vacuumed into special tank trucks for disposal off-site. Again, as the clean concrete reaches the top and all of the slurry has been picked up, the result would be 24-inch diameter concrete piles. The piles are then ready to be capped with a concrete footing (or pile cap, as sometimes called).

Once the concrete pile caps are constructed, their top surface would be five to six feet below the creek bed. At this point, these foundations of the new walls and bridge abutments would be protected with filter fabric and a two- to two and a half--foot layer of rock riprap on top for scour control. Ultimately, the underground riprap would crawl up on the wall face to some height and be subsequently covered with three feet of creek bed materials, restoring the creek bed and embankment slopes to their original levels through the site. The net effect will be restoring the site to a deep and wide soil “trough” traversing through the bridge site for natural fish passage without any obstructions in the creekbed or anything other than creek materials and native plants.

Once the southern (upstream) halves of the abutments and the two upstream connecting retaining walls are constructed, the new concrete superstructure would be cast to span them immediately adjacent to and south of the existing bridge. The bridge abutments would be cantilevered walls, providing seats for the ends of the new bridge superstructure. This location of the new bridge superstructure would be temporary. The design concept would utilize two concrete arch ribs spanning the abutments and supporting vertical spandrel columns which, in turn, would support

a thin concrete deck slab and railings at the top. The bridge would be 21.5 feet wide from edge to edge and have a 12-foot lane, a one-foot buffer, a five-foot wide sidewalk, and barrier and hand railings on both edges of the deck. Due to space limitations, 1'-9" of the final deck width would be cast in Stage 2, described below. The arch ribs would be cast in place in wooden forms supported on a wooden or steel falsework system temporarily placed on the creek bed. The arch ribs would be connected to each other for stability with four transverse beams. Once the arch rib concrete has cured and gained sufficient strength, the falsework would be removed. The arch ribs and the transverse connecting beams would be timed to gain strength by the end of the first dry season so that they are self-supporting once the falsework is removed by October 15th. The remainder of formwork, if needed beyond the dry season, would be attached to the arch ribs themselves above the 100-year flows from that point forward.

At the conclusion of Stage 1, the southern halves of the abutment walls and the retaining walls connecting to them, as well as the new bridge superstructure, would be completed. Construction at the bridge deck level and the existing roadway may continue beyond October 15 if work remains to be done in order to complete Stage 1. The underground riprap fortifications in front of the completed abutments and walls would be in place, the access road into the creek terminated, and the creek bed in the area of the Stage 1 construction would be restored. The new bridge, in its temporary location, would be ready for service, and traffic would be conveyed away from the existing bridge to the new bridge. At the end of the season, the site would be cleaned up and debris removed, the equipment would be taken away, and the site winterized until the next season. No materials will remain in the creekbed after the first season of work, the surface of the creekbed will be returned to pre-project conditions prior to the start of the wet season. If the bridge is not ready for traffic, the existing bridge would remain in service during the following winter and early spring.

Stage 2 Construction

Stage 2 construction would take place during the second season of construction. By the end of the first season, the new bridge would be in its temporary location, the temporary approach roadways are constructed south of the existing bridge, and the vehicular and non-motorized traffic would be using the new bridge. Cars and pedestrians would be kept within the small detour area with temporary railing (Type K) and temporary fencing. Prior to the removal of the old bridge, the existing "wet" utility pipes (sewer, water and gas) would be placed on a shoofly north of the existing bridge and supported in place during construction. They would eventually be relocated and housed and hung under the existing bridge deck well above the 50- and 100-year flow elevations.

At this stage, the existing bridge would be removed piece by piece with a crane or two, starting with its superstructure members. To avoid dropping pieces of the bridge into the creek, special catchment containers and bridge removal methods would be specified. After the removal of the superstructure, the wooden pile extensions would be cut at least three feet below the creek bed elevations and the holes backfilled with existing creek materials. The creosote-laden wood timbers would be disposed by the contractor at an appropriate facility permitted to handle hazardous waste. The remaining half of the wood and unreinforced concrete fortification in front of the Abutment 2 will also be removed and the abutment wall protected similar to Stage 1 Construction.

After the bridge removal, the northern halves of each of the two abutments and the two downstream wingwalls connecting with the abutment corners would be constructed. Excavations, CIDH pile and rock riprap installations, and backfilling over the riprap would be completed similar to Stage 1 construction, and the same access route will be reopened and used. The slopes above the retaining walls and wingwalls would be contour-graded. This aspect of the work can continue into the Final Stage, described below. During this stage, the excavations for the north abutments and wingwalls would continue to be protected from traffic with Temporary Railing Type K. The areas behind the walls would be backfilled and approach slabs and the approach roadways would be constructed in line with the alignment of the bridge in its final position, which would be approximately in the middle of Meadow Way's ROW.

Final Stage Construction

Once the existing bridge has been removed and the abutments and bridge approaches have been constructed, the new bridge would be closed for a few hours during a one night operation when little or no traffic is expected. The new bridge superstructure would be either pushed hydraulically sideways to the north or lifted with a crane on each side and placed back on the abutment seats at its final location near the middle of Meadow Way. The remaining 1'-9" wide strip of the deck width would be cast after this move. Since this is the only access to the homes on the other side of the creek, emergency fire and paramedic crews would be stationed on both sides of the bridge to provide emergency services to surrounding residences. After the relocation of the new bridge to its final position, the bridge would be reopened to traffic. Approach railings at all four bridge corners, landscaping and vegetation restoration with native plants (trees, bushes and other ground cover) on all affected slopes, fencing, and other surface improvements around the bridge would continue until project completion.

A program of fish habitat restoration, using bio-engineering techniques, low earth berms and woody nooks, designed specifically for the site, will be implemented. The current proposed location of the large wood is the bank along the access route, immediately upstream of the new retaining wall on the north side. A layer of large logs will be laid in a grid at the bottom of the excavation and on the creek bed, to be incorporated in the log-root wad revetment structure. The logs will be rot-resistant species, such as eucalyptus and redwood, typically obtained as re-purposed salvage from local urban tree removal companies. The structure will be designed so that the log grid is made integral with large rock rip-rap pieces placed within it and stacked under

the new overtopping embankment slope. The ends of the logs perpendicular to the creek centerline will protrude out of the base of the embankment into the creek's edge flow, catching small woody drift. The base of the embankment will be planted with native plants and small trees to create near-shore overhanging vegetation. In conjunction with the revetment, the creek bed in front of the revetment structure will be re-contoured to create pools for fish. The net effect will be restoring the site to a deep and wide soil "trough" traversing the bridge site for natural fish passage without any obstructions in the creek other than creek materials and native plants.

The wet utilities would be rerouted under the new bridge and the smaller "dry" utilities may be placed inside the barrier railings, the deck, or the sidewalk. A Revegetation Plan for the site will be prepared.

Right-of-Way

Most of the bridge and approach roadway work would remain within the Town of Fairfax's ROW. During construction, fences, fence pillars and driveways encroaching onto the Town's ROW, but no homes and other structures, would be affected. Temporary easement from one neighbor for the temporary access ramp and a permanent easement from the same for the retaining wall on the southwest quadrant would be necessary. A small strip of the land adjacent and parallel to the bridge on the north edge, privately owned but not used for residence, would be acquired permanently or through easement by the Town. It appears that there have been encroachments on the Town ROW over the years, especially in the southeast quadrant, which would be used during construction and relinquished back to the neighbor afterwards through an easement process.

Contractor's Staging and Storage Areas

The project site offers very limited storage and staging areas for the contractor. The publicly owned last block of Hickory Road at Cascade Drive, about ½-mile from the project site, would be designated for the contractor's use for storing equipment and materials during construction (Figure 1). The contractor would use various pickups, dump trucks, cranes, drilling vehicles, water and other liquid-carrying trucks, loaders, tractor trailers, excavation machinery, generators and handheld equipment. The contractor's personnel would be able to access the creek areas on foot.

3.2 Project –Related Approvals, Agreements, and Permits

The information contained in this Initial Study will be used by the Town of Fairfax (the CEQA Lead Agency) as it considers whether or not to approve the proposed project. If the project is approved, the Initial Study, as well as the associated Mitigated Negative Declaration (MND) would be used by the Town 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:

Army Corps of Engineers

- Clean Water Act Section 404 Form 4345, Application for Department of the Army Permit

California Department of Fish and Wildlife

- Section 1602 Lake and Streambed Alteration Agreement

Town of Fairfax

- Tree Removal Permit

Regional Water Quality Control Board

- Clean Water Act, Application for Section 401 Water Quality Certification
- Notice of Intent under the State Construction General NPDES 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.

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

Name and Title: Garrett Toy, Town Manager

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:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒	1, 2
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐	1
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐	1
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐	1

Environmental Setting

The project site is located in a residential neighborhood within the southern portion of the Town of Fairfax, Marin County, California (see Figure 1, Regional Location Map). The project site consists of the existing bridge along Meadow Way that was built within and over San Anselmo Creek. Part of the project site also extends into the adjacent residential property's ROW.

The existing bridge is a one-lane bridge located on Meadow Way over a sharp left bend in the San Anselmo Creek channel, approximately 175 feet from the northwestern terminus of the road where it connects to Cascade Drive and is approximately 150 feet from the southwestern terminus of the road where it connects to the remainder of Meadow Way (where it forms a T-intersection with itself). Surrounding land uses are primarily residential. Views of the project site and surrounding land uses are provided in Figures 3 and 4 (see above).

The Town of Fairfax 2020 General Plan (General Plan) identifies Visually Significant Areas within the Town. According to the General Plan's Map of Visual Resources, the project site is not located within a Visually Significant Area. Furthermore, the project site is not visible from a view or vista point, scenic highway, or scenic ridgeline corridor. Bolinas Road is a Town-designated scenic highway that provides views looking towards the project; however, due to dense vegetation and elevation difference, the project site is not visible from Bolinas Road.

According to the California Department of Transportation (Caltrans) Scenic Highway Program, there are no scenic highways adjacent to the project site. The closest scenic highway is State Route 1 (SR-1) located approximately 5.75 miles west of the project site.

Discussion of Impacts

a) ***No 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). Under this definition, there are no scenic vistas impacted by the proposed project. Views from the project site are limited, due to the dense existing vegetation and lack of accessible land use in the creek and surrounding private residences. Therefore, the project would have no impact on scenic vistas.

b) ***No Impact.*** As stated above, Meadow Way is not a designated state scenic highway, and there are no state scenic highways adjacent to the project site. The existing bridge and the approaches to the bridge have no heritage trees, unique geological features, or historic buildings within a state scenic highway. Therefore, the project would have no impact.

c) ***Less than Significant Impact.*** During the construction phase, views of material, construction equipment, and stockpiled soil would be available for brief periods. Storage of construction materials, tools, and vehicles will be limited to locations within the APE and a publicly-owned area on Hickory Road. The activities are typical of bridge replacement strategies approved by Caltrans in developed areas and would not substantially degrade views of the existing setting.

   Public views of the bridge are only afforded from adjacent roadways, including Cascade Drive and Meadow Way, due to dense vegetation along San Anselmo Creek and the close proximity of private residences. There are no publicly accessible views of the side of the bridge due to existing vegetation. Construction of the new bridge may necessitate the removal of vegetation, but this would be temporary as replanting would over time return the views to existing conditions. The new concrete deck would eliminate the older design of the wooden bridge. The scale and size of the bridge would not substantially change, and the removed vegetation would be replanted, keeping the existing visual character of the site largely the same. Furthermore, as the existing bridge is in disrepair, the replacement bridge would enhance the visual quality of the site through its graceful arch construction, the architectural treatment of new concrete abutments and wall surfaces, as well as included amenities such as special lighting, open barriers, and native vegetation plantings. Therefore, impacts to the visual character of the project site would be less than significant.

d) ***Less than Significant with Mitigation Incorporated.*** The proposed project would require the installation of new downcast and waist-level LED lighting fixtures, placed at certain intervals on the concrete barriers on both sides of the replacement bridge. The immediate vicinity of the project site currently contains street lighting and residential lighting. The only other existing source of nighttime lighting in the immediate vicinity is from motor vehicle headlights. The proposed project would also include raised reflective pavement markers at proper intervals to alert the drivers and pedestrians of the two separate travel zones.

The installation of new sources of light and glare from the proposed project could be a potentially significant impact. However, most homes and the surrounding street lighting emit some light and glare during daytime and evening hours, as is typical in residential areas and the project's proposed lighting would be similar to what exists throughout the surrounding residential area. The proposed project would also require nighttime construction for a couple of hours, on one night for the movement of the staged bridge into its permanent location. Implementation of Mitigation Measure AES-1 would ensure both construction and operational lighting would be designed to minimize glare and spillover to surrounding properties and that all applicable lighting guidelines are integrated into the proposed project.

Mitigation Measure AES-1

Prior to issuance of the building permit, an exterior lighting plan shall be submitted for review and approval by Town staff. The lighting plan shall include but not necessarily be limited to the following:

- The exterior lighting plan shall show all potential light sources with the types of lighting and their locations.
- Exterior lighting shall include low mounted, downward casting, and shielded lights that do not cause spillover onto adjacent properties.
- Floodlights shall not be used
- Lighting shall not "wash out" structures or any portions of the site.
- Low intensity, indirect light sources shall be required.
- Mercury, sodium vapor, and similar intense and bright lights shall not be permitted except where their need is specifically approved, and their source of light is restricted.
- All light sources shall be fully shielded from off-site view.
- All lighting shall be installed in accordance with building codes and the approved lighting plan during construction.

4.2 Agriculture and Forestry Resources

AGRICULTURE AND FORESTRY RESOURCES[1] — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
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?	☐	☐	☐	☒	1, 5
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	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))?	☐	☐	☐	☒	1, 3, 5
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	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?	☐	☐	☐	☒	1

[1] In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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 2016). 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 and open space uses.

Discussion of Impacts

a) ***No Impact.*** According to the California Department of Conservation (CDC) 2014 Marin County Important Farmland Map, the project site is located in an area that is designated as urban and built-up land. Therefore, the proposed project would have no impact on agricultural uses.

b) ***No Impact.*** The project site is zoned for residential uses and not for agricultural use. Furthermore, according to the CDC, the project site is not under a Williamson Act contract. Therefore, no impact would occur.

c) ***No Impact.*** As stated above, the project site is urban land zoned for residential uses and is not zoned for forest land or Timberland Production. Furthermore, the proposed project involves the replacement of an existing bridge and does not include the rezoning of forest land or timberland. Therefore, no impact would occur.

d) ***No Impact.*** As stated above, the project is site is designated urban and built-up land and does not contain any forest land. Therefore, the proposed project would not result in the conversion or loss of forest land to non-forest land, and no impact would occur.

e) ***No Impact.*** The proposed project involves the construction and maintenance of existing infrastructure within an already developed area that does not include any farmland. 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 district 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?	☐	☐	☒	☐	1, 9
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐	1, 9
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	1, 9
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☒	☐	☐	1, 9

Environmental Setting

The proposed project is located in Town of Fairfax, Marin County within the San Francisco Bay Area Air Basin (SFBAAB). Air quality in this area is determined by such natural factors as topography, meteorology, and climate, in addition to the presence of existing air pollution sources and ambient conditions. The potential for high pollutant concentrations developing at a given location depends upon the number of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the contaminated air. The project site is located in the eastern portion of Marin County, which is bounded on the west by the Pacific Ocean, on the east by San Pablo Bay, on the south by the Golden Gate, which connects San Francisco Bay to the Pacific Ocean, and on the north by the Petaluma Gap, which is a geographical region in Sonoma County which extends in a band from the Pacific Ocean to San Pablo Bay. Air pollution potential is highest in eastern Marin County, where most of the population is located in semi-sheltered valleys. In the southeast, the influence of marine air keeps pollution levels low. As development moves further north, there is greater potential for air pollution to build up because the valleys are more sheltered from the sea breeze.

While Marin County does not have many polluting industries, the air quality on its eastern side - especially along the U.S. 101 corridor - may be affected by emissions from increasing motor vehicle use within and through the county. Sources of air pollutants in the nearby vicinity of the

project site include vehicle emissions and other residential activities (cooking, wood burning, and/or charcoal grilling; emissions associated with lawn and garden maintenance; emissions associated with the application of paints and coatings; etc.) The primary sensitive receptors in the vicinity are residents, which may include children, elderly people, or people with respiratory illnesses.

Both US EPA and California have developed several ambient air quality standards (AAQS) which have become increasingly stringent over the last several decades. Although emissions and air pollution concentrations have decreased considerably, the 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 (NO_x) rather than being emitted directly—and particulate matter (PM). The Basin is considered "non-attainment" for the O_3 (8-hour), and is considered "non-attainment" for the O_3 (1-hour and 8-hour), PM_{10} (24-hour and AAM) and $PM_{2.5}$ (AAM) state standards.

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. 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).

There are multiple definitions of what emissions level would be considered "significant." If a large ("major") stationary source of air pollution were proposing to locate at the project site, Federal New Source Review (NSR) regulations would define "significant" emissions as being 100 tons per year (TPY) of CO or 40 TPY of ROG or NO_x.[2] For temporary activities at the project site 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 NO_x, ROG, or CO were in excess of 100 tons per year (referred to as Federal de minimis levels).[3]

In 2017, the Bay Area Air Quality Management District (BAAQMD) adopted quantitative thresholds of significance for construction activities and identified Best Management Practices for controlling PM associated with fugitive dust. The quantitative thresholds were 82 lb/day for exhaust PM_{10} and 54 lb/day for exhaust $PM_{2.5}$, NO_x, and ROG (these thresholds correspond to 15 TPY and 10 TPY, respectively, if construction were to last for 365 days). However, BAAQMD "is no longer recommending that [those] Thresholds be used as a generally applicable measure

---

[2] *40 CFR 51.165(a)(1)(x)(A); 51.166(b)(23)(i); 52.21(b)(23).*

[3] *Separately, Federal regulations for General Conformity identify "routine maintenance and repair activities, including repair and maintenance of administrative sites, roads, trails, and facilities" as "actions which would result in an increase in emissions that is clearly de minimis" [40 CFR 93.153(c)(2)(iv)]*

of a project's significant air quality impacts.[4] In the previous version of the BAAQMD CEQA Guidelines,[5] determination of significance is based only upon whether or not Best Management Practices for controlling fugitive dust (which are very similar to those identified in 2010) are implemented.

Discussion of Impacts

a) ***Less than Significant Impact.*** For projects proposed within the Bay Area, the applicable plan is BAAQMD's Air Quality Management Plan (AQMP). In working towards air quality management, BAAQMD works with the Association of Bay Area Governments (ABAG), county transportation commissions, local governments, and cooperates actively with all State and federal government agencies. BAAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

Projects that are consistent with the projections of employment and population forecasts identified by ABAG are considered consistent with the Plan's growth projections since the Growth Management Chapter forms the basis of the land use and transportation control portions of the Plan. The Plan also assumes that general development projects will include feasible strategies (i.e., mitigation measures) to reduce emissions generated during construction and operation.

The proposed project does not include the development of habitable structures or commercial development, nor does it expand the roadway to accommodate an increase in vehicle trips. Because the proposed project would not exceed the Town's population projections, the operation of the project will not conflict or obstruction implementation of the applicable air quality plan. In addition, construction equipment is mobile (dispersing and diluting pollutants over a wider area than sources that are fixed in place), and the construction phases would be temporary. Therefore, construction and operation emissions would have a less than significant impact related to applicable air quality plans.

---

[4] *BAAQMD, "Updated CEQA Guidelines", available from http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx.*

[5] *BAAQMD, "BAAQMD CEQA Guidelines", December 1999, pp. 13-15.*

b) ***Less than Significant with Mitigation Incorporated.*** The area is non-attainment of AAQS for ozone and particulate matter. The BAAQMD 2010 Clean Air Plan addresses these AAQS and evaluates cumulative impacts by considering emissions from all sources and projecting future activity.

During the construction phase of the proposed project, on-site stationary sources, heavy-duty construction vehicles, construction worker vehicles, and energy use would generate emissions. In addition to construction vehicle emissions, fugitive dust would be generated during grading and construction activities. Construction equipment operations and fugitive dust generation could emit ozone and PM, resulting in a cumulatively considerable net increase of criteria pollutants for which the basin is in non-attainment.

Fugitive dust and diesel emissions would be controlled by the implementation of BAAQMD-recommended mitigation measures and EPA Tier 2 standards (Mitigation Measure AIR-1, below). As the proposed project would include a replacement bridge with the same number of lanes as the existing bridge (one), the operation of the proposed project would not result in an increase in vehicle trips or traffic emissions. Therefore, the operation of the proposed project would have a less than significant contribution to cumulative pollutant levels in the region.

Mitigation Measure AIR–1

The contractor shall be responsible for implementing the following basic measures:

- 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 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.
- 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 the 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.

- All diesel engines used during construction shall meet EPA "Tier 2" engine standards identified in 40 CFR 89, or more stringent standards.

c) ***Less than Significant with Mitigation Incorporated.*** The primary sensitive receptors in the vicinity are residents, which may include children, elderly people, or people with respiratory illnesses. Sensitive receptors are located in close proximity to several locations along the construction area, which would result in a potentially significant impact. However, fugitive dust would be minimized by the measures listed in Mitigation Measures AIR-1, construction equipment is mobile (dispersing and diluting pollutants over a wider area than if they were fixed in place) and the proponent is also committing to use equipment that meets EPA Tier 2 standards or better (per Mitigation Measure AIR–1 above). 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.

d) ***Less than Significant with Mitigation Incorporated.*** 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 the 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, and would result in a potentially significant impact. However, construction equipment is mobile (dispersing and diluting pollutants over a wider area than if they were fixed in place) and the proponent is also committing to use equipment that meets EPA Tier 2 standards or better (per Mitigation Measure AIR–1 above). Furthermore, the project would not result in any other emissions adversely affecting a substantial number of people. Thus, with implementation of Mitigation Measure AIR-1, the proposed project would result in less-than-significant impacts.

4.4 Biological Resources

BIOLOGICAL RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
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?	☐	☒	☐	☐	1, 7
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?	☐	☒	☐	☐	1, 7
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	1, 7
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?	☐	☐	☒	☐	1, 7
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	1, 7, 4
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?	☐	☐	☐	☒	1, 7

Environmental Setting

WRA, Inc. (WRA) and Kelly Biological Consulting conducted biological resources studies at the project site. Studies included a biological resources assessment, special-status plant surveys, and a delineation of jurisdictional waters. Their findings were synthesized into a Natural Environment Study (NES; Appendix A) which is the foundation of this discussion of impacts to biological resources and covers such topics as vegetation communities present within the Study Area, the suitability of existing habitat conditions for special-status plant and wildlife species, and the presence of jurisdictional waters and other waters. These topics were evaluated by a review of available publications and databases followed by five on-foot site visits that occurred in the winter and spring of 2016 and 2017, and winter of 2018. Studies included a biological resources assessment, special-status plant surveys, and a delineation of Section 404 jurisdictional areas within the proposed Biological Study Area (BSA).

Biological Study Area

The BSA is located on and around the Meadow Way Bridge over San Anselmo Creek in the Town of Fairfax, Marin County, California. Meadow Way is a local residential road. The BSA covers the areas encompassed by the proposed project-related direct and indirect actions such as ground-disturbing, construction, staging, or anywhere access activities would occur and goes beyond that to ensure that key biological issues are addressed. Meadow Way is a local road in a developed suburban area. The adjacent land use is residential (single-family homes). The BSA extends up and downstream from the bridge along the stream corridor covering the primary natural area.

Site elevations range from approximately 100 to 200 feet NAVD88. Surrounding land use is residential. The bridge is located on the San Rafael USGS 7.5-minute quadrangle map at latitude W37.583366, longitude N122.36085.

Natural Communities

<u>Riparian Woodland</u>

The BSA contains 0.26-acre of open canopy Riparian Woodland similar to California Bay (Umbellularia Californica) Forest Alliance (G4, S3) (Sawyer, J.O., T. Keeler-Wolf, and J. Evens. 2009) (Figure 3a). The sparse overstory includes native tree species such as California bay, buckeye (Aesculus californica), oaks (Quercus kelloggii, Q, garryana, and Q. agrifolia var. agrifolia), and a multi-stem arroyo willow (Salix lasiolepis). The understory is comprised mainly of California blackberry (Rubus ursinus), Himalayan blackberry, English ivy (Hedera helix), and various grasses including panic veldtgrass (Ehrharta erecta). There are cement and wood retaining walls along portions of the lower banks.

Intermittent Stream (Other Waters)

At this location, San Anselmo Creek is an intermittent creek with flows that vary with the rainfall patterns of a given season. The watershed that supports it is local, generally the western part of the Town of Fairfax and adjacent open space lands. Flows within the creek during a January 11, 2017 site visit extended to the edges of the creek bed. During a site visit at a similar time of year (February 1, 2018) flows were much lower. In addition to slope change at the bed and bank junction, wrack observed at the edge of the creek bed was used as an indication of OHW mark. The creek substrate is a mix of small gravel to larger cobble. The channel width at the OHW mark was used to determine the intermittent stream ("other waters") boundary shown on Figure 3a. The creek is not included on the National System of Wild and Scenic Rivers published by the U.S. Department of the Interior. There are no wetlands in the BSA. Within portions of the BSA, there are wooden or cement retaining walls along the lower banks. The rest of the bank areas are natural substrate.

Ruderal Disturbed/Developed

The Ruderal Disturbed/Developed portion of the project site includes pavement (Meadow Way Road and driveways), the gravel and bare dirt roadsides, structures (homes and outbuildings), backyards, and landscaping or bare areas. In the areas that are not landscaped, the vegetation is predominately non-native species commonly found in the region, this plant community is predominately landscaping cultivars and non-native herbaceous species commonly found in the region, such as American vetch (Vicia americana), various clovers (Trifolium spp.), oats (Avena barbata), bromes (Bromus spp.), and hedge-hog dogtail (Cynosurus echinatus). The dominant vegetation along the middle to upper part of the creek bank is Himalayan blackberry and English ivy.

Special-Status Species

Based on pre-survey database searches, it was determined that 75 special-status plant species and 91 special-status wildlife species have been documented from or have a range that occurs in the San Rafael, Bolinas, San Geronimo, Novato, Petaluma Point, San Quentin, San Francisco North, or Point Bonita 7.5-minute USGS quadrangles. Of these species, 23 special-status plant species and seven special-status wildlife species have documented occurrences within 5 kilometers (3 miles) of the BSA.

Special-Status Plant Species

Due to a lack of appropriate habitat elements (such as coastal salt marsh) and the presence of residential development in the surrounding landscape, it was determined that the BSA has the potential to support only four of the special-status plant species identified below. No special-status plants were observed in the BSA during rare plant surveys conducted for this report. Given that surveys were conducted during the appropriate blooming periods but no special-status plant species were observed, no special-status plant species are likely present within the project site. Nonetheless, special-status plant species with suitable habitat within the project site are discussed below:

Napa false indigo (*Amorpha californica* var. *napensis,* Rare, threatened or endangered in CA or elsewhere; Moderately threatened in CA*)*. Habitat Present. Broadleaf upland forest, chaparral, cismontane woodland; openings in forest, woodland, and chaparral. 120-2,000 m. Flowers April-July. Woodland habitat within the project site could support this species, however, this woody perennial was not observed during the field surveys, which were conducted when this species would be identifiable. No further actions are recommended for this species.

Western leatherwood (*Dirca occidentalis,* Rare, threatened or endangered in CA or elsewhere; Moderately threatened in CA*)*. Habitat Present. Mesic sites, broadleafed upland forest, closed-cone conifer forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland. 25-425 m. Flowers January- April. Woodland habitat within the project site may support this species. This perennial woody shrub species was not observed during the field surveys, which were conducted when this species would be identifiable. No further actions are recommended for this species.

Minute pocket moss (*Fissidens pauperculus,* US Forest Service Sensitive Species; Rare, threatened, or endangered in CA but more common elsewhere; Moderately threatened in CA). Habitat Present. North coast coniferous forest. On damp soil on the coast and in dry streambeds and banks on soil in humus comprised of heavily decayed wood. 10-100 m. Flowers N/A (best observed during the wet season). Mesic substrates within the project site may have the potential to support this species. This species was not observed during the field surveys, which occurred during the wet season when this species is identifiable, though common member of the same genus was found (*Fissidens crispus*). No further actions are recommended for this species.

Tamalpais oak (*Quercus parvula* var. *tamalpaisensis,* Rare, threated, or endangered in CA and elsewhere; Not very threatened in CA*)*. Habitat Present. Lower montane coniferous forest. 100-750 m. Flowers March-April. Suitable habitat for this species may be present in the project site. This species is a woody shrub, which if present, would have been observed during the field surveys. No further actions are recommended for this species.

Special-Status Wildlife Species

The BSA is designated Critical Habitat for steelhead (*Oncorhynchus mykiss*), and the species is presumed present within this section of San Anselmo Creek. The BSA is also listed as designated Critical Habitat for Coho salmon (*O. kisutch*), although this species is considered extirpated from the tributaries and waters of San Francisco Bay. Additionally, the BSA contains essential fish habitat (EFH) for Pacific salmonids. Steelhead and coho salmon are discussed below, as the project site is critical habitat for both species. However, based on habitat and conditions within the BSA and documented occurrences nearby, it was determined that the BSA has potential to support CCC steelhead, NSO, and two other special-status wildlife species: Allen's hummingbird (Selasphorus sasin) and olive-sided flycatcher (Contopus cooperi).

> **Steelhead - central California coast DPS *(Oncorhynchus mykiss,* Federal threatened)*.*** Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean. San Anselmo Creek is designated as critical habitat for the central California coastal DPS of this species. Though two barriers to anadromy exist downstream of the project site, the species is considered present within the creek.
>
> **Coho salmon - central California coast (*Oncorhynchus kisutch*, Federal Endangered, State Endangered).** State listing is limited to Coho south of San Francisco Bay. Federal listing is limited to naturally spawning populations in streams between Humboldt County and Santa Cruz County. Spawn in coastal streams 4-14C. Prefer beds of loose, silt-free, coarse gravel and cover nearby. San Anselmo Creek is designated as critical habitat for the species. However, the species is considered extirpated from the tributaries of San Francisco Bay.

In addition to CCC steelhead, the project site has the potential to support three special-status bird species. These species and their preferred habitats are discussed below:

> **Northern spotted owl (*Strix occidentalis caurina*, Federal threatened, State threatened, CDFW species of special concern)**. Habitat consists of old-growth forests or mixed stands of old-growth and mature trees. Occasionally in younger forests with patches of big trees. Prefers high, multistory canopy dominated by big trees, trees with cavities or broken tops, woody debris and space under canopy. The project site and immediately surrounding area are low-density residential developments and riparian woodland; however, riparian redwood forest community is in proximity to the project site. This species has been documented to nest in dense forest approximately 0.28 miles southwest of the project site. No nesting habitat is present in the project site.

Olive-sided flycatcher (*Contopus cooperi*, CDFW species of special concern, USFWS bird of conservation concern). Typical breeding habitat is montane coniferous forests. At lower elevations, also occurs in wooded canyons and mixed forests and woodlands. Often associated with forest edges. Arboreal nest sites located well off the ground. This species is known to inhabit the area, particularly in the summer. Riparian redwood forest is present in the project site and may contain suitable nesting habitat for the species.

Allen's hummingbird (*Selaphorus sasin*, USFWS Birds of Conservation Concern). Breeds along the California coastline in habitats including mixed evergreen, Douglas fir, redwood and Bishop pine forests, riparian woodlands, nonnative eucalyptus and planted cypress groves, and occasionally live oak woodlands and coastal scrub with at least a scattering of trees, such as on north-facing slopes. The project site contains riparian woodlands that may provide suitable nest trees and foraging habitat which may support this species.

Regulatory Setting

Federal Regulations

Federal Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 et seq.), was enacted to provide a means to identify and protect endangered and threatened species. Under Section 9 of the ESA, it is unlawful to take any listed species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species. "Harass" is defined as an intentional or negligent act or omission, which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include, but are not limited to, breeding, feeding, or sheltering. "Harm" is defined as an act which actually kills or injures fish or wildlife and may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering.

Actions that may result in "take" of a federal-listed species are subject to USFWS or National Marine Fisheries Service (NMFS) permit issuance and monitoring. Section 7 of ESA requires federal agencies to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Any action authorized, funded, or carried out by a federal agency or designated proxy (e.g., Caltrans) which has potential to affect listed species requires consultation with the USFWS or the NMFS under Section 7 of the ESA.

Clean Water Act (CWA)

The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 404 identifies the Corps' jurisdiction over fill materials in essentially all water bodies, including wetlands. All federal agencies are required to avoid impacts to wetlands whenever there is a practicable alternative. Section 404 established a permit program administered by the Corps regulating the discharge of dredged or fill material into Waters of the US (including wetlands). Section 401 of the CWA requires that an applicant for a federal license or permit that allows discharge to Waters of the U.S. obtain a state certification that the discharge complies with the CWA. The Regional Water Quality Boards (RWQCB) administer the certification program in California. The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Executive Order 11990 – Protection of Wetlands

This order established a national policy to avoid adverse impacts to wetlands whenever there is a practicable alternative. The U. S. Department of Transportation (DOT) promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts to wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included. This must be documented in a specific Wetlands Only Practicable Alternative Finding. An additional requirement is to provide early public involvement in projects affecting wetlands. FHWA provides technical assistance (Technical Advisory 6640.8A) and reviews environmental documents for compliance.

Migratory Bird Treaty Act

This treaty with Canada, Mexico, and Japan makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season. California Fish and Game Code (Sec 3500) also prohibits the destruction of any nest, egg, or nestling.

State Regulations

California Porter-Cologne Water Quality Control Act

This regulatory law is becoming more prominent on projects involving impacts to isolated Waters of the State (non-404/401 waters). The RWQCB is increasingly requiring Waste Discharge Requirement (WDR) permits for impacts to Waters of the State.

Streams, Lakes, and Riparian Habitat in California

Streams and lakes, as habitat for fish and wildlife species, are subject to the jurisdiction of California Department of Fish and Wildlife (CDFW) under Sections 1600-1616 of California Fish and Game Code. Alterations to, or work within or adjacent to streambeds or lakes generally require a 1600 series Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72).

In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). "Riparian" is defined as "on, or pertaining to, the banks of a stream." Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Lake and Streambed Alteration Agreement from CDFW.

Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

California Endangered Species Act

CDFW is responsible for administering California Endangered Species Act (CESA, CDFG Code §§2050, et seq.), which prohibits take of species that have been listed, or are considered for listing (candidate species) as threatened or endangered species within the State of California. CESA allows for incidental take of state listed species through issuance of an Incidental Take Permit, or through a Consistency Determination in coordination with a Biological Opinion issued by the USFWS (CDFW Code Section 2081). In contrast with federal law, the definition of "take" under CESA involves actual harm to one or more members of a listed species and does not extend to modification of habitat not involving direct take.

Special-Status Species

Special-status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA). These acts

afford protection to both listed and proposed species. In addition, CDFW Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, and CDFW special-status invertebrates are all considered special-status species.

Although CDFW Species of Special Concern generally have no special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Under this legislation, destroying active nests, eggs, or young is illegal. Plant species on the CNPS Rare and Endangered Plant Inventory with California Rare Plant Rank of 1 or 2 are also considered special-status plant species and must be considered under CEQA. Rank 3 and Rank 4 species are afforded little or no protection under CEQA.

Other Sensitive Biological Communities

Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2015). Sensitive plant communities are also identified by CDFW. CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or USFWS must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). Specific habitats may also be identified as sensitive in city or county general plans or ordinances.

Local Regulations

Tree Protection Ordinance

In 1973, the Town of Fairfax approved Ordinance No. 387 for trees. The purpose of the ordinance is to preserve the wide variety of local native trees and to protect the benefits they provide the citizens. Chapter 8.36.020 of the Town Code defines "altering" and "tree." A Tree Permit is required for removal or significant trimming of any tree, which has a circumference of 24 inches or more measured at 24 inches above the ground. In effect, this is a little less than an 8-inch diameter tree trunk.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated***. The project site was determined to have potential habitat for four special-status plant species. None of these were observed during field surveys conducted during the appropriate flowering periods. It is therefore unlikely that any of these species are present within the project site and consequently, unlikely that impacts to special-status plant species would occur.

The segment of the San Anselmo Creek that contains the project site is essential fish habitat for Pacific Salmonids and critical habitat for Coho Salmon and CCC Steelhead. Although, Coho salmon are considered extirpated in the vicinity of the project site, and are therefore very unlikely to occur. With implementation of Mitigation Measure BIO-1, impacts to critical habitat, EFH, and steelhead would be less than significant.

In addition to fish species, the project site has potential habitat for two special-status bird species, Allen's hummingbird and olive-sided flycatcher. Additionally, although the project site itself does not contain suitable habitat for nesting northern spotted owl, the nearby vicinity does, and noise impacts at the project site could adversely affect the northern spotted owl. With implementation of Mitigation Measure BIO-2, impacts to nesting avian species would be less than significant.

Given impacts to birds and fish species would be mitigated to less-than-significant levels and there are no other special-status species within or near the project site, impacts would be less than significant with mitigation incorporated.

Mitigation Measure BIO-1 – Special-Status Fish Species

Prior to the issuance of construction permits, consultation with NMFS shall be conducted to ensure proposed project design will not result in permanent adverse effects to steelhead, critical habitat, or EFH. The project shall adopt measures as mandated by NMFS, which may include, but is not limited to, the following:

- Work shall be conducted in isolation from flowing water. If water is present, prior to the start of in-water activities, the work area will be isolated using temporary cofferdams, and flowing water shall be temporarily diverted around the isolated area.
- A fish salvage will be completed if water remains in the project site after the start of construction. A fish rescue and relocation plan shall be developed prior to the onset of any in-water work. The plan shall be implemented by a qualified biologist during dewatering activities in San Anselmo Creek. The fish rescue and relocation plan shall include an overview of the proposed methods for dewatering, expected location and duration of dewatering activities, and methods for conducting fish rescue and relocation during dewatering activities.
- If de-watering is necessary, pumps with 0.2-inch mesh will be used to remove standing water from the work area within the coffer dams to a filtration basin to

prevent direct discharge into the creek. If a filtration basin is not available, filter bags will be placed surrounding the hose-release and the hose-release end will be placed on a level area outside of the wetted creek channel to allow water to settle prior to returning to the creek. No pumped water will be directly discharged into the creek. Allowing the pumped water to settle in a filtration basin or release through filter bags will prevent increase in turbidity or sediment loads during the de-watering process.

- Concrete, dust, and other debris from concrete removal activities will be captured and removed from the work site so as not to enter the creek channel.
- Where disturbed, the creek bed and channel shall be restored to pre-project conditions following the completion of work.

Mitigation Measure BIO-2 – Nesting Birds

Prior to the issuance of construction permits, final avoidance and minimization measures shall be determined in consultation with the USFWS to ensure project design including avoidance and minimization measures do not result in adverse effects to NSO. The project shall adopt measures as mandated by USFWS, which may include, but is not limited to, the following:

- Work within the project site will be conducted outside the nesting season (September 1 through January 31) to avoid disrupting nesting NSO within and adjacent to the site. Work outside of this period during the nesting season will require protocol-level surveys to determine nesting status and location and consultation with the USFWS and CDFW.
    - If protocol-level surveys indicate that NSOs are nesting within the potential acoustic impact distance to be determined in consultation with the USFWS, project work may not commence until the end of the nesting season, i.e. September 1, or be limited to work within certain acoustic levels based upon distance from the nest and in consultation with the USFWS.
    - If protocol-level surveys determine that NSO are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence June 1. June 1 is the earliest date non-nesting status can be confirmed.
- If project work begins in the non-nesting season and is to continue into the nesting season, project work will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area.

b) ***Less than Significant with Mitigation Incorporated.*** Impacts to sensitive natural communities can be divided into two classes—permanent and temporary. Permanent impacts may occur upon conversion of a natural community to infrastructure such as bridge, support, or engineered slope stabilization. Temporary impacts are transient disturbances resulting from construction. Two natural communities of special concern were found to be present in the BSA, Riparian Woodland and Intermittent Stream.

The proposed Project would temporarily impact 0.07 acre of Riparian Woodland as a result of access routes, removal of existing retaining walls, excavations for footings and riprap, and contour grading on the creek banks. A total of 113 square feet of Riparian Woodland would be permanently impacted by the proposed Project through placement of new retaining walls and abutments. The proposed project avoids the Riparian Woodland community to the maximum extent feasible, and only one California bay tree cluster is to be removed.

The project would not create any permanent impacts to intermittent streams, 0.13-acre temporary impacts, and no permanent direct impacts on Intermittent Stream are anticipated as a result of proposed project construction. Removal of existing wooden piles from within the creek bed will result in a gain of 12.6 square feet (<0.01 acre) of Intermittent Stream habitat. Construction in the creek will be limited to areas that must be accessed for construction activities and creek bank excavations. With implementation of Mitigation Measure BIO-3, these impacts would be less than significant. Given the project would result in no impacts to riparian redwood forest and impacts to other waters would be mitigated to less-than-significant levels, impacts are considered less than significant with mitigation incorporated.

Mitigation Measure BIO-3 –Intermittent Streams

The project shall implement the following measures to avoid and/or minimize and restore potential impacts to creek habitat resulting from the use of mechanical equipment in the creek bed.

- The primary construction in the creekbed will be completed between June 1 and October 15, and work within the creek bed and banks will occur when the work area is dry or dewatered.
- Final grading in the creek bed will conform to the existing creek channel both downstream and upstream (except in the areas of permanent fill), and existing bed materials will be replaced with similar sized materials.
- Regulatory approval will be obtained for all work within potential jurisdictional areas, including the USACE, RWQCB, CDFW, and NMFS. All work within these areas will conform to any conditions imposed by the regulating agencies.
- Prior to clearing, grubbing, pruning, or groundbreaking activity, the limits of construction will be fenced with temporary high-visibility construction fencing to protect

environmentally sensitive areas and to prevent any equipment from unnecessarily extending the work area or entering the creekbed. In addition, silt fencing will be installed where appropriate to prevent debris from entering the creek. All fencing will be removed upon project completion.

- Prior to construction, the contractor will be required to prepare an Accidental Spill Prevention and Cleanup Plan.
- To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment spill control absorbent material will be in place underneath this equipment at all times to capture potential leaks. All refueling and maintenance of equipment, other than stationary equipment, will occur outside the creek's top-of-bank. Any hazardous chemical spills will be cleaned immediately.
- If there are drilling activities related to construction of the proposed project the contractor will be required to use a drilling mud and slurry seal that is non-toxic to aquatic life. All drilling muds and fluid will be contained on-site in tanks and disposed of in a permitted manner. Fluids from saw cutting and other activities will be collected and not allowed to flow into the creek.
- No equipment, including concrete trucks, will be washed within the channel of the creek, or where wash water could flow into the channel. Prior to proposed project construction, the contractor will establish a concrete washout area for concrete trucks in a location where wash water will not enter the creek or adjacent areas. The washout area will follow the practices outlined in the San Francisco Bay Regional Water Quality Control Board Erosion and Sediment Control Field Manual (page 107-108, July 1999) or more recent guidelines. Substitution of the designated concrete washout area or methods will require prior approval of the Town of Fairfax.
- All water that comes in contact with wet concrete will be pumped directly into tanks and disposed of at a permitted location.
- When working on the roadway and bridge approaches during the October 15 to June 1 period, all drainage inlets within the proposed project site will be protected from receiving polluted stormwater through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs.
- Water encountered during construction of the bridge foundations will be managed in accordance with an approved dewatering plan.
- All workers will ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the BSA are deposited in covered or closed trash containers. The trash containers will not be left open and unattended overnight.
- At the end of construction, the Town of Fairfax will require that seed and certified weed-free straw will be placed on disturbed areas in the proposed project site (with the exception of the lower creek banks, creek bed, and areas below the OHW mark). A

jute mesh type or equivalent matting will be placed over the straw, installed per the manufacturer's instructions. This matting will have no plastic incorporated into it. Substitution of materials or erosion control methods will require prior approval of the Town of Fairfax.

- After construction, the proposed project site will be inspected following the first heavy rain, during the middle of the rainy season and at the end of the rainy season. During each visit areas of significant erosion or erosion control device failure will be noted and appropriate remedial actions taken.

c) ***Less than Significant with Mitigation Incorporated*.** A delineation of jurisdictional waters was performed at the project site and found that there were no wetlands present. However, 0.18-acre of intermittent stream is present. Intermittent stream is considered "other waters" under the CWA and is considered a Water of the United States subject to RWQCB and Corps regulations. As discussed in response to question b, no permanent impacts to intermittent stream would occur; and temporary impacts would be reduced to less-than-significant levels with the implementation of Mitigation Measure BIO-3. Given there are no wetlands and impacts to other waters would be mitigated to less-than-significant levels, impacts to protected waters are less than significant with mitigation incorporated.

d) ***Less than Significant Impact.*** No migratory corridors or nursery sites are anticipated to be affected by the project. The only migratory route which lies within the project impact footprint would be the steelhead spawning migration habitat within San Anselmo Creek. However, because project activities have been designed to only occur outside of the spawning and migratory season (June 30 – October 15), no impediments to fish passage are anticipated as a result of project activities and impacts would be less than significant.

e) ***Less than Significant with Mitigation Incorporated.*** As stated in the Project Description above, the proposed project would include the removal of a bay tree and invasive blackberry bushes on the southwest corner of the new bridge, and pruning and removal of other vegetation in the construction zones. The Town's Tree Ordinance requires a permit for the removal or relocation of any tree with a circumference of 24-inches or more measures at 24 inches above the ground. The removal of the bay tree on-site would result in a potentially significant impact. However, implementation of Mitigation Measure BIO-4 would require the Applicant to submit an application for a tree removal permit, comply with all conditions of approval listed within the permit, and prepare a Tree Protection Plan for the other surrounding trees. A Planting Plan will be prepared for revegetation of the site, which includes native riparian trees, shrubs, vines, groundcover, and willows. The planting plan will consider native blackberry bushes in its development. Implementation of Mitigation Measures BIO-4 would reduce this potentially significant impact to a less-than-significant level. The proposed project would not conflict with any other applicable policies for the purpose of protecting biological resources.

Mitigation Measure BIO-4

Prior to issuance of a grading permit, the Town shall apply in writing to the Director for a tree removal permit, mark each tree to be considered for removal, and provide public notice per the Town's requirements.

- The Tree Committee may require the Applicant to submit his or her application to a Qualified Arborist designated by the town for a report and recommendation, for which the Applicant shall bear all expenses.
- Reasonable conditions of approval may be attached to any tree removal permit including, but not limited to, the replacement of removed trees.
- The project shall replace any removed trees shall at a minimum ratio of 1:1.
- A Qualified Arborist shall prepare a Tree Protection Plan in order to protect trees during construction of the proposed project and to maximize their chances for survival.

f) ***No Impact.*** No state, regional, or federal habitat conservation plans or Natural Community Conservation Plans have been adopted for the project site.

4.5 Cultural Resources

CULTURAL RESOURCES — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐	1, 12
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐	1, 12
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	1, 12

Environmental Setting

Far Western Anthropological Research Group, Inc. and JRP on behalf of the Town of Fairfax conducted a Historic Properties Survey Report (HPSR) and Archaeological Survey Report (ASR) in support of the Meadow Way Bridge (Bridge No. 27C- 0008) improvement project. The studies conducted for this project were consistent with Caltrans responsibilities under the January 1, 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California for compliance with Section 106 of the NHPA.

The bridge itself has been determined not eligible for listing in the National Register of Historic Places (National Register). No archaeological sites were identified within one-quarter mile of the project APE during a pre-field literature search at the Northwest Information Center. The Native American Heritage Commission (Commission) and members of the Federated Indians of Graton Rancheria listed by the Commission as interested parties were contacted regarding the project. The Rancheria responded with a request for copies of the report findings and recommendations. A buried site sensitivity assessment identifies the APE as having very low sensitivity for buried prehistoric resources owing to the age of the landform (Pleistocene) and erosional topography. As a result, subsurface testing was not recommended. A pedestrian survey of the APE was conducted on January 28, 2015. No resources were identified in or around the creek or bridge.

Native American Consultation

Contact with Native American tribes is described in further detail in Section 4.18 Tribal Cultural Resources.

Discussion of Impacts

a) ***Less than Significant Impact.*** Pursuant to State CEQA guideline 15064.5, record searches, field surveys, and research were conducted to determine the potential presence of historic resources. The project site does not contain any resource listed in, or determined to be eligible by the State Historical Resource Commission and does not contain a resource included in a local register of historic resources or identified as significant in a historic resource survey. Furthermore, the bridge itself is not eligible for placement in the National Register of Historic Places. Additionally, the project site does not contain any object, building, structure, site, area, place, record, or manuscript that a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Therefore, no impact would occur.

b) ***Less than Significant with Mitigation Incorporated.*** No archaeological resources are known in the vicinity of the project site, and most of the project site has already been disturbed by past construction. Although unlikely, an accidental discovery of archaeological resources remains possible. With the implementation of Mitigation Measure CULT-1, which requires a work stoppage in the vicinity of unearthed archaeological resources, impacts related to accidental discoveries would be less than significant. The project would therefore not have a substantial adverse impact on the significance of an archaeological resource, and impacts would be less than significant with mitigation incorporated.

Mitigation Measure CULT-1

Pursuant to CEQA Guidelines Section 15064(f), the Town shall make provisions for the discovery of historical or unique archaeological resources during construction. These provisions shall include an immediate evaluation by a qualified archaeologist. If the find is determined to be a historical or unique archaeological resource, the Town shall implement at least one of the following: contingency funding and time allotment will be allocated to allow the implementation of avoidance measures, or appropriate mitigation will be available.

c) ***Less than Significant with Mitigation Incorporated.*** Human remains are not known to occur on the project site. However, the potential for unanticipated discovery of human remains is still present. With the implementation of state-mandated stop work procedures delineated in Mitigation Measure CULT-2, any potential impacts from the accidental discovery of human remains would be less than significant.

Mitigation Measure CULT-2

Pursuant to CEQA Guidelines Section 15064(e), upon accidental discovery of human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the county coroner is contacted to determine that no investigation of the cause of death is required.

If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall subsequently identify the most likely living descendant, who may make recommendations to the landowner or person responsible for excavation for means of treating or disposing of the remains and any associated grave items.

If the NAHC is unable to identify the most likely descendant, the descendent fails to make a recommendation within 24 hours of notification, or the landowner rejects the recommendation and mediation by NAHC fails to yield a mutually agreeable recommendation, the landowner or representative shall rebury the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance.

4.6 Energy

ENERGY — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐	1
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	1

Discussion of Impacts

a) ***Less than Significant Impact.*** Construction of the new bridge would require the use of energy resources to power equipment and move workers and supplies to and from the site. Machinery idling would be limited per California law and equipment would be staged on and near the project site, minimizing the use of energy resources for equipment use and transportation. Following construction, energy use would be comparable to baseline levels. Operations of the bridge would not change and capacity would not be expanded, so energy consumption by cars using the bridge would be more or less unchanged. As there would be a temporary, minimal increase in energy use during construction and energy use would return to baseline levels during operation, the project would result in less than significant impacts related to the wasteful, inefficient, and unnecessary consumption of energy resources.

b) ***No Impact.*** The Town of Fairfax's Climate Action Plan contains energy efficiency goals for the Town. Although it does not provide any mandatory policies for energy efficiency or renewable energy, it provides 18 recommended actions for businesses, residents, and government entities to improve energy efficiency and the use of renewables. Most of these recommended policies are tailored to buildings and are not applicable to the proposed project.

Similarly, there are few requirements of state-wide plans and policies such as Title 24 that apply to open space projects. As few local and state energy renewability and efficiency programs and policies apply to the project, there would be no conflict with any such programs and policies; and no impact would occur.

4.7 Geology and Soils

GEOLOGY AND SOILS — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒	1, 8
ii) Strong seismic ground shaking?	☐	☐	☒	☐	1, 8
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐	1, 8
iv) Landslides?	☐	☐	☒	☐	1, 8
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐	1, 8
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?	☐	☒	☐	☐	1, 8
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐	1, 8
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?	☐	☐	☐	☒	1, 8
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☒	☐	☐	1, 8

Environmental Setting

Soils

The soil type found in the project site is Tocaloma-McMullin-Urban land complex, 30 to 50 percent slope. The Tocaloma-McMullin series consists of moderately deep or deep and moderately or well-drained soils that formed from weathered sandstone and shale. Urban land soils are found in heavily developed areas and contain a mixture of soil components from the native soils in the area as well as imported soils that may have been introduced during development activities. Their characteristics vary, and in the project site, the soils are well-drained with a medium runoff class due to the sloping on site. The creekbed is approximately 20-feet below the road surface, with steeply sloping banks.

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 the San Andreas (6.9 miles, west of the site), and Hayward (13.2 miles, east of the site). The project site is not located within a State-designated Alquist-Priolo Earthquake fault rupture zone.[6]

Liquefaction and Lateral Spreading

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations and ground rupture or sand boils. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. According to the Association of Bay Area Governments (ABAG), the project site is located in a moderate liquefaction hazard zones.[7]

---

[6] *California Geological Survey Alquist-Priolo Earthquake Fault Zone Maps. Available at: http://www.quake.ca.gov/gmaps/ap/ap_maps.htm. Accessed: November 21, 2014.*

[7] *ABAG Geographic Information Systems: Hazard Maps. Available at: http://gis3.abag.ca.gov/Website/liq_scenario_maps/viewer.htm. Accessed November 21, 2014.*

Landslide

The project site is classified as flatland by ABAG and would not be susceptible to earthquake-induced landslides or rainfall-induced landslides.[8] However, the creek banks may experience sliding due to liquefaction.

Discussion of Impacts

a-i) ***No Impact.*** The project site is not included in an earthquake fault zone designated by the California Geological Survey pursuant to the Alquist-Priolo Act because there are no known faults in the project site or surrounding area. Because the project is not located near a known fault, the project would not cause potential substantial adverse effects involving the rupture of a known earthquake fault, and no impact would occur.

a-ii) ***Less than Significant Impact.*** Seismic activity associated with faults outside of the immediate vicinity of the project site could cause ground shaking at 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.

Conclusions from the most recent Uniform California Earthquake Rupture Forecast (UCERF) indicate the highest probability of an earthquake of magnitude 6.7 or higher in the region by 2045 is assigned to the San Andreas Fault. The purpose of the proposed project is the replacement of the existing bridge structure in order to address vulnerabilities and prevent failure resulting in collapse or loss of life during the Maximum Credible Earthquake. Therefore, the impacts associated with seismic ground shaking would be less than significant.

a-iii) ***Less than Significant with Mitigation Incorporated.*** Liquefaction associated with ground shaking is possible given ABAG's hazard map and the results of the site-specific geotechnical investigation. The potential for liquefaction on the site is a potentially significant impact. However, the construction phase of the proposed project is temporary, and the operation of the proposed project would be similar to existing conditions. In addition, the design of project components would adhere to California Building Code requirements specific to the area to minimize the potential for damage from earthquake activity in the future. Furthermore, Mitigation Measure GEO-1 would require the proposed project to be designed in accordance with the recommendations provided in the site-specific geotechnical investigation. With the implementation of Mitigation Measure GEO-1, impacts associated with liquefaction would be less than significant.

---

[8] *ABAG Geographic Information Systems: Hazard Maps. Available at: http://gis.abag.ca.gov/website/LandslideDebrisFlow/index.html. Accessed November 21, 2014.*

Mitigation Measure GEO-1

The foundations of the bridge abutments and the conventional retaining walls shall be placed on pilings that penetrate beyond the 30-foot deep liquefiable layer into stiff soils or rock. The Upper retaining wall at the southwestern project quadrant, supporting a private residential property impacted by the project, will be held against landslide with tieback elements. The retaining walls at the bridge will protect the bank slopes adjacent to the bridge against sliding and lateral spreading due to ground liquefaction. Since the soils under the approach roadways would remain liquefiable, a ten-foot-long seismic approach slab at each end of the bridge shall be included to maintain the drive to and from the bridge after a major event.

a-iv) ***Less than Significant Impact.*** The term landslide includes a wide range of ground movements, such as rockfalls, deep failure of slopes, and shallow debris flows. Gravity acting on an over-steepened slope is the primary reason for a landslide. Slope material that becomes saturated with water may develop a debris flow or mudflow. The resulting slurry of rock and mud may pick up trees, houses, and cars, thus blocking bridges and tributaries causing flooding along its path. Any area composed of very weak or fractured materials resting on a steep slope can and will likely experience landslides. Although the physical cause of many landslides cannot be removed, geologic investigations, good engineering practices, and effective enforcement of land-use management regulations can reduce landslide hazards. The potential for landslides or liquefaction from seismic activity is considered low in the project site based on the geologic units and relatively flat topography. The project site is not located in an ABAG-designated earthquake-induced landslide area or within an existing rainfall-induced landslide or debris flow area. Furthermore, implementation of Mitigation Measure GEO-1, impacts associated with landslides would be less than significant.

b) ***Less than Significant with Mitigation Incorporated.*** The project proposes to excavate sediments along the sides of San Anselmo Creek for construction of the access road, the temporary staged bridge, and the permanent abutments and wingwalls. Soils excavated from this work would be stored in containers on the creek bed and used later for backfill. The remainder of excavated soils would be hauled away on a daily basis to an appropriate disposal facility. This excavation would have the potential for soil erosion and loss of topsoil and would, therefore, result in a potentially significant impact. Mitigation Measure BIO-4 addresses erosion and siltation impacts to the Perennial Stream ("Other Waters" and Wetlands) by listing avoidance and minimization measures. These measures include BMPs such as silt fencing, jute mesh, straw wattles, compliance with the RWQCB's Erosion and Sediment Control Field Manual, and post-construction erosion monitoring. Implementation of Mitigation Measure BIO-4 would reduce potentially significant impacts related to soil erosion to a less-than-significant level. Furthermore, the project addresses historic erosion at the project site by proposing to install retaining walls, an upper and a

lower wall, in the southwest quadrant of the site. Placement of riprap and native vegetation along the creek bed would also address future erosion.

The project shall also comply with terms of the Marin County Stormwater Pollution Prevention Program and any additional measures required by the Regional Water Quality Control Board (RWQCB). BMPs associated with the project's Stormwater Pollution Prevention Program (SWPPP) prepared for its NPDES permit shall be implemented to minimize the potential for erosion and indirect effects associated with soil erosion (i.e., water quality impacts, fugitive dust). Implementation of Mitigation Measure BIO-4 and Mitigation Measure HYDRO-2 would reduce potentially significant impacts related to soil erosion to a less-than-significant level.

c) ***Less than Significant with Mitigation Incorporated.*** As discussed in 4.6a-iii above, the project site is located in an area with soils susceptible to liquefaction, which is a potentially significant impact. However, the purpose of the proposed project is the replacement of the existing bridge structure in order to address vulnerabilities and prevent failure resulting in collapse or loss of life during the Maximum Credible Earthquake. Implementation of Mitigation Measure GEO-1 above requires compliance with all recommendations listed in the site-specific geotechnical report, including those design elements specific to preventing bridge failure from liquefaction. Implementation of Mitigation Measure GEO-1 would reduce impacts related to soil failure to a less-than-significant level.

d) ***Less than Significant Impact.*** The potential for geologic and soil hazards from unstable or expansive soils in the project site is considered low based on data from the County of Marin: Marin Map Data Viewer. However, as described in Section 3.0 (Project Description) above, the riverine environment presents the potential for the collapse of the drilled holes and excavation required for bridge installation. As the contractor would utilize a variety of wet-drilling hole stabilization techniques, the potential for collapse would be minimized. Therefore, impacts would be less than significant.

e) ***No Impact.*** The project does not involve the construction of septic tanks or wastewater disposal systems. As such, project site soils would not prove inadequate for the construction of septic tanks or wastewater disposal systems, and no impact would occur.

f) ***Less than Significant with Mitigation Incorporated.*** While no paleontological resources are known to occur within the project site, three prehistoric sites are present within one-quarter miles of the proposed project site. Impacts related to potential accidental discovery of paleontological resources or unique geologic features would be minimized by implementation of mitigation measure GEO-2. Thus, the project would not destroy a unique paleontological resource or site or unique geological feature; and impacts would be less than significant with mitigation incorporated.

Mitigation Measure GEO-2

If buried paleontological resources or unique geologic features are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified paleontologist or geologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the Town of Fairfax and other appropriate agencies.

4.8 Greenhouse Gas Emissions

GREENHOUSE GAS EMISSIONS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐	1, 9
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒	1, 9

Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of greenhouse gases (GHGs) that contribute to global warming or global climate change have a broader, global impact. Global warming is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The principal GHGs contributing to global warming are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space.

Among the potential implications of global warming are rising sea levels, and adverse impacts on water supply, water quality, agriculture, forestry, and habitats. In addition, global warming may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health. Like most criteria and toxic air pollutants, much of the GHG production comes from motor vehicles. GHG emissions can be reduced to some degree by improved coordination of land use and transportation planning on the city, county, and subregional levels, and other measures to reduce automobile use.

In 2010, BAAQMD adopted quantitative thresholds of significance for construction activities, but only identified GHG thresholds of significance for operational emissions; the Town identified no GHG thresholds for construction-related activities.

Discussion of Impacts

a) ***Less than Significant Impact.*** GHG emissions from the proposed project would be produced from construction-related equipment emissions. The proposed project would not result in the generation of emissions after construction is complete. Given the nature of the proposed project and short duration of construction, GHG emissions resulting from construction activities would be minor. While the proposed project would have an incremental contribution to GHG emissions within the context of the Town and region, the individual impact is considered less than significant.

b) ***No Impact.*** The project would not generate significant emissions of GHG and, therefore, would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

4.9 Hazards and Hazardous Materials

HAZARDS AND HAZARDOUS MATERIALS — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	1
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?	☐	☒	☐	☐	1
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	1
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?	☐	☐	☐	☒	1, 11
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the Project Area?	☐	☐	☐	☒	1
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐	1
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐	1

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 hazardous material sites, sites with leaking underground storage tanks, and landfills with evidence of groundwater contamination.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** Small amounts of hazardous materials would be used during construction for equipment maintenance (e.g., fuel and solvents) and creosote-soaked timber would be removed from the existing bridge. The use of hazardous materials would be limited to the construction phase and would comply with applicable local, state, and federal standards on the handling and storage of hazardous materials. Hazardous materials would not be stored or used where they could affect nearby residences. No transport, use, or storage of hazardous materials would be required for bridge operation. However, the transport and use of hazardous materials during construction within San Anselmo Creek and near surrounding residences would result in a potentially significant impact. Implementation of Mitigation Measures HAZ-1 and HYDRO-2 would reduce impacts related to the transport, use, and disposal of hazardous materials to a less-than-significant level.

Mitigation Measure HAZ-1

The contractor shall use catchment containers and bridge removal methods to avoid dropping pieces of the creosote-soaked timber from the existing bridge into the creek. The creosote-laden wood members shall be disposed of by the contractor at an appropriate landfill.

b) ***Less than Significant with Mitigation Incorporated.*** As mentioned above, small amounts of hazardous materials would be used during construction activities for equipment maintenance and creosote-soaked timber would be removed from the existing bridge. Standard construction measures would be implemented to contain any accidental spills of oil and other hazardous materials, and the contractor would be required to ensure that adequate materials are on hand to clean up any accidental spill that may occur. Spills would be cleaned up immediately, and all wastes and used spill control materials would be properly disposed of at approved disposal facilities. Accidental release of these hazardous materials for construction or contaminated soils into San Anselmo Creek or near the surrounding residences would result in a potentially significant impact. Implementation of Mitigation Measure HYDRO-1 and HYDRO-2 would reduce this impact to a less than significant level.

c) ***Less than Significant Impact***. The project site is not within ¼ mile from an existing or proposed school. The nearest school, Deer Park Elementary, is located approximately 1.0-miles east of the project site. Additionally, operation and maintenance of the project would not emit hazardous emissions or utilize hazardous substances. Waste utilities will be temporarily relocated during construction to prevent accidental releases. Therefore, the project would have a less than significant impact with respect to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d) ***No Impact.*** The proposed project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; therefore, no impact would occur under this criterion.

e) ***No Impact.*** The project site is not within the vicinity or approach/departure flight path of a public airport or private airstrip, nor is it within an airport land use plan. Therefore, the project would not have an impact related to aeronautical safety hazards or excessive noise for people working or residing in the project site.

f) ***Less than Significant with Mitigation Incorporated.*** While no formal emergency evacuation or response plans have been adopted for the Town of Fairfax, the project site provides the only access point for residents located on the southern stretch of Meadow Way. Emergency access to or evacuation from surrounding areas would be restricted during construction because traffic would be detoured to a temporary bridge. During the temporary road closure, emergency fire and paramedic crews would be stationed on both sides of the bridge. Furthermore, implementation of Mitigation Measures TRANS-1 would require best management practices for noticing and operating the detour and road closure. Implementation of Mitigation Measure TRANS-1 would reduce impacts related to emergency response plans and emergency evacuations plans to a less-than-significant level.

g) ***Less than Significant Impact.*** The project site is located within and adjacent to an area subject to moderate threats of wildland fires.[9] Short-term construction of the proposed project may expose people to increased risk from wildland fires due to the temporary road closure and temporary bridge detour. However, as described in the Project Description, emergency personnel, including fire crews, would be stationed on both sides of the bridge during the short-term road closure. Emergency vehicle access would be provided via the temporary bridge during all other construction activities. San Anselmo Creek will remain as a fire escape corridor for evacuation of the residents on foot. The long-term operation of the proposed project would not increase the risk of wildfire. Therefore, impacts related to the risk of wildland fires would be less than significant.

---

[9] *ABAG. ABAG Geographical Information Systems - Wildland Urban Interface (WUI) Fire Threat. Accessed March 16, 2019. Available at: http://quake.abag.ca.gov/wildfires/. .*

4.10 Hydrology and Water Quality

HYDROLOGY AND WATER QUALITY — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐	1, 2, 4
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒	1, 2, 4
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:					
i. Result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐	1, 2, 4
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒	1, 2, 4
iii. Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒	1, 2, 4
iv. Impede or redirect flood flows?	☐	☐	☒	☐	1, 2, 4
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐	1, 2, 4
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐	1, 2, 4

Environmental Setting

The 28-square mile Corte Madera watershed extends from Mt. Tamalpais and White's Hill through the communities of Fairfax, Sleepy Hollow, San Anselmo, Ross, Kentfield, Greenbrae, Larkspur, and Corte Madera to San Francisco Bay. The watershed includes 44 miles of stream channels. Ross Creek drains the northern slope of Mt. Tamalpais; San Anselmo Creek and its tributaries drain the northwestern portion of the watershed. The two channels join to form Corte Madera Creek, which continues through more than a mile of concrete-lined channel past the confluences of Larkspur and Tamalpais Creeks and into the salt marsh at the mouth.

Protection of water quality in California is primarily the responsibility of the State Water Quality Control Board (SWQCB), and, on a regional basis, the nine California Regional Water Quality Control Boards. Water quality within the project site is primarily under the jurisdiction of the RWQCB, San Francisco Bay Region (Region 2). The Town of Fairfax is responsible for overseeing the requirements of its water quality codes and ordinances.

The principal natural hydrological sources for the project site are creek flows, direct precipitation and surface run-off from adjacent lands. San Anselmo Creek flows through the project site towards the north/northeast.

According to the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Maps (FIRM), the project site is located in Zone X "Other Flood Areas" and is described as "0.2% chance annual flood discharge contained within channel". According to ABAG's Resilience Program Hazard Maps, the project site is not subject to seiches and is not within a Tsunami Inundation Area.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The proposed project would require the use of hazardous materials such as vehicle fuels during the construction phase of the project. The primary risk to water quality and resources would result from construction-related sediment and other pollutants entering the during a rain event. As described in Section 3.0 (Project Description) above, very little to no flow is expected during the peak summer construction months and a bypass pipe would be installed to convey low-flow volumes downstream of the bridge.

Construction impacts could potentially include increased sediment at the project site. As construction equipment would be located directly within San Anselmo Creek, this is a potentially significant impact. Construction activities would be required to comply with the NPDES general permit for construction activities. In compliance with Mitigation Measure HYDRO-2, a SWPPP would be prepared with a list of BMPs to minimize erosion and sedimentation.

In addition to the above permit conditions, Mitigation Measure HYDRO-1 would require the preparation of a Spill Prevention and Control Plan and an Equipment Staging Plan to address the potential for hazardous materials such as vehicle fuels to enter San Anselmo Creek. Implementation of Mitigation Measures HYDRO-1 and HYDRO-2 would reduce impacts to water quality to a less than significant level.

Mitigation Measure HYDRO–1

Prior to the issuance of construction permits, a spill prevention and control plan shall be developed to minimize the chance of toxic spills. Spill kits shall be present for any work within San Anselmo Creek. All spills of oil and other hazardous materials shall be immediately cleaned up and contained. Any hazardous materials cleaned up or used on-site shall be properly disposed of at an approved disposal facility.

Additionally, the Town of Fairfax shall require the construction contractor to submit an equipment staging plan and proposed staging locations prior to the start of construction. The specifications shall include at minimum, the following requirements:

- The staging area shall be located on existing asphalt or concrete surface area. No staffing shall be permitted on undeveloped lots. The Contractor shall notify the Town whether or not a suitable area is available.
- The staging area shall be included in the SWPPP.
- The staging area shall not be located in an environmentally or culturally sensitive area and / or impact water resources (rivers, streams, bays, inlet, lakes, drainage sloughs).
- The staging area shall not be located in a regulatory floodway within the base floodplain (100-year).

Mitigation Measure HYDRO-2

Prior to the issuance of a construction permit, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the NPDES General Construction Permit. Best Management Practices shall be identified in the SWPPP to reduce or eliminate pollutants from the construction site entering stormwater discharges. Implementation of BMPs shall control erosion and ensure that dirt, construction materials, pollutants, or other human-associated materials are not discharged from the project area into surface waters or into areas that would eventually drain to storm drain systems.

b) ***No Impact.*** The project would not require the use of groundwater supplies or affect groundwater recharge in the area. Therefore, the project would not impede sustainable groundwater management, and no impact would occur.

c-i) ***Less than Significant with Mitigation Incorporated.*** The site and the configuration of the existing bridge have resulted in historic bank erosion and bridge foundation scour. Operation of the proposed replacement bridge would alter the drainage San Anselmo Creek, but the placement of a proposed retaining wall on the southwest quadrant of the site, as well as riprap and native vegetation along the creek bed, would reduce potential future erosion. Construction of the proposed replacement of the Meadow Way Bridge would include excavation within the creek bed, which has the potential to result in erosion and siltation impacts. As described in Section 3.0 (Project Description), any water collected in excavation pits or pools on the creek bed would be run through sediment control tanks before being released in the creek to prevent potential sedimentation impacts. Implementation of Mitigation Measures BIO-3 and HYDRO-2 would reduce impacts to a less than significant level.

c-ii) ***Less than Significant Impact.*** The proposed project would not substantially alter the existing drainage pattern of the area. The bridge would be designed so that its soffit (underside) clears the 100-year flood flow and passes the 50-year flood flow with two feet of freeboard. As the 100-year-flood is predicted to be 141.8-feet, and the bridge deck elevation would be 155-feet, over 11-feet would be available for structure depth.

The existing bridge is only 14-feet wide and Caltrans has determined the bridge is too narrow for both automobiles and pedestrians to use the bridge safely. Therefore, the replacement bridge would include a 21-foot and 6-inch wide deck, increasing the number of impervious surfaces on the site. However, due to the design elevation of the bridge and predicted flow elevations, the creek would have the capacity for the minimal increase in runoff that would result from this increase in impervious surface. No flooding on- or off-site would be expected as a result of the replacement bridge. Therefore, impacts related to drainage and flooding would be less than significant.

c-iii) ***Less than Significant Impact.*** As described above, the proposed replacement bridge would increase the amount of impervious surface within the project site and would, therefore, result in increased stormwater runoff. No changes to the existing stormwater drainage pipes are included in the proposed project. The minimal increase in runoff from the wider deck would discharge directly into the creek and would not impact the existing stormwater drainage facilities. Therefore, impacts related to drainage and stormwater system capacity would be less than significant.

c-iv) ***Less than Significant Impact.*** The proposed replacement bridge would be designed so that its soffit (underside) clears the 100-year flood flow and passes the 50-year flood flow with two feet of freeboard. Thus, the project would not impede or redirect flood flows, and a less than significant impact would occur.

d) ***Less than Significant with Mitigation Incorporated.*** According to the ABAG Hazard Mapping Program, the project site is not located within an area subject to tsunamis or seiches. The project is not located within a 100-year flood zone, but flooding is possible during very high-flow events. If such an event were to occur during construction, pollutants from construction equipment could be released. However, Mitigation Measure HYDRO-1 requires preparation of a Spill Prevention Plan and equipment staging in an area where pollutants would not enter San Anselmo Creek. As such, the project would not risk the release of pollutants due to project inundation by flood, tsunami, or seiche, and impacts would be less than significant with mitigation incorporated.

e) ***Less than Significant Impact with Mitigation Incorporated.*** The project would not interfere with groundwater management, as no groundwater would be used, and minimal impervious surfaces would be introduced. However, soil erosion and accidental spills during construction could conflict with water quality control plans, including Total Maximum Daily Loads (TMDLs) for the San Francisco Bay and Corte Madera Creek. Implementation of Mitigation Measures HYDRO-1 and HYDRO-2 would minimize the risk of conflict with water quality control plans. Thus, there would be no conflict with groundwater management or water quality control plans, and impacts would be less than significant with mitigation incorporated.

4.11 Land Use and Planning

LAND USE AND PLANNING – Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Physically divide an established community?	☐	☒	☐	☐	1
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	2, 3

Environmental Setting

The Town of Fairfax General Plan provides policies and implementation strategies for management of the resources and land uses in the Town, and the Town Codes provide restrictions and requirements to protect resources and comply with local, state, and federal laws. No habitat conservation plans have been adopted for the area.

Town of Fairfax General Plan

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

Land Use Element

Policy LU-4.1.2: New and renewed development shall comply with all federal, state, and local regulations pertaining to development in flood zones.

Policy LU-4.1.3: New and renewed development shall comply with all regulations encompassed in the California and Uniform Building Codes intended to reduce potential damage and threats to the public's health, safety, and welfare in the event of an earthquake.

Policy LU-7.2.2: To the extent feasible natural features including the existing grade, mature trees, and vegetation shall be preserved for new and renewed development.

Circulation Element

Policy C-2.2: Maintain the street, sidewalk and pathway network through a regular maintenance program.

Conservation Element

Policy Con-2.1.2: All planning decisions shall require application of existing air quality guidelines and best practices to minimize air quality impact.

Policy Con-3.1.1: Maintain floodwater capacity and promote creek restoration.

Policy Con-3.1.2: The Town of Fairfax shall protect and restore riparian habitat and ensure natural channel process in the San Anselmo Creek and Fairfax Creek watersheds.

Policy Con-5.2.1: Maintain and restore native vegetation where appropriate for habitat value, aesthetics, reference habitat, and riparian cover.

Policy Con-6.1.2: Protect special-status species and resident and migrant wildlife, and their habitats, within the Fairfax Planning Area

Policy Con-8.2.1: Protect, maintain, rehabilitate, and enhance historical and cultural resources within the Fairfax Planning Area.

Policy Con-8.2.3: Ensure that development respects and complements the patterns, character, and scale of the Town's traditional communities and natural landscape.

Health and Safety Element

Policy S-1.1.3: The Town shall identify, evaluate, and encourage the seismic retrofit of public and private buildings that pose a risk of death or injury in a geohazard event.

Policy S-3.1.3: Maximize access and egress for emergency response vehicles.

Noise Element

Policy N-1.1.1: All new development must include an analysis of potential noise impacts.

Municipal Code

8.36 Trees

In 1973, the Town of Fairfax approved Ordinance No. 387 for trees. The purpose of the ordinance is to preserve the wide variety of local native trees and to protect the benefits they provide the citizens. Chapter 8.36.020 of the Town Code defines "altering" and "tree." A Tree Permit is required for removal or significant trimming of any tree, which has a circumference of 24 inches or more measured at 24 inches above the ground. In effect, this is a little less than an 8-inch diameter tree trunk.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The proposed project involves the replacement of an existing bridge within the Town of Fairfax. Upon completion of construction, the project site would function similarly to existing conditions. The replacement bridge would be a one-lane single-span bridge and would not result in an increased capacity for vehicle trips. While the deck of the replacement bridge would be wider than the existing bridge, this is to allow for a safe, designated pedestrian lane. During construction, a temporary bridge would be staged to allow pedestrian, bicycle, and vehicle access through the project site to the residential neighborhood. Construction traffic and this temporary bridge would result in a potentially significant impact, as Meadow Way is the only exit route for the residences located on the southwest side of the bridge.

As traffic would need to be shut down in order to move the bridge to its permanent location, this would occur in one evening after 5:00 p.m. in order to provide the least disruption for local residences that depend on this bridge for access. Mitigation Measure TRANS-1 would require best management practices for noticing and operating the temporary bridge detour and road closure. Implementation of Mitigation Measure TRANS-1 would reduce impacts related to the division of an established community to a less than significant level.

b) ***Less than Significant Impact.*** Land use plans, policies, and regulations applicable to the proposed project are outlined above. The project would improve safety and reduce hazards. These actions would not conflict with the Town of Fairfax General Plan or other applicable plans or policies. As the proposed project would include the removal of trees, the Applicant would be required to comply with the Town's municipal code requirements and would be required to apply for a tree removal permit. Furthermore, as described in the Project Description, the Applicant will be responsible for preparing a Tree Protection Plan to ensure the survival of adjacent and remaining trees through the development process. Therefore, the proposed project would not conflict with applicable Town plans or policies, and no impact would occur.

4.12 Mineral Resources

MINERAL RESOURCES — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***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?	☐	☐	☐	☒	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?	☐	☐	☐	☒	2

Environmental Setting

The project site is located within an urbanized area of the Town of Fairfax. According to the Town's General Plan, no known mineral resources have been identified within the vicinity of the project site. According to the California Department of Conservation Division of Mines and Geology, the project site is located within a Mineral Resource Zone 1 (MRZ-1), which is classified as an area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

Discussion of Impacts

a) ***No Impact.*** As stated above, the project site is not located in or adjacent to any important mineral resource zones. Therefore, the proposed project would not result in the loss of availability of a known resource, and no impact would occur.

b) ***No Impact.*** As stated above, the project site is not located within an important mineral resource zone. Furthermore, the Town's General Plan does not identify the project site as within a locally important mineral resource recovery site. Therefore, the proposed project would not result in the loss of a locally important mineral resource, and no impact would occur.

4.13 Noise

NOISE — Would the project result in:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐	1 ,2
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	1
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport of public use airport, would the project expose people residing or working in the Project Area to excessive noise levels?	☐	☐	☐	☒	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, in accordance with the Caltrans Environmental Handbook, 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 Leq 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.[10] 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 noisier 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.

Noise levels from a particular source generally decline as the 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

---

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

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.[11]

Under the Caltrans Traffic Noise Analysis Protocol (CaTNAP) 1998, projects that are not Type I only require an evaluation of predicted construction noise. The project is not a Type I project as defined in 23 CFR 772.5(h); “construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.” The proposed project is the replacement of the existing Meadow Way Bridge within the Town of Fairfax.

The project would take place within existing right-of-way in a residential neighborhood. The nearest residential properties to the project are situated within 10 feet of the APE for the project. Noise sources that contribute to ambient noise levels in and adjacent to the project site include traffic from local streets and noise from residential activities. Table 1 summarizes typical ambient noise levels based on population density. The vicinity of the project area is most similar to that of a “quiet suburban residential or small town” setting with an expected typical noise level of 45-50 dBA.

---

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

Table 1. Population Density and Associated Ambient Noise Levels

Population Density Type	dBA, Ldn
Rural Suburban	40–50
Quiet suburban residential or small town	45–50
Normal suburban residential urban	50–55
Normal urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Under flight path at major airport, 0.5 to 1 mile from runway	78–85
Adjoining freeway or near a major airport	80–90
Sources: Cowan 1984, Hoover and Keith 1996	

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The proposed project would not include major permanent noise-generating facilities. The proposed replacement bridge would include a wider road. However, it would remain a one-lane road. Therefore, the replacement bridge would not expand capacity or increase traffic volumes. Noise from 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.

Noise generated by project-related construction activities would be a function of the noise levels generated by individual pieces of construction equipment, the type and amount of equipment operating at any given time, the timing and duration of construction activities, the proximity of nearby sensitive land uses, and the presence or lack of shielding at these sensitive land uses. Construction noise levels would vary on a day-to-day basis during each phase of construction, depending on the specific task being completed. Each construction phase would require a different combination of construction equipment necessary to complete the task and differing usage factors for such equipment. Construction noise would primarily result from the operation of heavy construction equipment and the arrival and departure of heavy-duty trucks.

Activities associated with the earthwork and replacement phases of the project would generate hourly average noise levels up to 86 dBA Leq at a distance of 50 feet. Maximum instantaneous noise levels would reach 86 dBA Lmax at 50 feet. This replacement project does not include pile driving activities. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor; therefore, the noise levels calculated at 50 feet would be about 6 dBA less at 100 feet and 12 dBA less at 205 feet. Shielding provided by buildings or terrain would result in even lower construction noise levels at distant receptors.

Construction-related vehicles traveling to and from the project site would generate worst-hour noise levels of approximately 57 dBA Leq at a distance of 50 feet from the center of Meadow Way, assuming that the highest levels of noise are achieved.

During Construction Stages 1 and 2, no nighttime construction is anticipated for the proposed project. During the Final Construction Stage, on one evening, a few hours of construction would occur in order to move the replacement bridge into its final location. This evening construction is necessary as Meadow Way serves as the only ingress/egress for residences across the creek from Cascade Drive and access would be completely closed off during this time. Therefore, it is necessary this construction work take place when little to no traffic would be impacted by this closure.

Although the construction of the proposed project would elevate noise levels at nearby noise-sensitive land uses by 25 dBA or more above ambient daytime conditions, the duration of the project is expected to be approximately 6 months. Construction activities for the proposed project should include the following best management practices, as suggested in the Town's General Plan, to reduce noise from construction activities nearby sensitive land uses

Mitigation Measure NOISE-1

In order to comply with Policy N-3.1.4, the Town of Fairfax has developed a list of Standard Controls. The project shall comply with the following measures:

- Limit construction to the hours of 8:00 a.m. to 5:00 p.m. on weekdays, and 9:00 a.m. to 5:00 p.m. on Saturdays, with no noise-generating construction on Sundays or Holidays.
- Control Noise from construction workers' radios to the point where they are not audible at existing residences that border the project site.
- Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment.
- Utilize quite models of air compressors and other stationary noise sources where technology exists.
- Locate stationary noise-generating equipment as far as possible from sensitive

receptors when sensitive receptors adjoin or are near a construction project area.

- Prohibit unnecessary idling of internal combustion engines.
- Equipment to the extent feasible shall be stage off-site.
- Notify residents adjacent to the project site of the construction schedule in writing.
- Designate a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g. starting too early, bad mufflers) and institute reasonable measures warranted to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site.

In addition, the project shall follow the standard construction noise requirements regulated by Caltrans Sections 7-1.01I and 14-8.02 of the Standard Specifications, which states the following:

- Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

b) ***Less than Significant Impact.*** The construction of the proposed project may generate perceptible vibration when heavy equipment or impact tools (e.g., jackhammers, hoe rams) are used. Construction activities would include site preparation work, dewatering, excavation, bridge staging, bridge replacement, and paving. The proposed project would include abutments that need to be supported with piles. However, as described in the Project Description, 24-inch diameter CIDH piles would be used rather than driven piles, to minimize disturbance to surrounding residences.

For structural damage, the California Department of Transportation recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. All buildings in the project vicinity are assumed to be structurally sound, but these buildings may or may not have been designed to modern engineering standards. No ancient buildings or buildings that are documented to be structurally weakened are known to exist in the area. Therefore, ground-borne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

Table 2 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. project construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock

equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Jackhammers typically generate vibration levels of 0.035 in/sec PPV, and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. The single-family residences in the immediate project vicinity range from 50 to 205 feet; at these distances, vibration levels would be expected to be 0.1 in/sec PPV or less, below the 0.3 in/sec PPV significance threshold. This would be a less-than-significant impact and would not require mitigation.

Table 2. Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 ft. (in/sec)	Approximate L_V at 25 ft. (VdB)
Pile Driver (Impact)	upper range	1.158	112
	typical	0.644	104
Pile Driver (Sonic)	upper range	0.734	105
	typical	0.170	93
Clam shovel drop		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006.

c) ***No Impact.*** The project site is not within the vicinity of a public airport or private airstrip, nor is it within the jurisdiction of an airport land-use plan. Therefore, no impacts associated with excessive airplane noise are expected.

4.14 Population and Housing

POPULATION AND HOUSING — Would the project:	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant Impact*	*No Impact*	*Source*
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒	1
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒	1

Environmental Setting

The project site is located in a residential neighborhood community of the Town of Fairfax. The General Plan land use designations surrounding the project site include low-density residential and medium density residential. Surrounding land uses include San Anselmo Creek and residential homes.

Discussion of Impacts

a) ***No Impact.*** The proposed project includes the replacement of an existing bridge. The proposed project is consistent with the existing uses for the site and there is no housing located on-site. The proposed project does not include the construction of any homes or infrastructure that would induce population growth. Upon completion of the replacement bridge, the operation of the site would function in a similar manner as under existing conditions. Therefore, the project would not induce substantially unplanned population growth, and no impact would occur.

b) ***No Impact.*** The proposed project includes the replacement of an existing bridge and would not displace any existing people or housing. Thus, no replacement housing would be required, and no impact would occur.

4.15 Public Services

PUBLIC SERVICES — Would the project:					
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:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
Fire protection?	☐	☐	☒	☐	1
Police protection?	☐	☐	☒	☐	1
Schools?	☐	☐	☐	☒	1
Parks?	☐	☐	☐	☒	1
Other public facilities?	☐	☐	☐	☒	1

Environmental Setting

The Ross Valley Fire Department (RVFD) currently provides fire protection and emergency response services to the communities of Ross, San Anselmo, Sleepy Hollow and Fairfax. The RVFD operates four fire stations. RVFD Station 21 provides fire protection and paramedic services to the project site. Station 21 is located at 10 Park Road. The project site is within approximately one mile of the station.

The Town of Fairfax Police Department (FPD) provides police protection services to the project sites. The FPD employs 11 full-time Police Officers, two Reserve Police Officers, four full-time Police Dispatchers, one Community Services Technician and four part-time Police Dispatchers. The FPD station is located at 44 Bolinas Road. All project site is within approximately one mile of the station.

There is only a single school in the immediate vicinity of the project site. Deer Park Elementary is approximately 1/2 mile east of the project site.

The recreational parks within the general vicinity of the project site are the Contratti Park Baseball Field and Doc Edgar Park.

Discussion of Impact

a) The proposed project would not rely on the addition or alteration of any public services. No residential or commercial construction is proposed. The project would not lead to a population increase that could result in additional demand for public services, and would not require the construction of new public service facilities or the expansion of existing public service facilities. As such, the project would not result in significant physical impacts associated with the provision of new or physically altered governmental facilities.

a-i) ***Less Than Significant Impact.*** The RVFD would continue to provide fire protection services to the project site upon development. As discussed in Impact 4.14(a), the project would not include construction of any residential structures or result in an increase in residential population. Emergency fire and paramedic crews would be stationed on both sides of the bridge to provide emergency services to surrounding residences during any closure. It is not anticipated that the project would necessitate the expansion of existing or construction of new fire protection facilities. Furthermore, the replacement bridge would allow for a heavier vehicle load than under existing conditions, allowing for both fire vehicles at the Fairfax Fire Station (Station 21) to access the residences located on the east side of the bridge. Therefore, project impacts related to fire protection services would be less than significant

a-ii) ***Less Than Significant Impact.*** During construction, a minor demand for additional FPD services may occur during the project's construction phase. Such services include, but may not be limited to, consultation during plan check, routine surveillance of the construction site by regular patrol units, potential investigations of theft of or vandalism to construction equipment and materials, and enforcement of local speed limits near the construction site. However, the operational phase of the proposed project not result in increased service call responses from the FPD due to the lack of residential or commercial development. It is not anticipated that the project would necessitate the expansion of existing or construction of new police protection facilities. Therefore, project impacts related to police protection services would be less than significant

a-iii) ***No Impact.*** As discussed in Impact 4.14(a), the proposed project would not include construction of any residential structures. The project would not result in an increase of population that would require additional school facilities. Therefore, no impact would occur.

a-iv) ***No Impact.*** As discussed in Impact 4.14(a), the proposed project would not include construction of any residential structures. As the project would not induce population growth, the project would not create a need for additional park or recreational services. Therefore, no impact would occur.

a-v) ***No Impact.*** As discussed in Impact 4.14(a), the proposed project would not include construction of any residential structures. The project would not induce population growth, the project would not create a need for other public facilities. No impact would occur.

4.16 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?	☐	☐	☐	☒	1
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	1

Environmental Setting

The recreational parks within the general vicinity of the project site are the Contratti Park Baseball Field and Doc Edgar Park.

Discussion of Impacts

a) ***No Impact.*** The purpose of the proposed project is to replace an existing bridge and the project would not involve the construction of any additional housing or businesses that could increase residents and/or employees in the project site. The proposed project would not increase the use of nearby recreational facilities. Therefore, no impact would occur.

b) ***No Impact.*** The purpose of the proposed project is to replace an existing bridge and the project site does not include any recreational facilities. The proposed project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impact would occur.

4.17 Transportation

TRANSPORTATION — Would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, and bicycle and pedestrian facilities?	☐	☒	☐	☐	1, 4, 6
b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐	1, 4, 6
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒	1, 4, 6
d) Result in inadequate emergency access?	☐	☒	☐	☐	1, 4, 6

Environmental Setting

The General Plan provides classification of major streets in Fairfax (arterial and local). Arterials carry regional trips and traffic between areas of the town while providing access to major traffic generators. Collector streets link neighborhoods to arterial streets and carry through traffic for short segments in residential and commercial areas, while local streets provide direct access to parcels and residences. *The project site is located along Meadow Way, which is classified as a local street.* There are no Principal Arterial Roadways, as designated by the Congestion Management Program, in or adjacent to the project site.

Regulatory Setting

Local Regulations

General Plan

Program S-1.1.5.1: Seek funding through Caltrans Local Highway Bridge Program and explore other funding sources to retrofit bridges identified by Caltrans or other technical evaluations as seismically deficient. Determine the seismic stability of Meadow Way, Marin Road (adjacent to Manor Circle) and Creek Road bridges.

Marin County Congestion Management Plan (CMP)

The Transportation Authority of Marin established the CMP roadway network in 1991. The designated CMP roadway system includes all state highways and principal arterial roadways in Marin County. The CMP roadway system is a network that allows performance monitoring in terms of established Level of Service (LOS) standards. The project site is not located within the vicinity of any CMP-designated roadways.

Pedestrian and Bicycle Master Plan

The Town's Pedestrian and Bicycle Master Plan provide for a town-wide network of bicycle paths, lanes and routes, along with bicycle-related programs and support facilities, intended to ensure bicycling becomes a viable transportation option. Meadow Way is not included in this plan as a designated or proposed bicycle or pedestrian facility.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** The proposed project would replace the existing bridge. While the replacement bridge would have a wider deck, it would continue only to have one travel lane and would not increase the bridge's current capacity. The additional width of the bridge would provide for safe pedestrian and bicycle access, as the existing bridge is currently too narrow for both pedestrians and motorized traffic to travel safely. Although the project would positively impact the pedestrian network, the temporary bridge detour and temporary road closure during the final construction stage would result in potentially significant impacts related to the performance of the intersection and roadway. Mitigation Measure TRANS–1 includes control measures to alert travelers to potential delays and would ensure construction-related impacts are less than significant.

Mitigation Measure TRANS–1

The Town shall require that no work or traffic control be allowed before 8:00 a.m. weekdays and 9:00 a.m. Saturdays and Sundays. No work shall be allowed after 5:00 p.m., unless otherwise noted. At least one week prior to the commencement of work, the Town shall require the contractor to provide project information signs to notify drivers of the upcoming project and potential delays.

Lane closure and traffic control shall conform to the California Manual on Uniform Traffic Control Devices, Caltrans standard plans and specifications. Car and pedestrians shall be kept within the small detour area with temporary railing (Type K) and temporary fencing. The contractor will install advance warning signs to alert bicyclists and motorists of the work zone and lane closures. Advance warning signs may be reflective signs, changeable message boards, cones, and barricades. Flagging and other means of traffic control shall be required to allow for the safe movement of traffic through the work zone. The contractor shall provide flaggers to temporarily hold traffic for staging equipment or construction. Work shall be performed in a manner that is least disruptive to the public. The contractor shall consult and coordinate with the property owner if access is affected.

b) ***Less than Significant Impact.*** According to CEQA Guidelines Section 15064.3, Subdivision (b), a project's effects on automobile delay do not constitute significant environmental impacts. Instead, vehicle miles traveled (VMT) is the most appropriate measure of the project's impact on transportation; and projects that would reduce VMT in their vicinity should be considered to have a less-than-significant transportation impact.

The project would lead to a small, minimal increase in VMT due to the transportation of construction equipment and personnel, as well as a very brief, small increase in VMT due to the temporary road closure and detour. Construction equipment would be staged just a half-mile away from the site at the end of Hickory Road at Cascade Road, minimizing construction VMT and making this increase less than significant. The detour would only last a few hours and would impact a minimal quantity of people, making this increase in VMT negligible.

In the long-term, the project would not lead to an increase in VMT. The replacement bridge would not contain a new path or additional features that might accommodate increased vehicles. As no substantial increases in VMT are anticipated to result from the project, the project would be consistent with CEQA Guidelines Section 15064.3, subdivision (b); and a less than significant impact would occur.

c) ***No Impact.*** The project would replace the existing bridge and would not include any new features 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 replacement bridge as ingress and egress at the bridge would remain the same as under existing conditions. Therefore, no impact would occur.

d) ***Less than Significant with Mitigation Incorporated.*** Emergency access to or evacuation from surrounding areas would be restricted during construction because traffic would be detoured to a temporary bridge during the construction phase of the bridge replacement. The detour and temporary road closure would result in a potentially significant impact related to emergency response and emergency evacuation. During the temporary road closure, emergency fire and paramedic crews would be stationed on both sides of the bridge. Furthermore, implementation of Mitigation Measures TRANS-1 would require best management practices for noticing and operating the temporary bridge detour and road closure. Implementation of Mitigation Measure TRANS-1 would reduce impacts related to emergency response plans and emergency evacuations plans to a less-than-significant level.

Mitigation Measure TRANS–1

The Town shall require that no work or traffic control be allowed before 8:00 a.m. weekdays and 9:00 a.m. Saturdays and Sundays. No work shall be allowed after 5:00 p.m., unless otherwise noted. At least one week prior to the commencement of work, the Town shall require the contractor to provide project information signs to notify drivers of the upcoming project and potential delays.

Lane closure and traffic control shall conform to the California Manual on Uniform Traffic Control Devices (CAMUTCD), Caltrans standard plans and specifications. Car and pedestrians shall be kept within the small detour area with temporary railing (Type K) and temporary fencing. The contractor will install advance warning signs to alert bicyclists and motorists of the work zone and lane closures. Advance warning signs may be reflective signs, changeable message boards, cones, and barricades. Flagging and other means of traffic control shall be required to allow for the safe movement of traffic through the work zone. The contractor shall provide flaggers to temporarily hold traffic for staging equipment or construction. Work shall be performed in a manner that is least disruptive to the public. The contractor shall consult and coordinate with the property owner if access is affected.

4.18 Tribal Cultural Resources

TRIBAL CULTURAL RESOURCES — Would the project:					
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☒	☐	☐	1, 12
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	1, 12

Environmental Setting

The Town of Fairfax retained Far Western Anthropological Research Group (Far Western) to survey the potential for cultural and archaeological resources, including tribal resources, to occur within the area of potential effect. Far Western contacted the Native American Heritage Commission (NAHC) in August 2017 to request a review of the Sacred Lands file for information on Native American cultural resources in the study area and to request a list of Native American contacts in the vicinity of the project site. In a response dated August 31, 2017, the NAHC stated that there are no known Native American cultural resources in the immediate vicinity of the project.

Additionally, letters were sent to Gene Buvelot and Greg Sarris of the Federated Indians of Graton Rancheria (FIGR). FIGR has previously requested consultation under AB52 on other bridge replacement and repair projects nearby. FIGR requested an update with findings of the archaeological study of the project site and a copy of the final report. No further response was received.

Far Western conducted a literature search at the Northwest Information Center and found that there were no known archaeological sites within a quarter-mile of the area of potential effect. Further, there are no known historic resources in or near the project site, and the bridge itself has been deemed not eligible for listing in the National Register of Historic Places. Far Western subsequently assessed the site's sensitivity for buried resources. They determined that the site has very low sensitivity for buried prehistoric resources due to the erosional topography and age of the landform. A pedestrian survey of the area of potential effect occurred on January 28, 2015; and no resources were identified.

Regulatory Setting

In September 2014, the California Legislature passed Assembly Bill (AB) 52, which added provisions to the Public Resources Code (PRC) concerning the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze a project's impacts on "tribal cultural resources," separately from archaeological resources (PRC Section 21074; 21083.09). Under AB 52, tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (1) listed, or determined to be eligible for listing, on the state or local register of historic resources; or (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource (PRC Section 21074).

AB 52 also requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, 21082.3). If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss (1) whether the proposed project has a significant impact on an identified tribal cultural resource and (2) whether feasible alternatives or mitigation measures avoid or substantially lessen the impact on the identified tribal cultural resource (PRC Section 21082.3(b)). Finally, AB 52 required the Office of Planning and Research to update Appendix G of the CEQA Guidelines by July 1, 2016 to provide sample questions regarding impacts to tribal cultural resources (PRC Section 21083.09). AB 52's provisions apply to projects that have a notice of preparation filed on or after July 1, 2015.

Discussion of Impacts

a-i, a-ii) ***Less than Significant with Mitigation Incorporated.*** The project's area of potential effect has low sensitivity for buried archaeological resources, and there are no known tribal cultural resources present. This includes tribal cultural resources listed or eligible for listing in the California Register of Historic Places or a local register of historic places as well as a resource determined by the lead agency to be significant pursuant to PRC 5024.1. Contact of the NAHC and consultation with FIGR did not reveal any known tribal cultural resources that may be affected by the project. Further, the landscape's eroded nature and the age of landforms underlying the project site make the discovery of tribal cultural resources unlikely.

Although unlikely, accidental discovery remains possible; and the contractor would be required to stop work upon discovery of any potentially significant archaeological or historical resources or human remains. Procedures are delineated in the PRC and the CEQA guidelines and are discussed below. As tribal cultural resources are unlikely to be present and state-mandated procedures would be implemented upon any accidental discoveries in keeping with Mitigation Measures CULT-1 and CULT-2, the project would not adversely affect the significance of any tribal cultural resources.

4.19 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) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	1
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐	1
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒	1
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	1
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐	1

Environmental Setting

The project site is located adjacent to a developed area of the Town of Fairfax. Existing utility lines including telecommunication, electrical, sewer, water, and gas exist along the existing bridge and within the project site. Water needs for the project site are served by the Marin Municipal Water District. Sewer needs within the project site are served by the Ross Valley Sanitation District. Gas and electrical utilities within the project site are served by Pacific Gas & Electric (PG&E). Comcast services telecommunication. The Landfill that serves the Town is the Redwood Landfill located in Novato, Marin County, California. This Landfill is permitted to accept 2,310 tons of material daily and has an anticipated closure date of 2025.

Local waste reduction efforts are overseen by Zero Waste Marin, a joint powers authority comprised of representatives of Marin County and each of the County's constituent cities. Zero Waste Marin works with businesses and residents to reduce solid waste and move towards Marin County's goal of zero waste by 2025. Among these efforts, Zero Waste Marin encourages the use of certified disposal facilities during demolition and construction projects to ensure that materials are recycled to the fullest extent feasible, in keeping with state requirements that most construction and demolition projects divert 65% of waste.

Discussion of Impacts

a) ***Less than Significant Impact.*** The proposed project would not require or result in the construction or expansion of water, wastewater treatment, natural gas, energy, or telecommunications facilities. Operations of the project would be similar to current operations, as the existing bridge would be replaced without expansion of service. There would therefore be no need for new or expanded public services. During construction, some water and energy use would be required for dust control and equipment power and a temporary bypass pipe would be installed to convey low-flow stormwater past the project site. Increased use of water and energy during construction would be temporary and insufficient as to necessitate new or expanded facilities. The stormwater diversion pipe would be removed following construction, and during construction, water quality would be sampled regularly to assure adverse impacts to turbidity and water quality do not occur.

Prior to removal of the existing bridge, existing water, gas, and wastewater utility lines within the project site would be placed on a shoofly north and supported in place during construction. These wet utility lines would then be rerouted under the replacement bridge during the final stage of construction. Relocation of these utilities would be temporary, and they would be moved close to their current location. Upon completion, they would return to near their original location in or on the new bridge. As gas, water, and wastewater lines would only temporarily be relocated and the relocation would be minor, this would not result in a significant environmental impact. As utilities would only need to be temporarily introduced or relocation, significant environmental effects would not occur. Impacts related to relocation, expansion, or construction of public utilities would, therefore, be less than significant.

b) ***Less than Significant Impact.*** The proposed project would replace an existing bridge and operation of the project would not require new or expanded water supplies. Construction of the project would require minimal water supply for dust and erosion control. The water supply needed for dust control would be provided by existing service providers and would not exceed allotted limits. Further, water would be required in sufficiently small quantities that supplies would be adequate during normal, dry, and multiple dry years. Therefore, impacts related to water supply would be less than significant.

c) ***No Impact.*** The proposed project would replace an existing bridge. Neither construction nor operation of the project would result in an increase in wastewater. Therefore, the proposed project would not exceed the capacity of the local wastewater treatment provider and no impact would occur.

d) ***Less than Significant Impact.*** The project would 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. Non-hazardous waste would be disposed of at the Redwood Landfill, a certified landfill that serves the Town. Redwood Landfill is anticipated to have capacity through 2025; so the project's solid waste would be insufficient to exceed remaining capacity. Further, Zero Waste Marin encourages disposal at certified facilities to assure that materials are recycled to the greatest extent feasible. By recycling at Redwood Landfill, the project would maximize its potential for recycling, in keeping with local waste reduction efforts.

The minimal quantity of hazardous creosote-contaminated timber and soils would be disposed of at an appropriate facility permitted to handle hazardous materials. As the project would only temporarily generate solid waste, quantities would not overwhelm existing local infrastructure, and the project would not conflict with local waste reduction statutes, impacts would be less than significant.

e) ***Less than Significant Impact.*** Marin County has a goal of zero waste by 2025. The joint powers authority overseeing zero waste efforts, Zero Waste Marin, encourages disposal at a certified facility during construction and demolition to comply with state waste reduction requirements. The project would dispose of solid waste at Redwood Landfill, a certified landfill. The project would therefore comply with local and state requirements for solid waste reduction. No federal solid waste reduction requirements applicable to the project were identified. As the project would comply with local and state requirements and no federal requirements were identified, a less than significant impact would occur.

4.20 Wildfire

WILDFIRE — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	***Potentially Significant Impact***	***Less than Significant with Mitigation Incorporated***	***Less than Significant Impact***	***No Impact***	***Source***
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐	1
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	1
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒	1
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐	1

Environmental Setting

Pursuant to Government Code Section 51175-89, the California Department of Fire and Forestry (CalFire) recommends Very High Fire Hazard Severity Zones throughout the state. These are mapped taking relevant factors such as fuels, terrain, and weather into account. Fire hazard severity zones are described based on their potential to cause building ignition. Areas assessed for fire hazards throughout the state are categorized as local responsibility areas and state responsibility areas depending on the entity responsible for fire protection.

The Ross Valley Fire Department (RVFD) currently provides fire protection and emergency response services to the communities of Ross, San Anselmo, Sleepy Hollow and Fairfax. The RVFD operates four fire stations. RVFD Station 21 provides fire protection and paramedic services to the project site. Station 21 is located at 10 Park Road. The project site is within approximately one mile of the station.

CalFire classifies the site and its surroundings as being within the local responsibility area. The nearest state responsibility area is less than 0.2 miles from the project site on the southern border of Fairfax. The project site is classified as a non-very high fire hazard severity zone, with the nearest very high fire hazard severity zone residing less than two miles north of the project.

Discussion of Impacts

a) ***Less than Significant with Mitigation Incorporated.*** While no formal emergency evacuation or response plans have been adopted for the Town of Fairfax, the project site provides the only access point for residents located on the southern stretch of Meadow Way. Emergency access to or evacuation from surrounding areas would be restricted during construction because traffic would be detoured to a temporary bridge. During the temporary road closure, emergency fire and paramedic crews would be stationed on both sides of the bridge. Furthermore, implementation of Mitigation Measures TRANS-1 would require best management practices for noticing and operating the detour and road closure. Implementation of Mitigation Measure TRANS-1 would reduce impacts related to emergency response plans and emergency evacuations plans to a less-than-significant level.

b) ***Less than Significant Impact.*** During construction, there would be a slight increase in wildfire risk due to the presence and use of gas-powered construction equipment. This would be temporary and minimal, with a return to baseline risk level following project completion. The operational project would not alter the area's fire risk, as the bridge would continue to operate similarly to its current status quo and no additional traffic is anticipated. In fact, the materials used on the new bridge would reduce the risk of increased pollutant concentration during a wildfire because creosote-soaked wood would be removed from the existing bridge and the new concrete bridge would be generally far more fire-resistant than the existing bridge.. As there would be a temporary, minimal increase in on-site wildfire risk and the project would remove toxic, flammable materials from the existing bridge, the project would not exacerbate wildfire risks and expose project occupants to pollutant concentrations from wildfire. Thus, impacts would be less than significant.

c) ***No Impact.*** The project would replace existing infrastructure and would not require the installation of new infrastructure such as emergency water supplies and fuel breaks. As such, the installation or maintenance of infrastructure would not exacerbate fir risk or result in temporary or ongoing impacts to the environment. Thus, no impact would occur.

d) ***Less than Significant Impact.*** Downstream areas roughly two miles south of the project site are considered very high fire hazard severity zones. These areas could be vulnerable to slope instability following a fire. However, the project would not alter drainage patterns or result in runoff in these areas. The bridge has been designed to clear the high water mark, even during high flow events. Although there are areas prone to wildfire downstream, the project would not alter the chance of downstream flooding or landslides. Thus, a less than significant impact would occur.

4.21 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?	☐	☒	☐	☐	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)?	☐	☒	☐	☐	1
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	1

Discussion

a) ***Less than Significant with Mitigation Incorporated.*** The project would not affect natural habitats or federally or state-listed species. Impacts on wildlife 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 mitigated to a less than significant levels by mitigation measures CULT-1 and CULT-2

b) ***Less than Significant with Mitigation Incorporated.*** Section 15130 of the CEQA *Guidelines* requires an evaluation of potential environmental impacts when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual 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. These impacts can result from a combination of the proposed project together with other projects causing related impacts. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

At the time of preparation of this Initial Study, other cumulative projects that are projected to be constructed or implemented within the next year in the vicinity of the project site include other bridge projects in the Town. These projects include the rehabilitation of bridges over San Anselmo Creek and Fairfax Creek along Creek Road, Marin Road, Spruce Road, and Canyon Road.

The proposed 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. The Town would coordinate project construction activities to avoid overlap of construction timing for cumulative impacts to traffic. Given the project does not result in any significant impacts that cannot be completely mitigated to less-than-significant levels, and construction scheduling would be coordinated to avoid simultaneous construction with other cumulative projects, the proposed project would not result in impacts that are cumulative considerable.

c) ***Less than Significant with Mitigation Incorporated.*** The project, particularly during the construction phase, could result in a variety of temporary impacts to human beings. The project's construction phase would result in potentially significant impacts related to air quality, biological resources, cultural resources, geology and soils, hazardous materials, and hydrology and water quality, noise and traffic; however, all impacts would be mitigated to less-than-significant levels via the mitigation measures included in this Initial Study.

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. Town of Fairfax General Plan
3. Town of Fairfax Zoning Map
4. Town of Fairfax Municipal Code
5. California Department of Conservation, 2010
6. California Department of Transportation, 2012
7. WRA, Inc., Natural Environment Study and Biological Assessment, 2019
8. ABAG Hazards Mapping, 2014
9. Bay Area Air Quality Management District, 2010
10. Federal Emergency Management Agency, 2011
11. Department of Toxic Substances Control, 2011, and State Water Resources Control Board, 2011
12. Far Western and JRP Cultural Resource Reports, 2019

6.0 REPORT PREPARATION

Town of Fairfax – CEQA Lead Agency
Garrett Toy, Town Manager

California Infrastructure Consultancy (CIC) – Project Engineer
Nader Tamannaie, P.E., Project Manager

WRA, Inc. – CEQA Consultant
Geoff Reilly, Senior Environmental Planner, Project Manager
Jonathan Hidalgo, Senior Environmental Planner
Rachael Carnes, Environmental Planner
Audrey Smith, Environmental Planner
Patricia Valcarcel, Senior Wildlife Biologist
Nicholas Brinton, Fisheries Biologist

Far Western Anthropological Research Group – CEQA Cultural Resources Subconsultant
Adrian Whitaker, Project Manager

JRP Historical Consulting, LLC – CEQA Historic Architectural Resources Subconsultant
Chris McMorris, Project Manager

Illingworth & Rodkin – CEQA Noise and Air Quality Subconsultant
Michael S. Thill, Project Manager

7.0 RESPONSE TO COMMENTS ON THE DRAFT INITIAL STUDY/PROPOSED MITIGATED NEGATIVE DECLARATION

Introduction

On December 16, 2019 the Town of Fairfax (Lead Agency) released for public review a Draft Initial Study/Proposed Mitigated Negative Declaration for the Proposed Meadow Way Bridge Replacement Project (SCH# 2019129045). The public review and comment period on the Draft Initial Study began on December 16, 2019 and closed on January 22, 2020.

The Draft Initial Study/Proposed Mitigated Negative Declaration and the response to comments on the Draft Initial Study/Proposed 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 responds to the comments and questions on the Draft Initial Study/Proposed Mitigated Negative Declaration circulated by the City to public agencies and the public as required by CEQA. No edits to the Draft Initial Study/Proposed Mitigated Negative Declaration were required based on the responses to comments. This Final Initial Study/Mitigated Negative Declaration does not describe a project having any new or substantially more severe impacts than those identified and analyzed in the Draft Initial Study/Proposed Mitigated Negative Declaration. Therefore, in accordance with CEQA Guidelines Section 15073.5, recirculation of a Draft Initial Study/Proposed Mitigated Negative Declaration is not required.

This section contains a copy of the one comment letter submitted during the public review period on the Draft Initial Study/Proposed Mitigated Negative Declaration, and the individual responses to those comments. The written comment letter is designated with an alphabet letter in the upper right-hand corner of the letter. Within the written comment letter individual comments are labeled with the designated alphabet letter and a number in the margin. Immediately following the comment letter is an individual response to each numbered comment.

During the 37-day public review period, the following organizations/persons provided written comments on the Draft Initial Study/Proposed Mitigated Negative Declaration to the Town:

<u>Commenters</u>

1. Frank Egger

Comment Letter A

Date: January 22, 2020
To: Garrett Toy, Town Manager, 142 Bolinas Road, Fairfax, CA 94930
From: Frank Egger, 13 Meadow Way, Fairfax, CC 94930
RE: Meadow Way Bridge Replacement Project, Draft Initial Study (IS) and Mitigated Negative Declaration (MND)

The Public Review Period: Notice was given Tues, Dec 17, 2020 at 9:30 AM with written comments due Tues, January 22, 2020 (37 days). Ronita and I were gone over the Holidays. The Notice said the IS/MND would be posted on the Town's Bridges Website. It was not posted over the Holidays and when we returned, I went to Fairfax Town Hall to purchase the IS/PMND booklet. I was advised there was none to purchase but I could borrow the Counter Copy over the long weekend. A-1

I borrowed it and made copies of a few pertinent pages. It is 99 pages long plus 321 pages of attachments. I emailed the Town Manager and said it was not on the Website. He had it posted by Jan 7th. It is a very short time period, down to 15 days from the date posted on the Bridges Website to review and make timely comments.

The Draft Initial Study and Mitigated Negative Declaration are insufficient to be able to make a determination that a full Environmental Impact Report for the Meadow Way Bridge Replacement is unnecessary. The lack of on-site knowledge, the ecology of the Cascade Canyon and institutional A-2

2.

knowledge of the consultants preparing the Draft IS/MND is such that if the Meadow Way Bridge Replacement project proceeds as proposed, there will be significant adverse impacts on listed species in the Cascade Canyon including central California coast steelhead, Northern Spotted Owls, Yellow Legged Frogs and CCC Coho salmon. The temporary 220 foot long road down into San Anselmo Creek will push the local Fox Den out. The Bridge, retaining walls and fencing as proposed will block access to the watering holes in San Anselmo Creek for the native deer population that reside in the Pine Drive area of the canyon. And, the historic public access (at least 70 years that I know of) to San Anselmo Creek for recreation will be blocked. The project as proposed will be the most expensive project ever built by the Town of Fairfax since incorporation in 1931. A-2

Posted on the Fairfax Bridges Website in 2016:

"ENVIRONMENTAL STUDIES TO BE UNDERTAKEN FOR MEADOW WAY BRIDGE'S REPLACEMENT Since the project is federally funded, National Environmental Protection Act (NEPA) requires a series of environmental studies, including those concerning plants, animals, wetlands, water quality, air quality, noise, visual resources and cultural resources. A-3

California Environmental Quality Act CEQA (studies) will further develop and present these studies to satisfy the

3.
State requirements. Caltrans has determined the NEPA document to be developed will reflect Categorical Exclusion (CE) with required technical studies. For CEQA, the document will be Initial Study/Mitigated Negative Declaration (IS/MND). We anticipate that any significant impacts identified can be fully mitigated to a less than significant level and therefore an Environmental Impact Report (EIR) or Environmental Impact Statement (EIS) is not anticipated to be required. A-3

The sensitive and threatened species, as well as non-sensitive environmental issues, are as follows 1. Northern Spotted Owl (NSO) is a federally and state-listed Threatened Species. It has a high level protection protocol. 2. Central California Coast Steelhead is very well protected. The window of work in the creek is now known to be limited to after June 30th and before October 15th each year. 3. Coho salmon is protected even though it has been established that it has been extirpated from these waters. 4. The Migratory Birds Act requires studies. 5. There are no protected bats associated with the site. 6. There are no red-legged or Foothill Yellow-Legged Frogs associated with the site 7. There are no threatened or otherwise protected plants associated with the site. Item 2 above has a profound effect on our construction window, effectively making Meadow a 2-season project. Normally we count on the permissible season to start April 15th, giving us 6 months to build the bridge out of the water. We now know we have 3 ½ months each season only." A-4

4.

Frank Egger Response: It is clear that this IS/MND was written to prove the applicant's stated position in 2016, prior to this IS/MND being prepared, that neither an Environmental Impact Report (EIR) nor Environmental Impact Statement (EIS) would be required. I fished the streams and creeks of Marin County as a youngster in the 1940's. Ronita and I purchased our Fairfax home at 13 Meadow Way, 45 feet from the Meadow Way Bridge, in Dec of 1962. We have lived in the Cascades since moving in early 1963. Neighborhood kids fished San Anselmo and Cascade Creeks in the 1960's catching steelhead and Coho. There is no institutional knowledge at Town Hall regarding San Anselmo Creek, its history, its fisheries nor its ecology. Neither Fairfax's bridge consultant nor the WRA Firm that prepared the IS/MND has any history with this San Anselmo Creek area of Fairfax here in the Cascade Canyon or the headwaters of Corte Madera Creek. As a former 40 year town councilmember and seven term mayor of Fairfax, I have walked all Fairfax Creeks including Fairfax Creek from the westerly town limits to Bolinas Road and the Cascade, Carey and San Anselmo Creeks from the Falls to the Pastori Bridge. I have crawled under buildings downtown Fairfax in the original Fairfax Creek bed that was dewatered when Fairfax Creek was diverted at Bolinas Road under Sherman Ave in the box culvert bypass to San Anselmo Creek. I was part of the Fairfax Town Council, City Council at that time, majority that removed Fairfax from Ross Valley Flood Zone #9 to prevent our creeks from being channelized and concreted by the US Army Corps of

A-4

5.

Engineers in the 1960's. Over the years I have met with and spent time talking about the fisheries in Fairfax, and gained first hand historical knowledge, with a number of old timers like Everett Jensen, Lou Vaccaro, Pete Arrigoni, Hal Lazzini and John Smith who fished these creeks when they were youngsters. I worked with Leo Cronin on creek issues in Fairfax and the Ross Valley. There were fish rescue programs, some sanctioned and some not, where steelhead and Coho were netted, put in five gallon containers and moved downstream to locations where the creek never dried up. To protect Coho salmon, steelhead and Northern Spotted Owls I authored a number of Fairfax Laws including Fairfax's Creek Setback Law that protects creeks and creek banks by restricting structures being built in the Creek setback like retaining walls and bridges and Fairfax's first Tree Protection Ordinance that requires a permit to remove trees 24 inches in circumference. A number of trees on site, including all trees on the southwest bank in the immediate vicinity of the new Bridge, will have to be removed if the project as proposed goes forward. A-4

The RFP for a bridge consultant was put out in the Spring of 2013. Reading the WRA Consultants' report, their biologists came to Fairfax five times and to check the creek flows three times between 2017 and 2019.

From the Report: For Stage 1 construction, an access ramp to the creek would be necessary. This earthen ramp would be used to transport of materials and heavy A-5

6.
equipment, such as pile drilling rigs, dump trucks, cranes, loaders, excavators, large containers, etc., to the creek bed elevation and back. The ramp would be located on the southwest quadrant of the bridge between two proposed retaining walls, one which connects with the bridge. These walls are needed to stop the historic erosion taking place here adjacent to Abutment 1 (western abutment), threatening to undermine the abutment and private properties on both north and south sides of the bridge. The lower wall will be a conventional concrete retaining wall, supported on piles, and upper wall will be a concrete tieback wall with tieback elements placed in drilled holes stretching 40-50 feet from the wall face under the private property.

A-5

Frank Egger response: This report has been written to accomplish the goal not requiring an Environmental Impact Report as stated in the opening statement: "We anticipate that any significant impacts identified can be fully mitigated to a less than significant level and therefore an Environmental Impact Report (EIR) or Environmental Impact Statement (EIS) is not anticipated to be required."

Construction of the proposed road down to and into the creek for heavy earth moving equipment will require removal of two large retaining walls on the southwest creek bank and then after the second year of construction, constructing new retaining walls in their place, wasted tax dollars. The creekbed will be excavated and filled to allow

7.
access by large earth moving equipment including excavators and pile drivers.

No one seems to know that the Federal Emergency Management Act, FEMA, paid for a large rip-rap with cloth backing wall to protect the Meadow Way roadway from erosion that occurred in the flood of 2005 on the southwest bank nor that the former owner of 333 Cascade Drive, George Tong, built a rip-rap wall using concrete and metal for re bar between 1960 and 1966 to protect their property on the creek's southwest curve. Both have been holding. Someone dumped broken concrete from a construction project down the creek embankment which I reported at a Town Council meeting last year. Will Fairfax be required to repay FEMA for the cost of the rip-rap retaining wall they financed in 2005? A-5

The data provided by WRA Environmental Consultants is either missing important information or contains mis-information regarding the four listed species that are present in the Cascade Canyon Area and the Meadow Way Bridge, Coho, CCC steelhead, Northern Spotted Owl and Yellow Legged Frogs. A-6

From the Report: 1. Northern Spotted Owl (NSO) is a federally and state-listed Threatened Species. Northern spotted owl (Strix occidentalis caurina, Federal threatened, State threatened, CDFW species of special concern). Habitat consists of old-growth forests or mixed stands of old-growth and mature trees. Occasionally in A-7

8.
younger forests with patches of big trees. Prefers high, multistory canopy dominated by big trees, trees with cavities or broken tops, woody debris and space under canopy. The project site and immediately surrounding area are low-density residential developments and riparian woodland; however, riparian redwood forest community is in proximity to the project site. This species has been documented to nest in dense forest approximately 0.28 miles southwest of the project site. No nesting habitat is present in the project site.

NORTHERN SPOTTED OWL The NSO is a federally threatened and state threatened resident spotted owl subspecies found in cool temperate forests in the coastal portion of California, from Marin County northward. The natural history of this subspecies is summarized by the U.S. Fish and Wildlife Service (USFWS 2008) and Gutiérrez et al. (1995). Typical habitat consists of old-growth coniferous forests, or mixed stands of old-growth and mature trees; younger (second-growth) forests with patches of large trees are also occasionally used. High-quality year-round habitat features a tall, multitiered, multi-species canopy dominated by big trees, trees with cavities and/or broken tops, and woody debris and space under the canopy. NSO breeding pairs are usually monogamous and also demonstrate site fidelity, maintaining nesting territories and home ranges across years. **The general breeding season is February through August,** and nesting occurs on platform-like substrates in the forest canopy. Substrates used as nest sites include tree

9.
cavities, broken tree tops, epicormic branching (i.e., multiple branches forming from a single node), large horizontal branches, and old nests built by other birds or squirrels. While NSO nesting occurs predominantly in coniferous trees throughout its range, the population in Marin County is somewhat more generalist and has also been documented to use hardwoods for nesting (Chow 2001). Within Marin County, NSO young leave the nest (by gliding and climbing through the canopy) in late May through June, though they remain dependent on their parents for several weeks thereafter as they learn how to fly and forage independently. NSOs forage for nocturnal mammals; dusky-footed woodrats (Neotoma fuscipes) are the primary prey in northern California.

A-7

Frank Egger Response: The significant adverse impact on Northern Spotted Owls is not mitigated. The Cascade Canyon has one of the most prolific Northern Spotted Owl (NSO) populations in Marin County. NSOs would land on veranda deck railings here in the Cascades. The report on page 27, Table 1 states species is 0.28 miles from the project, 1,478 feet away. There is a known Northern Spotted Owl nest in a Redwood tree between 700 and 800 feet from the project area of the Meadow Way Bridge.

NSOs are ever present here in the canyon today. In 2008-2009 the Ross Valley Sanitary District approved a pipe-bursting project from the area of 22 Meadow Way, north, down the wagon trail easement to Bolinas Road. Prior to that project, NSOs were here along our end of Meadow

10.
Way and once that project was in full swing, the NSOs abandoned this area only recently returning this year, 10 years gone but now returned. I'm hearing their soft voices most every night now, a NSO has been beckoning a companion not two hundred feet from the Meadow Way Bridge. The project, as proposed, will run the NSOs out of this area of Meadow Way again for another 10 years. Photos of Northern Spotted Owls at an undisclosed location here in the the Cascade Canyon are attached. A-7

The Northern Spotted Owl nesting season, is either from Feb 1st to July 31st or Feb 1st to August 31st. No construction should begin before either August 1st or Sept 1st. That gives either a 2 & 1/2 month or a 1 & 1/2 month window for construction.

From the Report: 2. Yellow Legged Frog. This species has not been documented within the watershed, and the closest documented occurrence is 2.9 miles east of the BSA in a different watershed (CDFW 2018a). This section of San Anselmo Creek is not perennial.

Frank Egger Response: Once again the IS/MND report is way off base and includes misinformation. The County of Marin discovered Yellow Legged Frogs in the area of the Melvin property on Meadow Way, less than 1,000 feet from the Meadow Way Bridge project, where development was proposed in 2002. The development never occurred and the 7 acre Melvin property with 1st and 2nd growth Redwood Groves was purchased by Fairfax with resident A-8

11.

donations, local fundraising and funding from the Marin County Open Space District secured by then Supervisor Hal Brown. Recently one of the most significant Yellow Legged Frog population discoveries in Marin was found 3,696 feet further up San Anselmo Creek. A-8

From the Report: 3. Coho salmon - central California coast San Anselmo Creek is designated as critical habitat for the species. However, the species is considered extirpated from the tributaries of San Francisco Bay (NMFS 2012, Brown and Moyle 1991).

Frank Egger Response: Fairfax received a letter from the National Marine Fisheries Service (NMFS) in the later 1990's, addressed to then Planning Director Elizabeth Patterson, stating that central California coast Coho Salmon known to be present in Fairfax Creeks were added to the Federal Endangered Species List as Endangered and central California coast steelhead were listed as Threatened. I do not remember the letter stating that Coho were extinct in the headwaters of Corte Madera Creek (Fairfax must have that letter in the files). I last saw Coho in this creek in the 1990's. For thousands of years, Coho were present in San Anselmo Creek. In the past 20+ years, the CA Dept of Fish & Wildlife (CDF&G) and NMFS stood down and allowed Coho to disappear in this watershed. If this project goes forward as proposed, it will also hasten the extinction of steelhead. Fairfax, the NMFS, the CDF&W and Caltrans should be required to restore central California coast Coho runs in San Anselmo Creek A-9

12.
and prevent the extirpation of CCC steelhead.

Just because they say Coho are extirpated does not mean they can't be brought back, it has not been that long. The daily Marin IJ and San Francisco Chronicle are currently running news stories on the plight of Coho saying Coho are in big trouble in West Marin creeks and streams. The National Park Service, MMWD, the County of Marin, CDF&W and SPAWN are trying to restore those Coho runs. Soon West Marin streams will be like Corte Madera Creek and her tributaries if the spiraling down of Coho can't be stopped. A-9

From the Report: 4. steelhead - Central California Coast . Central California coast steelhead were listed as Threatened by NMFS (Same letter as above). San Anselmo Creek is designated as critical habitat for the central California coastal DPS of this species. Though two barriers to anadromy exist downstream of the BSA, the species is considered present within the creek.

Frank Egger Response: The barrier at the Bolinas Road Bridge/box culvert is not really a barrier, steelhead continue to make it up at that location. The barrier at Pastori Bridge is an old steel fish ladder that gets clogged with woody debris during storms, blocks fish migration and has to be constantly cleaned or replaced. There is the same issue with the Canyon Road Bridge steel fish ladder. SPAWN ran a permitted fish rescue around 15 years ago and was able to move 120 steelhead fry to A-10

13.
lower reaches of San Anselmo Creek. If SPAWN could come over the hill every year and perform an annual fish rescue, they could rescue as many as 100 steelhead fry from the upper reaches of San Anselmo Creek, at, above and below the Meadow Way Bridge and move them down stream where the Creek never dewaters. Last year I saw steelhead fry in watering holes by the bridge in August. In recent years I have seen a number of steelhead fry and some fish up to 6 inches in holes between Meadow Way Bridge and Cascade Falls. I have photos attached of 24 inch steelhead in San Anselmo Creek from a location between Pastori Bridge and Meadow Way Bridge

A-10

From the Report: 4.4 Biological Resources

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? The box marked with the X is Less Than Significant Impact.

A-11

Frank Egger Response: Yes, this project will interfere with unreported native animal life that accesses San Anselmo Creek in the vicinity of the Meadow Way Bridge including:

California Mountain Lion. There is a resident mountain lion that travels the dry creek bed towards downtown in the Summer. How does this project impact the lion?

14.
Gray Fox. There is a seasonal Fox Den right next to the creek. The resident foxes will be run out if the road is cut down to the creek at the proposed location.

Preparing an Environmental Impact Report would allow the Town to look at alternatives to constructing the huge road into the creek. Heavy equipment can be lowered into the creek with a crane.

Deer. A large local deer population comes down from Pine Drive to water in the Creek. They enter the creek on both the northwest and southwest sides on the Meadow Way Bridge. This is the only creek access for deer along Meadow Way from Cascade Drive. Photos of foxes and deer in the immediate area of the Meadow Way Bridge are attached. A-11

Fairfax must set up game cameras in the vicinity of the Meadow Way Bridge, at the bridge, above and below it to capture the wildlife that uses this corridor for a period of one year before the IS/Mitigated Negative Declaration is approved. This is a $3.5 million dollar project, wildlife cameras at strategic locations will show all activity in and around the site.

From the Report:Tree Removal. The Report - Public views of the bridge are only afforded from adjacent roadways, including Cascade Drive and Meadow Way, due to dense vegetation along San Anselmo and the close proximity of private residences. There are no publicly accessible views of the A-12

15.
side of the bridge due to existing vegetation. Construction of the new bridge may necessitate Creek the removal of vegetation (this language is a cut and paste from the report), but this would be temporary as replanting would over time return the views to existing conditions.

Frank Egger Response: The public has had access to the Meadow Way recreational hiking trail down to the Creek on the northwest side of the Bridge forever. Fishers,
Blackberry pickers, kids playing in the Creek and adults hiking the Creek have used the trail and public access to a recreational area will be cut off. Same for the animals. The original wooden bridge was constructed in the same location as the current Bridge around 1924. During the high water flows of the 1955 Christmas Day Flood, the old Bridge dropped down and became impassable. The US Army Corps of Engineers came to Fairfax and constructed the current railroad Trestle Bridge so folks could drive in and out of Meadow Way.

The report also says one Bay tree would be removed and a few other unidentified trees on the Southwest side of the Bridge, plus the backberries. There are two native Buckeyes, 12 to 15 inches in diameter, that hang over the Creek and provide shade to keep the water cool being removed as well as multiple Bay trees, 14 of them ranging in size from 8 to 20 inches in diameter. The trees in place, like the Buckeyes, have been there for over 60 years.

Once half of the Bridge is constructed on the southeast side of the existing Bridge, with the new road cutting thru the yard at 6

16.
Meadow Way, the impact on the 34" in diameter Valley Oak tree next to the fence has not been determined. The closeness of the road to the Oak tree may cause significant damage to the root system? All Of the Blackberries on the banks of the southeast side of the Bridge, 3,000 Sq Ft of, will be removed, same with the southwest creek banks. What is the method of Blackberry removal and how does the consultant guarantee they won't grow back? What about all the animals that have cut trails thru the Blackberries? What's the impact on the birds that get the Blackberries when ripe once they are gone? There is a native Willow tree growing next to the Creek on the southeast side that is 24 feet high and 30 feet wide, probably 40 years old and provides shade to a large portion of the creek where it ponds. The size of the trees to replace existing trees has not been spelled out. Are they 30 gallon, 50 gallon box specimens? The report has no estimate as to how many years it will take for the newly planted trees to grow to the same size as what's there today and provide the same amount of shade for the Creek so the heat does not kill the steelhead fry in the Creek's pools. The hot sun is deadly on Creek environs. See attached tree photos shading San Anselmo Creek.. A-12

From the Report: Intermittent Stream (Other Waters) At this location, San Anselmo Creek is an intermittent creek with flows that vary with the rainfall patterns of a given season. The watershed that supports it is local, generally the western part of the Town of Fairfax and adjacent open space lands. Flows within the creek during a January 11, 2017 site visit extended to the edges of the creek bed. During a site visit at a similar time of year (February 1, 2018) flows were much lower.(Consultant A-13

17.
Biologists have visited the site five times over three years, 2016, 2017 and 2018). In addition to slope change at the bed and bank junction, wrack observed at the edge of the creek bed was used as an indication of OHW mark. The creek substrate is a mix of small gravel to larger cobble. The channel width at the OHW mark was used to determine the intermittent stream ("other waters") boundary shown on Figure 3a.

A-13

Frank Egger Response: I have seen the San Anselmo Creek flowing like a raging river from 10 to 12 feet high under the Meadow Way Bridge multiple years. I have seen 30 foot long trees shooting down the creek and under the bridge. The preparation of an Environmental Impact Report would give time to place gauges in the creek to determine flows. Wildlife Cams could do the same things, noting the height of the creek waters under the Bridge.

From the Report: 4.8 Greenhouse Gas Emissions a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? In 2010, BAAQMD adopted quantitative thresholds of significance for construction activities, but only identified GHG thresholds of significance for operational emissions; the Town identified no GHG thresholds for construction-related activities. Less than Significant Impact.

A-14

Frank Egger Response: Concrete is the most widely used construction product in the world and is also one of the most polluting according to the Sierra Club. The production of cement, the binding agent in concrete, accounts for roughly 8%

of global greenhouse gas emissions. During the preparation of an Environmental Impact Report, Fairfax could look at alternatives like a steel drop in bridge at one half the price and a reduction in the unnecessary concrete walls in the creek. This project in the San Anselmo Creek, as proposed, would put more concrete in new creek walls, the new bridge and bridge abutments than at any time since the Ross Valley Flood Zone 9 built the concrete channel in Kentfield. Currently one of the longest concrete retaining walls, 142 feet long and 8 feet high to the east of the Bridge plus an additional 40 feet of concrete retaining wall that connects to the 142 foot long one, brings the total to 182 feet of concrete now. Around 1968, Fairfax put a stop to these kind of massive concrete walls in the creek. Fairfax has an ordinance requiring a use permit for any structure within the creek setback. Creek Setback: 20 feet from the top of the bank or twice the depth of the creek whatever is greater. In 2018 the same Bay Area Air Quality Management District, as reported above that said no problem with concrete in 2010, gave the County of Marin a $200,000 grant to develop an ordinance to reduce standard concrete use in Marin and finding alternatives. A-14

How many tons and cubic yards of concrete will be poured for this project, Bridge and retaining walls?

From The Report: 4.1 Aesthetics c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project A-15

19.
conflict with applicable zoning and other regulations governing scenic quality? b) No Impact. As stated above, Meadow Way is not a designated state scenic highway, and there are no state scenic highways adjacent to the project site. The existing bridge and the approaches to the bridge have no heritage trees, unique geological features, or historic buildings within a state scenic highway. Therefore, the project would have no impact.

A-15

Frank Egger Response: The new Bridge will have No Impact? Meadow Way is a tiny, quiet, rural road, a hideaway from busy Cascade Drive, Bolinas Road and downtown Fairfax. Both the southeast and southwest sides of the Bridge will be stripped bare and denuded. All trees and shrubbery will be removed. This Initial Study and Mitigated Negative Declaration is geared to a big city and does not take into account small town liveability and values. The end project will look like it belongs in a very busy urban setting.

From The Report: 4.16 Recreation RECREATION — Would the project: Potentially Significant Impact- Less than Significant with Mitigation Incorporated- Less than Significant Impact- No Impact. Environmental Setting. The recreational parks within the general vicinity of the project site are the Contratti Park Baseball Field and Doc Edgar Park. Discussion of Impacts a) No Impact. The purpose of the proposed project is to replace an existing bridge and the project would not involve the construction of any additional housing or businesses that could increase residents and/or employees in the project site. The proposed project would not increase the use of nearby recreational facilities. Therefore, no impact would occur. b) No

A-16

20.
Impact. The purpose of the proposed project is to replace an existing bridge and the project site does not include any recreational facilities. The proposed project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impact would occur

A-16

Frank Egger Response: This project blocks historical public access to the Creek for Blackberry pickers, kids playing in the Creek and adults hiking the Creek that have used the trail next to the Bridge for public access to the public property for 70+ years. This is the Meadow/Cascade neighborhood access point to the informal Meadow Way Recreational Area and it will be cut off.

From The Report: 40 feet of public right of way. The Report claims there is a 40 foot street right of way on Meadow Way and the proposed Bridge location will be moved 7 or 8 feet to the south.

Frank Egger Response: There have been a number of surveys along Meadow Way that dispute that statement. The southside of Meadow Way is shown on one Assessor's Parcel Page and the northside is shown on another Assessor's Parcel Page. A survey of 1 Meadow Way disputes the 40 foot public right of way. The current Meadow Way Bridge is approximately where the first Meadow Way Bridge was located. The pavement matches the Bridge approaches. Moving the Bridge 7 or 8 feet to the south, will require realigning the Meadow Way pavement to the south on both sides of the bridge. It will eliminate eight to ten parking spaces along the southside of Meadow Way, make

A-17

21.
the home at 333 Cascade Drive have a non-conforming front setback and the same for 6 Meadow Way. 6 Meadow Way has been a two unit building since we looked at it for sale in 1962. It will eliminate two of 6 Meadow Way's 4 off-street parking spaces, leaving only the two in their garage. 6 Meadow Way will become non-conforming. A-17

The applicant must conduct a current survey of both sides of Meadow Way from Cascade Drive to the Meadow Way T.

From The Report: 4.19 Utilities and Service Systems
UTILITIES AND SERVICE SYSTEMS — Would the project:
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? A-18

Frank Egger Response: Because the Bridge is being moved 7 to 8 feet south, the Ross Valley Sanitary District and Marin Municipal Water District will have to relocate their service lines a few feet for the eastside service of the Bridge. Relocating the Bridge 7 or 8 feet to the south puts an unnecessary expense on the ratepayers of those public districts.

4.21 Mandatory Findings of Significance: Discussion a) Less than Significant with Mitigation Incorporated. The project would not affect natural habitats or federally or state-listed species. Impacts on wildlife would be less than significant after implementation of avoidance, minimization, and mitigation A-19

22.
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 mitigated to a less than significant levels by mitigation measures CULT-1 and CULT-2

Frank Egger Response: The proposed mitigation measures are not sufficient to protect natural habitats and listed species. Having another public agency driving Northern Spotted Owls out of the immediate area for ten years is significant. Excavating the creek and building another 120 feet of concrete retaining walls in the creek over a two to three year period will continue the central California coast steelhead's rapid downward spiral towards extinction in the headwaters of Corte Madera Creek. A-19

Figure 5. Special-status Wildlife Species Documented within 5 kilometers of the Biological Study Area.
Meadow Way Bridge: No 27C-0008.
*Northern spotted owl occurrences are sensitive and not shown on this figure.

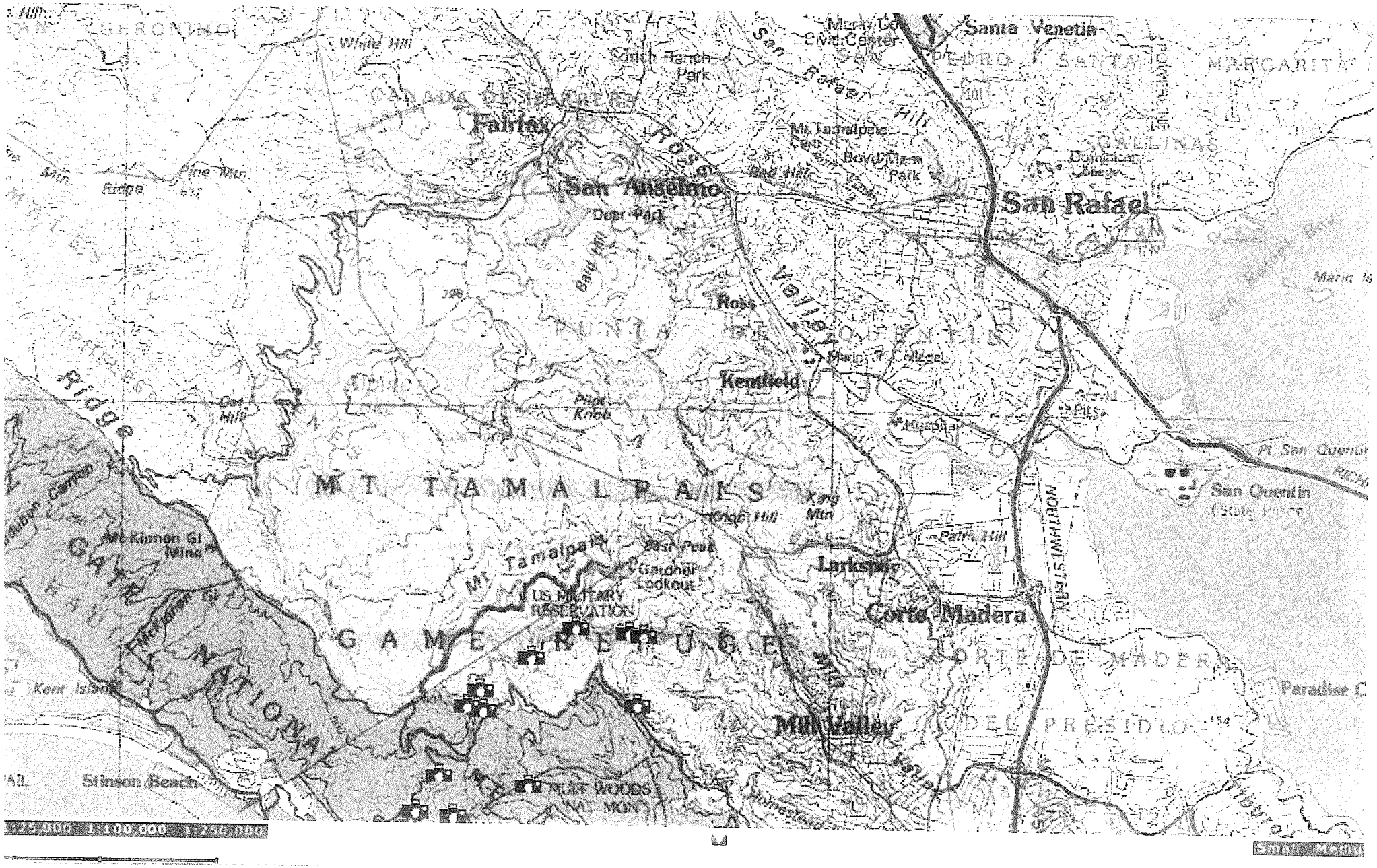
A-20

Frank Egger Response: This map does not represent actual facts regarding listed species. While the report says Northern Spotted Owl occurrences are sensitive, it does not even acknowledge how close known Northern Spotted Owl nesting sites are and their habitat really is. It shows the closest Yellow Legged Frog habitat 3 miles away when it is less than 1,000 feet away. If the general breeding season is Feb thru August, that would reduce the

23.
period of time to work on the project from Sept 1st to Oct 15th, thus a month and a half window pushing the project to a three year project. Photos of proximity of NSO nest tree, map of the State Game Refuge & where YLFs were found are attached.

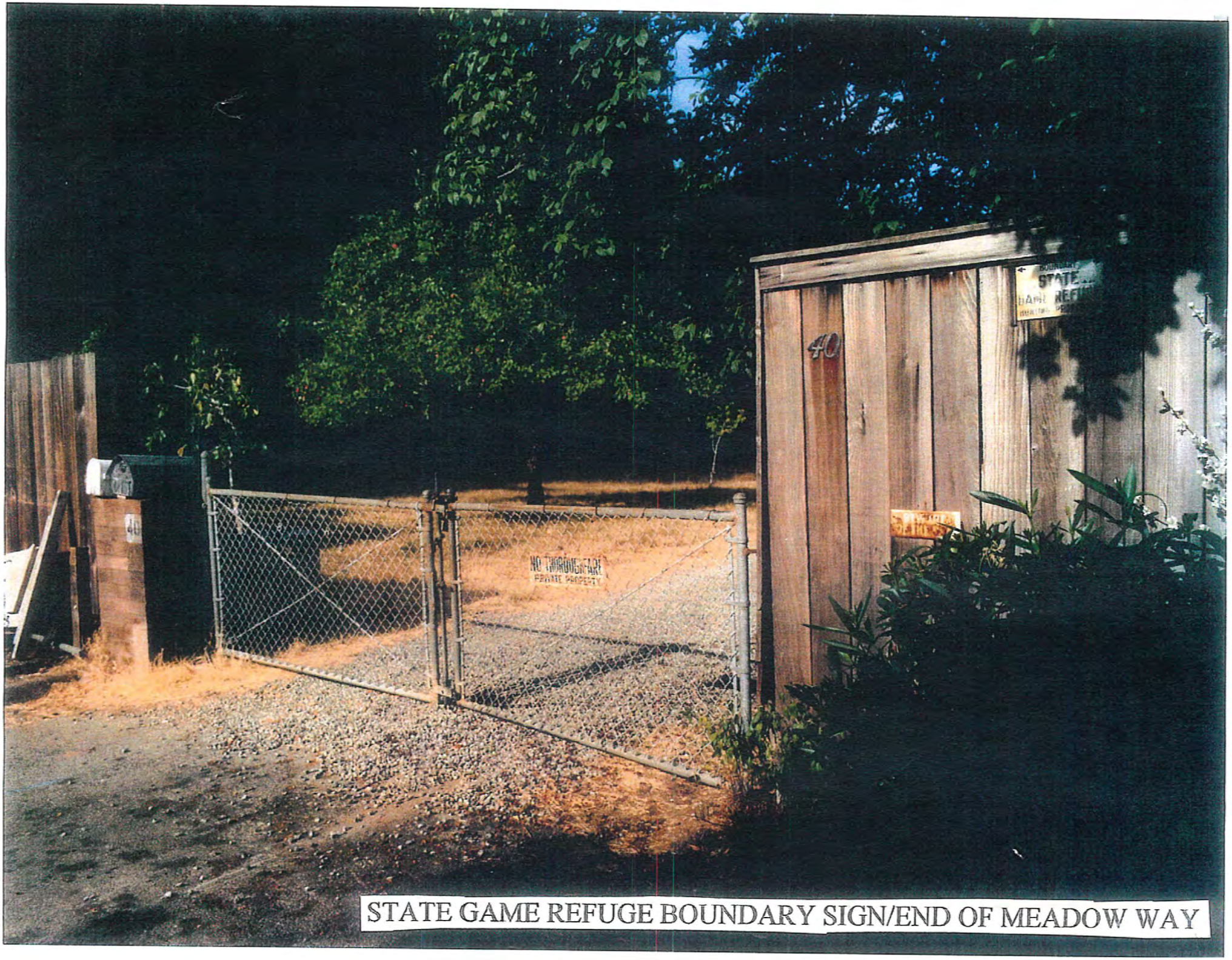
For the above responses to the report, it is clear a full Environmental Impact Report is required under the California Environmental Quality Act.

A-20



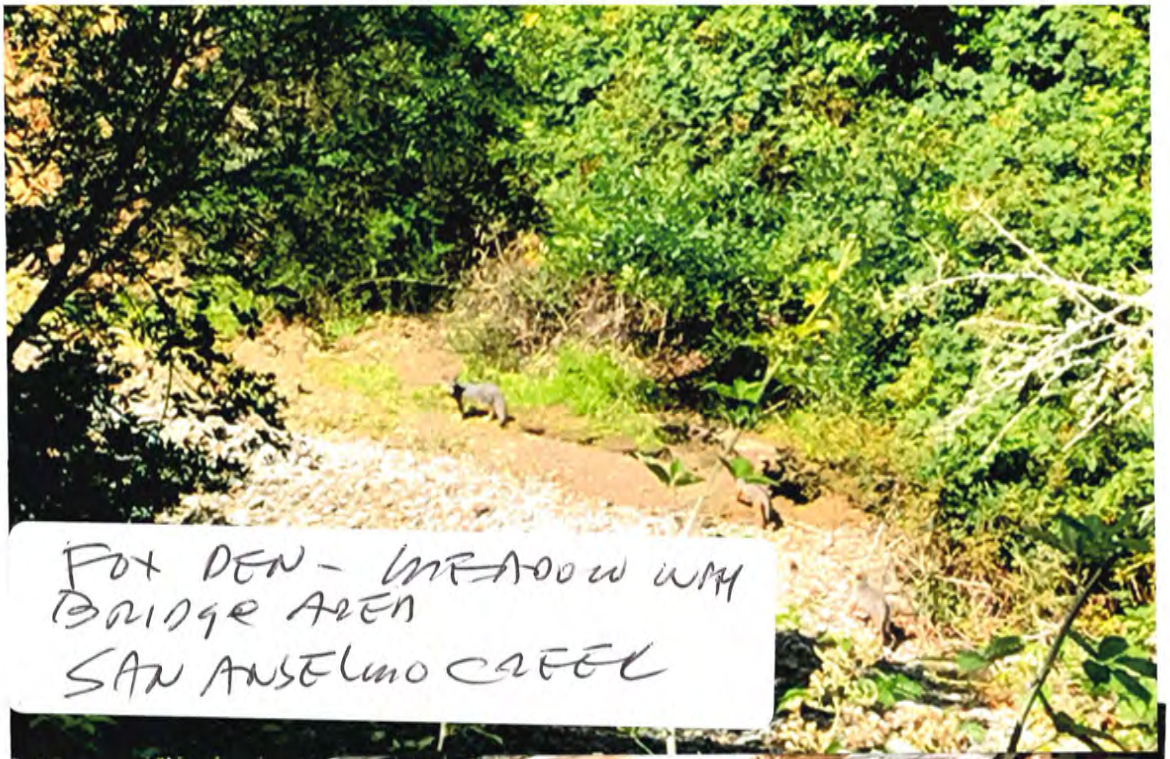
MT. TAM GAME REFUGE
FAIRFAX AREA IN GREEN

YLF SITE (FROG)
CASCADE CANYON

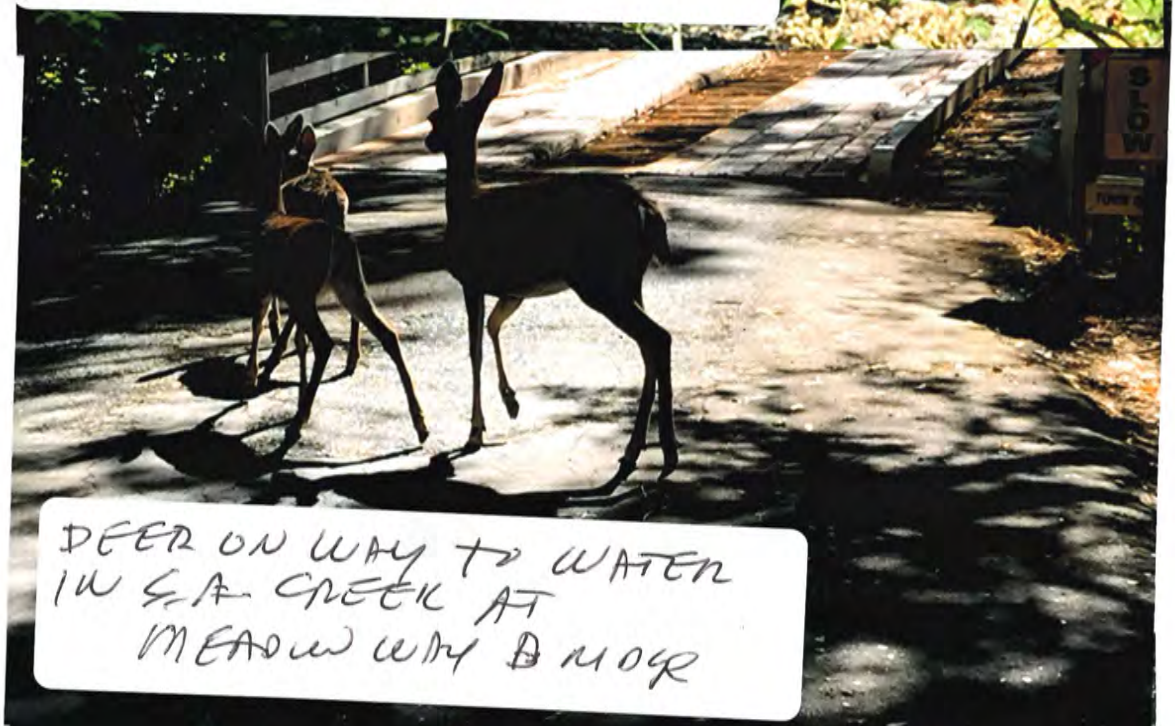


STATE GAME REFUGE BOUNDARY SIGN/END OF MEADOW WAY

NSO NEST TREE
CASCADE CANYON



FOX DEN - MEADOW WAY
BRIDGE AREA
SAN ANSELMO CREEK



DEER ON WAY TO WATER
IN S.A. CREEK AT
MEADOW WAY & MOR

DEER HEADING DOWN
HISTORICA GAME AND page 6
TRAIL TO S.A CREEK WATER

STEELHEAD SAN ANSELMO CREEK
BETWEEN MEADOW WAY AND
PASTORI BRIDGE

STEELHEAD BETWEEN
PASTORI AND MEADOW WAY
BRIDGE - SA CREEK

STEELHEAD FRY RESCUED FROM MEADOWWAY BRIDGE AREA

2ND NSO SITE - CASCADE CANYON

NSO undisclosed site
CASCADE CANYON

Response to Comment A-1

The Town of Fairfax apologizes for the Draft Initial Study/Mitigated Negative Declaration (IS/MND) not being posted on the Town's Bridges Website on the first day of the 37-day public review period. However, a copy of the Draft IS/MND was made available at the Town for the full 37-day public review period. CEQA Guidelines Section 15073(a) requires a minimum 30-day public review period for mitigated negative declarations that are submitted to the State Clearinghouse for review by state agencies, which is the case of the Draft IS/MND for the Meadow Way Bridge Replacement Project where the Draft IS/MND was submitted to the State Clearinghouse on December 16, 2020. Also, in a letter to the Town of Fairfax dated January 24, 2020 the State of California Office of Planning and Research State Clearinghouse and Planning Unit acknowledged that the Town has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA.

Response to Comment A-2

The Draft IS/MND is not insufficient to make a determination that an Environmental Impact Report (EIR) pursuant to CEQA is not required for the proposed project. The Draft IS/MND identifies potentially significant environmental impacts for eleven topics, including biological resources, and includes feasible mitigation measures to reduce such impacts to a "less-than-significant" level. As all potentially significant impacts would be reduced to a less-than-significant level, an EIR is not required to be prepared by the Town of Fairfax. Also, in a letter to the Town of Fairfax dated January 24, 2020 the State of California Office of Planning and Research State Clearinghouse and Planning Unit stated that no state agencies submitted comments by the Draft IS/MND public review deadline of January 22, 2020. The State Clearinghouse also acknowledged that the Town has complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to CEQA.

Response to Comment A-3

The commenter cites information about the project that was posted on the City's website in 2016 and fails to provide any specific comments regarding the adequacy of the Draft IS/MND. In addition to compliance with CEQA, the proposed project was also subject to environmental review pursuant to the National Environmental Policy Act (NEPA) as the project involves federal funding. Caltrans Local Assistance, with the assistance from environmental consultants, prepared a NEPA Categorical Exclusion supported by various technical reports and memorandums, as cited by the commenter. As the project qualified for a NEPA Categorical Exclusion, an Environmental Impact Statement (EIS) pursuant to NEPA was not required to be prepared. In a letter to the Town of Fairfax dated October 1, 2019 the State of California Department of Transportation (District 4 Office of Local Assistance) confirmed that the Town's NEPA Categorical Exclusion for the project had been reviewed and approved by Caltrans in conformance with NEPA. Please refer to Response to Comment A-2 regarding why an EIR pursuant to CEQA was not required to be prepared for the project.

Response to Comment A-4

The commenter cites information about the project that was posted on the City's website in 2016 and fails to provide any specific comments regarding the adequacy of the Draft IS/MND. At the initiation of the CEQA and NEPA processes and based on the professional judgement of environmental consultants and staff, the Town of Fairfax and Caltrans Local Assistance preliminarily determined that the proposed project would not likely require an EIR pursuant to CEQA nor an EIS pursuant to NEPA. This was based in part on the anticipation that all potentially significant impacts related to the project could be reduced to a less-significant level. Based on the conclusions of the CEQA Initial Study and NEPA Categorical Exclusion, the Town and Caltrans Local Assistance confirmed that an EIR pursuant to CEQA nor an EIS pursuant to NEPA would be required for the project, respectively.

The remainder of the comment does not address the adequacy of the Draft IS/MND; therefore, pursuant to Section 15204 of the CEQA Guidelines, no further response is required.

Response to Comment A-5

The commenter describes the project description and suggests that the Draft IS/MND was written to accomplish the goal of not requiring and EIR or EIS for the project. The commenter also describes past creek bank protection efforts by FEMA and others within San Anselmo Creek and inquires if the Town will be required to repay FEMA for the retaining wall they financed in 2005.

As described in Response to Comment A-4, based on the conclusions of the CEQA Initial Study and NEPA Categorical Exclusion, the Town and Caltrans Local Assistance determined that an EIR pursuant to CEQA nor an EIS pursuant to NEPA would be required for the project, respectively. Past improvements within San Anselmo Creek by FEMA and others are not a part of the project. The commenter does not address the adequacy of the Draft IS/MND; therefore, no further response is required.

Response to Comment A-6

The commenter suggests that data provided by the Draft IS/MND consultant is either missing important information or contains misinformation regarding four listed species that are present in the Cascade Canyon area and the Meadow Creek Bridge: Coho, CCC Steelhead, Northern Spotted Owl, and Yellow-Legged Frogs. Please refer to Responses to Comments A-7, A-8, A-9, and A-10.

Response to Comment A-7

The commenter cites information regarding the Northern Spotted Owl (NSO) from the Draft IS/MND and suggests the project's impacts to NSO are not mitigated and that NSOs are ever present in the canyon. The commenter states that the project would run the NSOs out of the area for ten years, cites the NSO nesting season, and recommends no project construction occur before August 1 or September 1.

Page 37 of the Draft IS/MND states that NSO's preferred habitat consists of old-growth forests or mixed stands of old-growth and mature trees, and occasionally in younger forests with patches of

big trees. NSO prefers high, multistory canopy dominated by big trees, trees with cavities or broken tops, woody debris and space under canopy. The project site and immediately surrounding area are low-density residential developments and riparian woodland; however, riparian redwood forest community is in proximity to the project site. This species has been documented to nest in dense forest approximately 0.28 miles southwest of the project site. No nesting habitat is present in the project site.

Page 42 of the Draft IS/MND states that although the project site itself does not contain suitable habitat for nesting northern spotted owl, the nearby vicinity does, and noise impacts at the project site could adversely affect the northern spotted owl. With implementation of Mitigation Measure BIO-2, impacts to nesting avian species would be less than significant.

Mitigation Measure BIO-2 (Nesting Birds) is provided on page 43 of the Draft IS/MND and is copied below. This measure was approved by the US Fish and Wildlife Service (USFWS) as a part of informal consultation between the Town's CEQA/NEPA consultant and USFWS. Refer to Appendix A of the Draft IS/MND for more detailed biological resources reports (i.e., Natural Environment Study and Biological Assessment).

Mitigation Measure BIO-2 – Nesting Birds

Prior to the issuance of construction permits, final avoidance and minimization measures shall be determined in consultation with the USFWS to ensure project design including avoidance and minimization measures do not result in adverse effects to NSO. The project shall adopt measures as mandated by USFWS, which may include, but is not limited to, the following:

- *Work within the project site will be conducted outside the nesting season (September 1 through January 31) to avoid disrupting nesting NSO within and adjacent to the site. Work outside of this period during the nesting season will require protocol-level surveys to determine nesting status and location and consultation with the USFWS and CDFW.*
    - *If protocol-level surveys indicate that NSOs are nesting within the potential acoustic impact distance to be determined in consultation with the USFWS, project work may not commence until the end of the nesting season, i.e. September 1, or be limited to work within certain acoustic levels based upon distance from the nest and in consultation with the USFWS.*
    - *If protocol-level surveys determine that NSO are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence June 1. June 1 is the earliest date non-nesting status can be confirmed.*
- *If project work begins in the non-nesting season and is to continue into the nesting season, project work will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area.*

Response to Comment A-8

The commenter cites text from the Natural Environment Study (NES) in Appendix A to the Draft IS/MND related to foothill yellow-legged frog and suggests that the Draft IS/MND is way off base and includes misinformation. The commenter states that Marin County identified the foothill yellow-legged frog near the project site in 2002 and that there have been more recent discoveries of this species 3,696 feet upstream in San Anselmo Creek.

As acknowledged by the commenter, page 43 of the NES included in Appendix A to the Draft IS/MND states that this species has not been documented within the watershed, and the closest documented occurrence is 2.9 miles east of the Biological Study Area (BSA) in a different watershed (CDFW 2018a) and that this section of San Anselmo Creek is not perennial. The California Natural Diversity Database (CNDDB) was reviewed as part of the assessment for special-status species including foothill yellow-legged frog. At the time of review in early 2018, there were no records in CNDDB of foothill yellow-legged frog in San Anselmo Creek. Several occurrences have been entered since this review including those in Marin County Open Space District upstream of the BSA. Although the habitat upstream is suitable, downstream occurrences are still marked as “extirpated” in the CNDDB. The section of San Anselmo Creek within the BSA is not perennial and foothill yellow-legged frog is typically found within a few meters of water in the dry season. Measures to protect steelhead include limiting work to the dry season, June 1 – October 15. This work window measure would protect foothill yellow-legged frog by limiting work to the season when this species is not likely to be present in the BSA because of dry conditions. Based on the habitat conditions within the BSA, foothill yellow-legged frog is not anticipated to be present during the work period and no impacts are anticipated. The proposed project would create a freespan bridge and restore fish habitat which would also result in benefits to foothill yellow-legged frog.

Response to Comment A-9

The commenter cites a portion of the Draft IS/MND related to Coho salmon, including that San Anselmo Creek is designated as critical habitat for this species but that it is now considered extirpated from the tributaries of San Francisco Bay. The commenter cites the history of Coho salmon in the Marin County and states the project would hasten the extinction of steelhead. The commenter also recommends the Town of Fairfax, CDFW, and Caltrans restore central California coast Coho runs in San Anselmo Creek and prevent the extirpation of steelhead.

This comment is noted. Pages 42 and 43 of the Draft IS/MND includes a discussion of the project’s potentially significant impacts to steelhead and includes feasible mitigation measures to ensure such impacts are reduced to a less-than-significant level. Also, in a letter to Caltrans Office of Local Assistance dated July 8, 2020 regarding Fairfax bridge projects, including the proposed project, the National Marine Fisheries Service (NMFS) stated that NMFS concludes the Fairfax bridge projects are not likely to jeopardize the continued existence of threatened CCC steelhead, nor are the projects likely to result in the destruction of or adverse modification of its critical habitat. NMFS also stated that the proposed Fairfax bridge projects are not likely to adversely affect designated critical habitat for CCC coho salmon.

Response to Comment A-10

The commenter cites a portion of the Draft IS/MND related to central California coast steelhead and that this species is present in San Anselmo Creek. The commenter states that the fish barrier at Bolinas Road isn't a barrier and steelhead continue to make it up at that location. The commenter states that the barrier at Pastori Bridge is an old fish ladder that gets clogged with debris and during storms and blocks fish migration and requires on-going maintenance. The commenter states that the same issue exists at the Canyon Road Bridge fish ladder and that SPAWN ran a permitted steelhead rescue 15 years ago. The commenter acknowledges more steelhead fry could be rescued by SPAWN annually at, above, and below the Meadow Way Bridge, and states he has seen steelhead fry in watering holes at the Meadow Way Bridge.

This comment is acknowledged. Please refer to Response to Comment A-9.

Response to Comment A-11

The commenter cites a wildlife movement question from the Draft IS/MND and notes that the Draft IS/MND concludes that the project would result in a less-than-significant impact related to wildlife movement. The commenter states that the project will interfere with unreported native wildlife in the area, including California mountain lion, gray fox, and deer, and that the commenter is aware such species use the project area. The commenter inquires how the project will impact the lion, and recommends that the Town set up game cameras in the vicinity of the bridge, at the bridge and above and below the bridge for one year prior to the Town's adoption of the Final IS/MND. Lastly, the commenter notes that the preparation of an EIR for the project would allow for the consideration of alternatives to constructing an access road into the creek and the possibility of lowering heavy equipment into the creek instead.

The construction phase of the project may discourage the wildlife species cited by the commenter from traversing the construction site, particularly during the day when work is in progress. However, the construction phase of the project would not preclude wildlife from using the site particularly at night. After construction wildlife movement impacts at the project site would be negligible as such species adapt to the rural residential character to the project area. The project would result in a freespan bridge and remove piles from the creek bed. The removal of piles and fish restoration program proposed by the project would reduce obstructions to wildlife movement in the creek bed including mountain lions, gray fox, and other locally common species.

The commenter's recommendation for a game camera at the site would be at the discretion of the Town. If appropriate, the Town will conduct a CEQA analysis for any alternatives, if considered, to the construction of an access road. As a part of the bridge design process a variety of project alternatives were considered by the bridge engineers. Also, as stated in Response to Comment A-4, all potentially significant impacts related to the project can be mitigated to less-than-significant levels, and therefore a Mitigated Negative Declaration is sufficient for the project instead of an EIR.

Response to Comment A-12

The commenter cites a portion of the Draft IS/MND related to public views and the project's removal of vegetation and trees during construction as well as how replanting would over time return the views to existing conditions. The commenter states that the public has had access to the creek forever and that the project would cut off access for the public and animals. The commenter states that the impact to an existing Valley Oak has yet to be determined and inquires as to the method of removing the existing blackberry bushes, how to guarantee the blackberry bushes will grow back and what is the impact to birds that feed on the blackberries. The commenter also inquires about the size of trees to be replanted and how long with it take for the trees to regrow to ensure adequate shade is provided for steelhead fry.

The project will not permanently block public access to the creek and other access points to the creek will remain unaffected by the project. Please refer to Response to Comment A-11 regarding the project's less-than-significant impacts related to wildlife movement. Page 47 of the Draft IS/MND includes the following impact analysis and mitigation measures related to tree removal and blackberry bushes:

> *As stated in the Project Description above, the proposed project would include the removal of a bay tree and invasive blackberry bushes on the southwest corner of the new bridge, and pruning and removal of other vegetation in the construction zones. The Town's Tree Ordinance requires a permit for the removal or relocation of any tree with a circumference of 24-inches or more measures at 24 inches above the ground. The removal of the bay tree on-site would result in a potentially significant impact. However, implementation of Mitigation Measure BIO-4 would require the Applicant to submit an application for a tree removal permit, comply with all conditions of approval listed within the permit, and prepare a Tree Protection Plan for the other surrounding trees. A Planting Plan will be prepared for revegetation of the site, which includes native riparian trees, shrubs, vines, groundcover, and willows. The planting plan will consider native blackberry bushes in its development. Implementation of Mitigation Measures BIO-4 would reduce this potentially significant impact to a less-than-significant level. The proposed project would not conflict with any other applicable policies for the purpose of protecting biological resources.*
>
> *Mitigation Measure BIO-4*
>
> *Prior to issuance of a grading permit, the Town shall apply in writing to the Director for a tree removal permit, mark each tree to be considered for removal, and provide public notice per the Town's requirements.*
>
> - *The Tree Committee may require the Applicant to submit his or her application to a Qualified Arborist designated by the town for a report and recommendation, for which the Applicant shall bear all expenses.*
> - *Reasonable conditions of approval may be attached to any tree removal permit including, but not limited to, the replacement of removed trees.*

- *The project shall replace any removed trees shall at a minimum ratio of 1:1.*
- *A Qualified Arborist shall prepare a Tree Protection Plan in order to protect trees during construction of the proposed project and to maximize their chances for survival.*

It is anticipated the size of the trees to be replanted will be 5 to 15 gallons size which could take up to five years for moderate shading. However, pages 18 and 19 of the Draft IS/MND explain that a program of fish habitat restoration, using bio-engineering techniques, low earth berms and woody nooks, designed specifically for the site, will be implemented. The current proposed location of the large wood is the bank along the access route, immediately upstream of the new retaining wall on the north side. A layer of large logs will be laid in a grid at the bottom of the excavation and on the creek bed, to be incorporated in the log-root wad revetment structure. The logs will be rot-resistant species, such as eucalyptus and redwood, typically obtained as re-purposed salvage from local urban tree removal companies. The structure will be designed so that the log grid is made integral with large rock rip-rap pieces placed within it and stacked under the new overtopping embankment slope. The ends of the logs perpendicular to the creek centerline will protrude out of the base of the embankment into the creek's edge flow, catching small woody drift. The base of the embankment will be planted with native plants and small trees to create near-shore overhanging vegetation. In conjunction with the revetment, the creek bed in front of the revetment structure will be re-contoured to create pools for fish. The net effect will be restoring the site to a deep and wide soil "trough" traversing the bridge site for natural fish passage without any obstructions in the creek other than creek materials and native plants. Also, the removal of the blackberry bushes is not anticipated to result in any significant impacts to birds.

Response to Comment A-13

The commenter cites portions of the Draft IS/MND related to San Anselmo Creek being an intermittent creek as well as creek flow conditions observed by the project biologists. The commenter states he has seen the creek from 10-12 feet high under the bridge in multiple years as well as debris flowing down the creek and under the bridge. The commenter notes that preparation of an EIR for the project would provide time to place gauges in the creek to determine flows and that wildlife cameras would also help monitor creek flows.

The commenter's recommendation to prepare an EIR for the project to allow time to place gauges in the creek and to use wildlife cameras to monitor creek flows is noted. As stated in Response to Comment A-4, all potentially significant impacts related to the project can be mitigated to less-than-significant levels, and therefore a Mitigated Negative Declaration is sufficient for the project instead of an EIR.

Response to Comment A-14

The commenter cites a greenhouse gas emissions question (also known as a CEQA Threshold of Significance) from page 58 of the Draft IS/MND as well as a paragraph provided under the Environmental Setting on page 58. The commenter also states the Draft IS/MND's conclusion of "Less than Significant" which is provided on page 58 in response to the following question:

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

The commenter states that the production of cement accounts for roughly eight percent of global greenhouse gas emissions and that the project would use concrete in the construction process. The commenter recommends alternatives such as a steel drop-in bridge to reduce costs and the amount of concrete proposed to be used. The commenter also inquires how many tons and cubic yards of concrete would be required for the project.

The commenter is correct that the Draft IS/MND concludes that the project would result in a Less than Significant impact related to greenhouse gas emissions. See pages 58 and 59 of the Draft IS/MND.

The commenter's recommendation of an alternative steel drop-in bridge is noted. Preliminary estimates show an approximate total of 400 cubic yards of concrete will be poured, nearly half of which will be footings and wall portions below the surface.

The commenter does not address the adequacy of the Draft IS/MND; therefore, no further response is required.

Response to Comment A-15

The commenter cites questions 4.1c and 4.1b on page 23 of the Draft IS/MND related to Aesthetics impacts of the project. The commenter also cites the third full paragraph from page 24 of the Draft IS/MND related to scenic highways. The commenter questions the No Impact conclusion in Section 4.1b on page 24 of the Draft IS/MND related to scenic highways and states that the project will look like it belongs in a very urban setting.

The No Impact conclusion for Section 4.1b of the Draft IS/MND is based on the fact that Meadow Way is not a designated scenic highway, that the existing bridge and the approaches to the bridge have no heritage trees, unique geological features, or historic buildings within a state scenic highway. Therefore, the project would have No Impact in this regard.

Response to Comment A-16

The commenter cites portions of Section 4.16 on page 83 of the Draft IS/MND related to Recreation. The commenter states that the project would block historical public access to the creek and the existing trail next to the bridge.

The project will not permanently block public access to the creek and other access points to the creek will remain unaffected by the project.

Response to Comment A-17

The commenter states that the Draft IS/MND claims there is a 40 foot street right-of-way on Meadow Way and the proposed bridge location will be moved seven or eight feet to the south. The commenter states that there have been a number of surveys along Meadow Way that dispute this statement and that the project will result in the permanent loss of parking and make some existing homes have non-conforming front setbacks.

This comment is noted.

Response to Comment A-18

The commenter cites portions of Section 4.19 (Utilities and Service Systems) on page 91 of the Draft IS/MND. The commenter states that because the bridge is being moved seven to eight feet to the south it will require the relocation of service lines under the jurisdiction of the Ross Valley Sanitary District and Marin Municipal Water District which puts an unnecessary expense on the ratepayers of those public districts.

This comment is noted.

Response to Comment A-19

The commenter cites portions of Section 4.21 (Mandatory Findings of Significance) on page 97 of the Draft IS/MND. The commenter states that proposed mitigation measures in the Draft IS/MND are no sufficient to protect natural habitats and listed species.

Please refer to Responses to Comments A-7, A-8, A-9, and A-10.

Response to Comment A-20

The commenter states that Figure 5 (Special-Status Wildlife Species Documented within 5 Kilometers of the Biological Study Area) does not represent actual facts regarding listed species and the proximity of such species to the project site. The commenter references attached photos and maps of such species.

Please refer to Responses to Comments A-4, A-7, A-8, A-9, and A-10. Figure 5 in Appendix A of the Draft IS/MND is based on CDFW's CNDDB. The "2001 Spotted Owl Nest Site in Cascade Canyon, Fairfax, California" map provided by the commenter has not been included in this Final IS/MND as the map states "Sensitive Information – Not for Public Distribution".

8.0 MEADOW WAY BRIDGE REPLACEMENT PROJECT 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.*

The MMRP lists the potentially significant impacts and proposed mitigation measures identified in the Meadow Way Bridge Replacement Project Initial Study/Mitigated Negative Declaration. The MMRP describes the timing of implementation of the mitigation measures (i.e., when the measure will implemented) and the Town of Fairfax staff or individual responsible for ensuring implementation of the measures. Finally, the MMRP describes the Town of Fairfax staff member or individual responsible for monitoring the mitigation measures.

Mitigation Monitoring and Reporting Program

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
AESTHETICS				
Impact 4.1d: Light and Glare	***Mitigation Measure AES-1*** Prior to issuance of the building permit, an exterior lighting plan shall be submitted for review and approval by Town staff. The lighting plan shall include but not necessarily be limited to the following: • The exterior lighting plan shall show all potential light sources with the types of lighting and their locations. • Exterior lighting shall include low mounted, downward casting, and shielded lights that do not cause spillover onto adjacent properties. • Floodlights shall not be used • Lighting shall not "wash out" structures or any portions of the site. • Low intensity, indirect light sources shall be required. • Mercury, sodium vapor, and similar intense and bright lights shall not be permitted except where their need is specifically approved, and their source of light is restricted. • All light sources shall be fully shielded from off-site view. • All lighting shall be installed in accordance with building codes and the approved lighting plan during construction.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to and during construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
AIR QUALITY				
Impact 4.3b: Result in a cumulatively considerable net increase of any criteria pollutant ***Impact 4.3c: Expose sensitive receptors to substantial pollutant concentrations*** ***Impact 4.3d: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people***	***Mitigation Measure AIR–1*** The contractor shall be responsible for implementing the following basic measures: • 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 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. • 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 the manufacturer's	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	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. • All diesel engines used during construction shall meet EPA "Tier 2" engine standards identified in 40 CFR 89, or more stringent standards.			
BIOLOGICAL RESOURCES				
Impact 4.4.a: Sensitive or special-status species	***Mitigation Measure BIO-1 – Special-Status Fish Species*** Prior to the issuance of construction permits, consultation with NMFS shall be conducted to ensure proposed project design will not result in permanent adverse effects to steelhead, critical habitat, or EFH. The project shall adopt measures as mandated by NMFS, which may include, but is not limited to, the following: • Work shall be conducted in isolation from flowing water. If water is present, prior to the start of in-water activities, the work area will be isolated using	***Implementation Responsibility:*** Town-approved Consulting Biologist ***Monitoring Frequency:*** Prior to and during construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	temporary cofferdams, and flowing water shall be temporarily diverted around the isolated area. • A fish salvage will be completed if water remains in the project site after the start of construction. A fish rescue and relocation plan shall be developed prior to the onset of any in-water work. The plan shall be implemented by a qualified biologist during dewatering activities in San Anselmo Creek. The fish rescue and relocation plan shall include an overview of the proposed methods for dewatering, expected location and duration of dewatering activities, and methods for conducting fish rescue and relocation during dewatering activities. • If de-watering is necessary, pumps with 0.2-inch mesh will be used to remove standing water from the work area within the coffer dams to a filtration basin to prevent direct discharge into the creek. If a filtration basin is not available, filter bags will be placed surrounding the hose-release and the hose-release end will be placed on a level area outside of the wetted creek channel to allow water to settle prior to returning to the creek. No pumped water will be directly discharged into the creek. Allowing the pumped water to settle in a filtration basin or release through filter bags will prevent increase in turbidity or sediment loads during the de-watering process.			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	• Concrete, dust, and other debris from concrete removal activities will be captured and removed from the work site so as not to enter the creek channel. • Where disturbed, the creek bed and channel shall be restored to pre-project conditions following the completion of work. ***Mitigation Measure BIO-2 – Nesting Birds*** Prior to the issuance of construction permits, final avoidance and minimization measures shall be determined in consultation with the USFWS to ensure project design including avoidance and minimization measures do not result in adverse effects to NSO. The project shall adopt measures as mandated by USFWS, which may include, but is not limited to, the following: • Work within the project site will be conducted outside the nesting season (September 1 through January 31) to avoid disrupting nesting NSO within and adjacent to the site. Work outside of this period during the nesting season will require protocol-level surveys to determine nesting status and location and consultation with the USFWS and CDFW. ▪ If protocol-level surveys indicate that NSOs are nesting within the potential acoustic impact distance to be determined in consultation with the USFWS, project work may not commence until the end of the			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	nesting season, i.e. September 1, or be limited to work within certain acoustic levels based upon distance from the nest and in consultation with the USFWS. ▪ If protocol-level surveys determine that NSO are not nesting or not nesting within the potential acoustic impact zone during the year of the surveys, project work may commence June 1. June 1 is the earliest date non-nesting status can be confirmed. • If project work begins in the non-nesting season and is to continue into the nesting season, project work will cease January 31 and will not recommence until protocol-level surveys as described above determine the nesting status of the survey area.			
Impact 4.4b: Have a substantial adverse effect on any riparian habitat or other sensitive natural community ***Impact 4.4c: Have a substantial adverse effect on state or federally protected wetlands***	***Mitigation Measure BIO-3 –Intermittent Streams*** The project shall implement the following measures to avoid and/or minimize and restore potential impacts to creek habitat resulting from the use of mechanical equipment in the creek bed. • The primary construction in the creekbed will be completed between June 1 and October 15, and work within the creek bed and banks will occur when the work area is dry or dewatered. • Final grading in the creek bed will conform to the existing creek channel both downstream and	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to, during, and after construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	upstream (except in the areas of permanent fill), and existing bed materials will be replaced with similar sized materials. • Regulatory approval will be obtained for all work within potential jurisdictional areas, including the USACE, RWQCB, CDFW, and NMFS. All work within these areas will conform to any conditions imposed by the regulating agencies. • Prior to clearing, grubbing, pruning, or groundbreaking activity, the limits of construction will be fenced with temporary high-visibility construction fencing to protect environmentally sensitive areas and to prevent any equipment from unnecessarily extending the work area or entering the creekbed. In addition, silt fencing will be installed where appropriate to prevent debris from entering the creek. All fencing will be removed upon project completion. • Prior to construction, the contractor will be required to prepare an Accidental Spill Prevention and Cleanup Plan. • To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment spill control absorbent material will be in place underneath this equipment at all times to capture potential leaks. All refueling and maintenance of equipment, other than stationary equipment, will occur outside the creek's			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	top-of-bank. Any hazardous chemical spills will be cleaned immediately. • If there are drilling activities related to construction of the proposed project the contractor will be required to use a drilling mud and slurry seal that is non-toxic to aquatic life. All drilling muds and fluid will be contained on-site in tanks and disposed of in a permitted manner. Fluids from saw cutting and other activities will be collected and not allowed to flow into the creek. • No equipment, including concrete trucks, will be washed within the channel of the creek, or where wash water could flow into the channel. Prior to proposed project construction, the contractor will establish a concrete washout area for concrete trucks in a location where wash water will not enter the creek or adjacent areas. The washout area will follow the practices outlined in the San Francisco Bay Regional Water Quality Control Board Erosion and Sediment Control Field Manual (page 107-108, July 1999) or more recent guidelines. Substitution of the designated concrete washout area or methods will require prior approval of the Town of Fairfax. • All water that comes in contact with wet concrete will be pumped directly into tanks and disposed of at a permitted location.			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	• When working on the roadway and bridge approaches during the October 15 to June 1 period, all drainage inlets within the proposed project site will be protected from receiving polluted stormwater through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs. • Water encountered during construction of the bridge foundations will be managed in accordance with an approved dewatering plan. • All workers will ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the BSA are deposited in covered or closed trash containers. The trash containers will not be left open and unattended overnight. • At the end of construction, the Town of Fairfax will require that seed and certified weed-free straw will be placed on disturbed areas in the proposed project site (with the exception of the lower creek banks, creek bed, and areas below the OHW mark). A jute mesh type or equivalent matting will be placed over the straw, installed per the manufacturer's instructions. This matting will have no plastic incorporated into it. Substitution of materials or erosion control methods will require prior approval of the Town of Fairfax. • After construction, the proposed project site will be inspected following the first heavy rain, during the middle of the rainy season and at the end of the rainy			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	season. During each visit areas of significant erosion or erosion control device failure will be noted and appropriate remedial actions taken.			
Impact 4.4e: Conflict with any local policies or ordinances protecting biological resources	***Mitigation Measure BIO-4*** Prior to issuance of a grading permit, the Town shall apply in writing to the Director for a tree removal permit, mark each tree to be considered for removal, and provide public notice per the Town's requirements. • The Tree Committee may require the Applicant to submit his or her application to a Qualified Arborist designated by the town for a report and recommendation, for which the Applicant shall bear all expenses. • Reasonable conditions of approval may be attached to any tree removal permit including, but not limited to, the replacement of removed trees. • The project shall replace any removed trees shall at a minimum ratio of 1:1. • A Qualified Arborist shall prepare a Tree Protection Plan in order to protect trees during construction of the proposed project and to maximize their chances for survival.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to ground disturbance	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
CULTURAL RESOURCES				
Impact 4.5b: Archaeological Resources	***Mitigation Measure CULT-1*** Pursuant to CEQA Guidelines Section 15064(f), the Town shall make provisions for the discovery of historical or unique archaeological resources during construction. These provisions shall include an immediate evaluation by a qualified archaeologist. If the find is determined to be a historical or unique archaeological resource, the Town shall implement at least one of the following: contingency funding and time allotment will be allocated to allow the implementation of avoidance measures, or appropriate mitigation will be available.	***Implementation Responsibility:*** Town-approved Archaeologist ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
Impact 4.5c: Human Remains	***Mitigation Measure CULT-2*** Pursuant to CEQA Guidelines Section 15064(e), upon accidental discovery of human remains during project construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the county coroner is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall subsequently identify the most likely living descendant, who may make recommendations to the landowner or person responsible for excavation for means	***Implementation Responsibility:*** Town-approved Archaeologist ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	of treating or disposing of the remains and any associated grave items. If the NAHC is unable to identify the most likely descendant, the descendent fails to make a recommendation within 24 hours of notification, or the landowner rejects the recommendation and mediation by NAHC fails to yield a mutually agreeable recommendation, the landowner or representative shall rebury the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance.			
GEOLOGY AND SOILS				
Impact 4.7aiii: Seismic-related ground failure, including liquefaction ***Impact 4.7c: Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project***	***Mitigation Measure GEO-1*** The foundations of the bridge abutments and the conventional retaining walls shall be placed on pilings that penetrate beyond the 30-foot deep liquefiable layer into stiff soils or rock. The Upper retaining wall at the southwestern project quadrant, supporting a private residential property impacted by the project, will be held against landslide with tieback elements. The retaining walls at the bridge will protect the bank slopes adjacent to the bridge against sliding and lateral spreading due to ground liquefaction. Since the soils under the approach roadways would remain liquefiable, a ten-foot-long seismic approach slab at each end of the bridge shall be included to maintain the drive to and from the bridge after a major event.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
Impact 4.7b: Result in substantial soil erosion or the loss of topsoil	Implementation of Mitigation Measures BIO-4 and HYDRO-2	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to ground disturbance	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
Impact 4.7f: Directly or indirectly destroy a unique paleontological resource or site or unique geological feature	***Mitigation Measure GEO-2*** If buried paleontological resources or unique geologic features are discovered during ground-disturbing activities, work shall stop in that area and within 100 feet of the find until a qualified paleontologist or geologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the Town of Fairfax and other appropriate agencies.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
HAZARDS/HAZARDOUS MATERIALS				
Impact 4.9a: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	***Mitigation Measure HAZ-1*** The contractor shall use catchment containers and bridge removal methods to avoid dropping pieces of the creosote-soaked timber from the existing bridge into the creek. The creosote-laden wood members shall be disposed of by the contractor at an appropriate landfill.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During and after construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	Implementation of Mitigation Measure HYDRO-2			
Impact 4.9b: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions	Implementation of Mitigation Measures HYDRO-1 and HYDRO-2	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to ground disturbance	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
Impact 4.9f: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	Implementation of Mitigation Measure TRANS-1	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
HYDROLOGY AND WATER QUALITY				
Impact 4.10a: Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality	***Mitigation Measure HYDRO–1*** Prior to the issuance of construction permits, a spill prevention and control plan shall be developed to minimize the chance of toxic spills. Spill kits shall be present for any work within San Anselmo Creek. All spills of oil and other hazardous materials shall be immediately cleaned up and	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:***	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	contained. Any hazardous materials cleaned up or used on-site shall be properly disposed of at an approved disposal facility. Additionally, the Town of Fairfax shall require the construction contractor to submit an equipment staging plan and proposed staging locations prior to the start of construction. The specifications shall include at minimum, the following requirements: • The staging area shall be located on existing asphalt or concrete surface area. No staffing shall be permitted on undeveloped lots. The Contractor shall notify the Town whether or not a suitable area is available. • The staging area shall be included in the SWPPP. • The staging area shall not be located in an environmentally or culturally sensitive area and / or impact water resources (rivers, streams, bays, inlet, lakes, drainage sloughs). • The staging area shall not be located in a regulatory floodway within the base floodplain (100-year). ***Mitigation Measure HYDRO-2*** Prior to the issuance of a construction permit, the contractor shall prepare a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the NPDES General Construction Permit. Best Management Practices shall be identified in the SWPPP to reduce or eliminate pollutants	Prior to ground disturbance		***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	from the construction site entering stormwater discharges. Implementation of BMPs shall control erosion and ensure that dirt, construction materials, pollutants, or other human-associated materials are not discharged from the project area into surface waters or into areas that would eventually drain to storm drain systems.			
Impact 4.10ci: Result in substantial erosion or siltation on- or off-site	Implementation of Mitigation Measures BIO-3 and HYDRO-2	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to ground disturbance	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
Impact 4.10d: In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation	Implementation of Mitigation Measure HYDRO-1	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** Prior to ground disturbance	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____
Impact 4.10e: Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater	Implementation of Mitigation Measures HYDRO-1 and HYDRO-2	***Implementation Responsibility:*** Town of Fairfax ***Monitoring***	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
management plan		***Frequency:*** Prior to ground disturbance		***Date*** _____
NOISE				
Impact 4.13a: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project	***Mitigation Measure NOISE-1*** In order to comply with Policy N-3.1.4, the Town of Fairfax has developed a list of Standard Controls. The project shall comply with the following measures: • Limit construction to the hours of 8:00 a.m. to 5:00 p.m. on weekdays, and 9:00 a.m. to 5:00 p.m. on Saturdays, with no noise-generating construction on Sundays or Holidays. • Control Noise from construction workers' radios to the point where they are not audible at existing residences that border the project site. • Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment. • Utilize quite models of air compressors and other stationary noise sources where technology exists. • Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.	***Implementation Responsibility:*** Contractor ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
	• Prohibit unnecessary idling of internal combustion engines. • Equipment to the extent feasible shall be stage off-site. • Notify residents adjacent to the project site of the construction schedule in writing. • Designate a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (e.g. starting too early, bad mufflers) and institute reasonable measures warranted to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site. In addition, the project shall follow the standard construction noise requirements regulated by Caltrans Sections 7-1.01I and 14-8.02 of the Standard Specifications, which states the following: • Do not exceed 86 dBA at 50 feet from the job site activities from 9 p.m. to 6 a.m. • Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.			

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
TRANSPORTATION				
Impact 4.17a: Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, and bicycle and pedestrian facilities ***Impact 4.18d: Result in inadequate emergency access***	***Mitigation Measure TRANS–1*** The Town shall require that no work or traffic control be allowed before 8:00 a.m. weekdays and 9:00 a.m. Saturdays and Sundays. No work shall be allowed after 5:00 p.m., unless otherwise noted. At least one week prior to the commencement of work, the Town shall require the contractor to provide project information signs to notify drivers of the upcoming project and potential delays. Lane closure and traffic control shall conform to the California Manual on Uniform Traffic Control Devices, Caltrans standard plans and specifications. Car and pedestrians shall be kept within the small detour area with temporary railing (Type K) and temporary fencing. The contractor will install advance warning signs to alert bicyclists and motorists of the work zone and lane closures. Advance warning signs may be reflective signs, changeable message boards, cones, and barricades. Flagging and other means of traffic control shall be required to allow for the safe movement of traffic through the work zone. The contractor shall provide flaggers to temporarily hold traffic for staging equipment or construction. Work shall be performed in a manner that is least disruptive to the public. The contractor shall consult and coordinate with the property owner if access is affected.	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
TRIBAL CULTURAL RESOURCES				
Impact 4.18ai: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources ***Impact 4.18aii: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1***	Implementation of Mitigation Measures CULT-1 and CULT-2	***Implementation Responsibility:*** Town-approved Archaeologist ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____

Environmental Impact	Mitigation Measures	Implementation Responsibility & Timing	Monitoring Responsibility	Performance Objective
WILDFIRE				
Impact 4.20: Substantially impair an adopted emergency response plan or emergency evacuation plan	Implementation of Mitigation Measure TRANS-1	***Implementation Responsibility:*** Town of Fairfax ***Monitoring Frequency:*** During construction	***Monitoring Responsibility:*** Town of Fairfax	***Initials*** _____ ***Date*** _____