

# **APPENDIX B**

## **Hazardous Materials Technical Memo**

March 4, 2019

TO: Hugo Ahumada  
Senior Environmental Planner  
Caltrans Office of Local Assistance-District 4

Federal Project No: BRLO-5927(094)

Subject: **Hazardous Materials Technical Memo**  
**Mountain View Road over San Geronimo Creek Bridge Replacement (27C0154)**

Crawford & Associates, Inc. prepared this Hazardous Materials Technical Memo (HTM) for the Mountain View Road over San Geronimo Creek Bridge Replacement Project in Marin County, CA. The purpose of this HTM is to identify recognized soil and/or groundwater contamination/hazardous material issues that may impact the planned project improvements. This memo includes; project description, records review summary, and potential hazardous materials issues.

## **PROJECT DESCRIPTION**

We include the following project description and information as provided to us by the design team and described in the Preliminary Environmental Study.

## **PROJECT LOCATION**

The project is located in Marin County, California, along Mountain View Road just off of Sir Francis Drake Boulevard in the community of Lagunitas/Forest Knolls. Mountain View Road is a rural, paved one-lane roadway that provides access to several residential properties on the south side of San Geronimo Creek. On the south side of San Geronimo Creek, Mountain View Road and Corona Avenue are part of a Private Road District.

## **PROJECT NEED**

The existing bridge has been given a sufficiency rating of 59.0 and a status of functionally obsolete. The existing steel railroad cars which make up the bridge are rusting and have experienced minor structural section loss. Additionally, the grouted riprap on the north bank is undermined along its full length. The structure does not meet AASHTO standards due to its narrow width. The bridge rails and approach guardrails consist of wooden railings which are also substandard.

## **PRESENT CONDITION**

Mountain View Road is a rural, one-lane local roadway approximately 11 feet wide with no shoulders. The existing San Geronimo Creek Bridge (Bridge No. 27C0154), constructed in 1962, is a three-span steel railroad car frame structure with timber deck runners. The bridge is approximately 51-foot long with an 11-foot clear width and has an ADT of 213. The bridge is extremely close to residential roads and a driveway on the south side of the creek and the intersection of Mountain View Road and Sir Francis

Drake Boulevard on the north side of the creek. Overhead telephone and electrical lines and an underground water line are present in the project area.

## **PROPOSED IMPROVEMENTS**

The proposed project will replace the existing bridge with a new structure accommodating one 12-foot lane with two-foot shoulders, and bridge railings, resulting in a bridge width of 20 feet. The new structure will be a 70-foot long, single-span, precast, prestressed concrete slab unit bridge. The alignment will shift by approximately seven feet to the east.

The roadway and bridge profile will be raised approximately four feet to clear the 100-year flood elevation. The southern roadway approach work will extend 60 feet down Corona Avenue east, 25 feet down Corona Avenue south, 95 feet down Mountain View Road, and 115 feet down the private driveway. The roadway cross-section will consist of a single lane varying in width from 9 to 12 feet, consistent with existing Mountain View Road and Corona Avenue roadway widths.

On the north, the roadway approach work will extend into the Mountain View Road and Sir Francis Drake Boulevard intersection, raising the center of the intersection by two feet. The roadway approach work will extend 440 feet along Sir Francis Drake Boulevard (238 feet to the west and 202 feet to the east). The roadway cross-section along Sir Francis Drake Boulevard will consist of 12-foot lanes, and varying shoulder widths to match existing conditions.

A temporary shift in the alignment along Sir Francis Drake Boulevard is expected in order to provide contractor staging areas along the south shoulder of Sir Francis Drake Boulevard near the project site. The shift is anticipated to be approximately six feet to the north extending 300 to 400 feet in both directions, with temporary k-railing running along the south shoulder to separate the staging area for traffic.

Relocation of overhead and underground utilities is anticipated as part of the project. The waterline that is mounted to the east side of the existing structure will be relocated to the new structure, and the fire hydrant located off the southeast corner of the bridge will also be relocated. Two utility poles, one to the northeast and one to the southeast of the existing bridge, and the overhead utilities they support will be relocated within the project area. An existing storm drain culvert running under Corona Avenue east will be replaced.

Construction of the bridge will involve excavation for and construction of concrete abutments supported on cast-in-drilled-hole (CIDH) piles. The new abutments will be constructed behind the existing abutments and this work will occur outside of the creek. Construction of the roadway approaches will involve the removal of existing pavement and the placement of fill material, aggregate base and hot mix asphalt pavement. Tree removal and the removal of other vegetation along the creek banks will be necessary for the project. Temporary work within San Geronimo Creek is anticipated to include removal of the existing bridge, supports and grouted riprap, installation of scour countermeasures and construction of retaining walls along the top of south creek bank. Temporary creek diversion is anticipated in order to complete activities within the waterway. Construction is expected to begin in Spring 2021 and is anticipated to have a duration of 6 months.

The project improvements will remain within the County's right of way and permanent right of way acquisitions are not anticipated. Temporary construction easements will be required from several

parcels in order to reconstruct driveways, provide access to the creek and provide adequate storage and staging areas. A review of the Marin Agricultural Land Trust (MALT) map shows that there are no MALT conservation easements on the properties directly adjacent to the project site.

As is standard with all roadway projects, the contractor will be required to install temporary Best Management Practices (BMPs) to control any runoff or erosion from the project site into any nearby waterways (here San Geronimo Creek). These temporary BMPs will be installed prior to any construction operations and will be in place for the duration of the contract. The removal of these BMPs will be the final operation, along with the project site cleanup.

## **RECORDS REVIEW SUMMARY**

Our site reconnaissance and review of regulatory databases maintained by county, state, tribal, and federal agencies found no evidence/documentation of hazardous materials violations or discharge within the project limits. However, the following facilities or locations were listed on Federal, State environmental databases.

### SAMUEL TAYLOR PARK

This site is mapped within one mile of the bridge site, however the actual location is over 3 miles. We include this site for clarification even though it is beyond the one mile radius.

Located on Sir Francis Drake Blvd, approximately 3.6 miles northwest of the bridge site, is listed on the LUST, HIST CORTESE databases due to the presence of a leaking underground storage tanks in 1997. The tanks contained gasoline that may have impacted groundwater.

### SAMUEL P. TAYLOR PARK

May be located on Sir Francis Drake Blvd, approximately 900 ft east of the bridge site, is listed on the HIST UST database due to the presence of underground storage tank. The tank contains unleaded gasoline.

We reviewed readily available records available from the GeoTracker website maintained by the California Water Board and we list our finding below.

### FOREST KNOLLS GARAGE

Located at 6700 Sir Francis Drake Blvd, approximately 4200 ft east of the bridge site, is listed on the LUST database due to the presence of a leaking underground storage tank in 1992. No soil or groundwater contamination was reported and the case was closed in 1994.

We show the three locations listed above on Figure 1.

## **POTENTIAL HAZARDOUS MATERIALS ISSUES**

The following potential hazardous materials issues should be considered in future planning of project improvements and may require testing according to EPA test methods.

## Building Materials

Based on our understanding of the project, the existing Mountain View Road Bridge is constructed of unpainted steel frame and a wood deck. The existing bridge elements will be removed and we do not anticipate asbestos or lead-based paint to be encountered during demolition. However, if bridge elements with asbestos and lead potential are encountered, the asbestos and lead containing materials are to be properly surveyed for asbestos and lead-based paint prior to demolition according to the California Code of Regulations (CCR), (Asbestos-Title 8, Section 1529, Lead-Title 22, Section 1532.1).

## Asphalt

Proposed project improvements may include removal of existing asphalt roadway and historical asphalt road sections. Currently, asphalt is not regulated as a hazardous material, but potential contaminants in the asphalt binder require off-site disposal restrictions imposed by the California Department of Resources Recycling and Recovery (CalRecycle). These restrictions are more onerous for more recently placed asphalt. Asphalt removal from the project will need to be disposed in accordance with CCR Title 22 Division 4.5.

## Yellow Traffic Stripes

Yellow traffic stripes can contain heavy metals, including lead and chromium, at concentrations in excess of the hazardous waste thresholds established by the CCR and may produce toxic fumes when heated. Yellow traffic striping within the project area will require proper disposal, which may include a Class 1 disposal facility. Testing and removal requirements should be in accordance with Caltrans Standard Special Provision 14-11.07 and 15-2.02C(2).

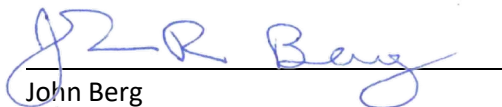
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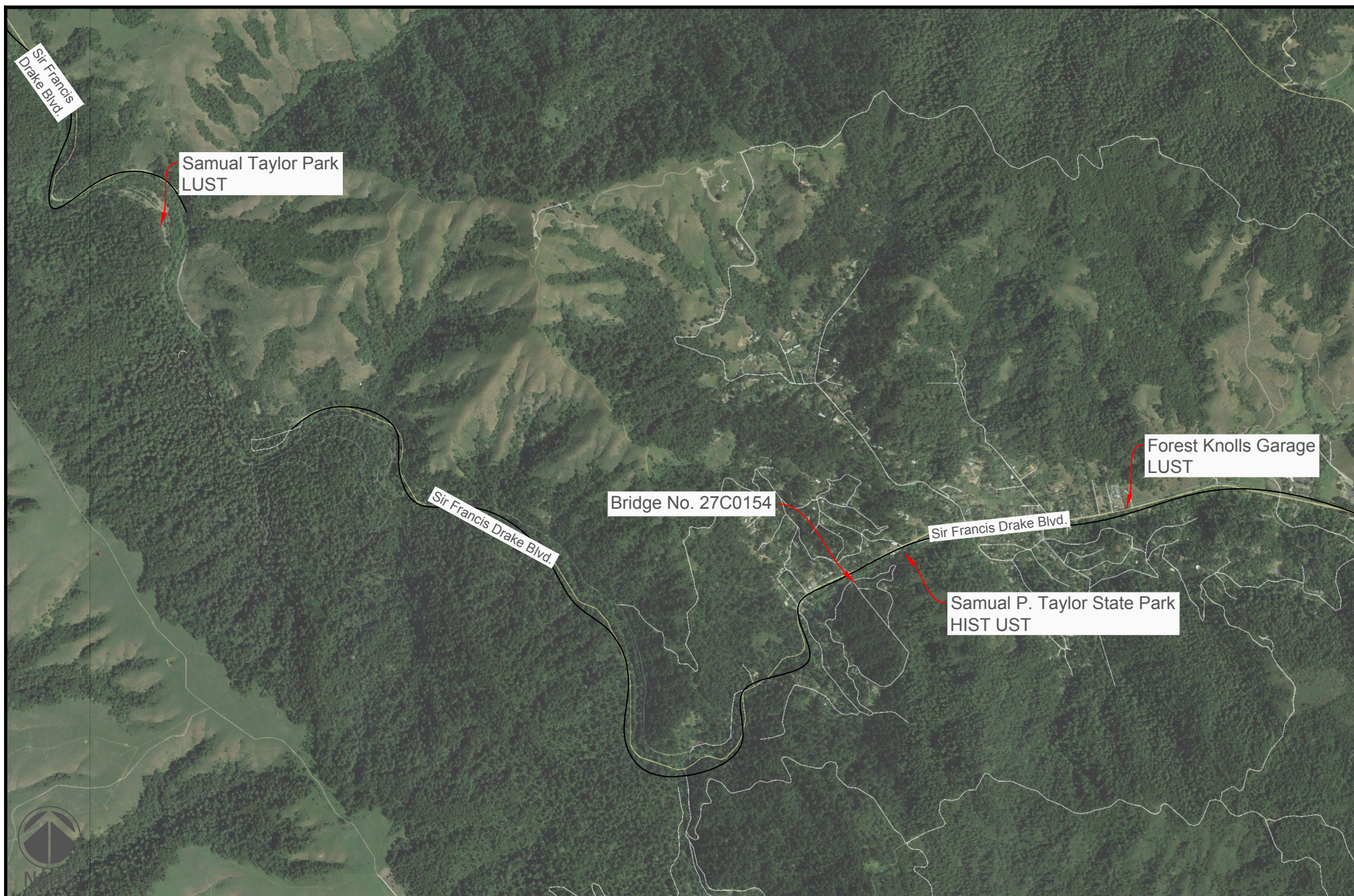
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Drawn By		
	By	Date

**MOUNTAIN VIEW ROAD  
 BRIDGE REPLACEMENT  
 MARIN COUNTY, CA**

**Figure 1**  
 Site Plan

Proj. No: 14-176.2  
 Scale: NTS  
 Date: 3/1/19