**APPENDIX E**

**HISTORIC PROPERTIES SURVEY REPORT**

**AND ARCHAEOLOGICAL SURVEY REPORT**

**(REDACTED)**

# HISTORIC PROPERTY SURVEY REPORT

## 1. UNDERTAKING DESCRIPTION AND LOCATION

| *District* | *County* | *Federal Project. Number. (Prefix, Agency Code, Project No.)* | *Location* |
|---|---|---|---|
| 3 | GLE | BRL0-5911 (056) | Watson Creek Bridge, Willows |

The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 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* (Section 106 PA), as well as under Public Resources Code 5024 and pursuant to the January 2015 *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, addended 2019* (5024 MOU) as applicable.

**Project Description**:

The County of Glenn Public Works Agency (County) in conjunction with the California Department of Transportation (Caltrans) proposes to replace the Watson Creek Bridge (Bridge No. 11C-0091), which was determined to be structurally deficient, with a similarly sized structure. The bridge replacement project is located on County Road (CR) 305, one mile north of State Highway 162, approximately 3.5 miles south of the community of Chrome in Glenn County, California (Attachment 2: Exhibit 1-Figures 1 and 2).

The purpose of the project is to improve traffic safety conditions on a public roadway and comply with current County and American Association of State Highway and Transportation Officials (AASHTO) guidelines by 1) replacing a structurally deficient bridge with a new structure that meets current standards and 2) reconstructing the approaching roadway to transition between the new construction and the existing roadway from both east-bound and west-bound directions. The proposed project would replace the existing one-lane bridge with a new, standard width, two-lane, multi-span, continuous reinforced concrete slab bridge, including replacing/reconstructing the approaching roadway to transition between the new construction and the existing roadway. In addition, two potential staging areas are proposed. One is located on the west side of County Road 306 north of Grindstone Creek and the other at the northeast corner of County Roads 306 and 305. The proposed alignment would tie into County Road 306, 20 feet (ft.) south of the existing intersection. The County Road 305 east approach will conform back to the existing road section 450 ft. east of Watson Creek. A full project description can be found in the Archaeological Survey Report (ASR), provided as Attachment 2.

## 2. AREA OF POTENTIAL EFFECTS

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established in consultation with William Larson, PQS: PI-Prehistoric Archaeology, and Robert Brown, Project Local Assistance Engineer, on July 19, 2022. The APE maps are located in in Attachment 2: Exhibit 1-Figure 3.

The APE was established to encompass all ground-disturbing activities. The APE comprises 6.27 acres: the main bridge area covers approximately 4.81 acres and the two separate staging areas to the north and west measure 1.46 acres. The horizontal APE includes the roadway approaches, equipment staging areas, and bridge abutments. The vertical APE includes all ground

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

disturbances for the new roadway (2 ft), installation of the bridge abutments (5 ft maximum depth), and 24-inch CIDH piles for the bents (23 ft deep).

## 3. CONSULTING PARTIES / PUBLIC PARTICIPATION

☒ Native American Heritage Commission

- Pacific Legacy contacted the Native American Heritage Commission (NAHC) on January 18, 2019 requesting a review of their Sacred Lands file and the contact information for potentially interested individuals.

- The NAHC responded on January 24, 2019 that the results indicate Native American cultural sites are present and to contact Grindstone Rancheria as a source of information regarding known and/or recorded sites in the project area. The NAHC letter also provided a list of four Native American tribes and individuals who may have knowledge of cultural resources in the project area. A copy of correspondence is provided in Attachment 2: Appendix B.

☒ Native American Tribes, Groups and Individuals

Representatives of local Native American groups were contacted via letters on March 19, 2019. The letter requested tribal knowledge, comments, and concerns about cultural resources in the proposed project (Attachment 2: Appendix B). No responses to the initial contact letter were received. The following parties were contacted via mailed letters and phone calls:

- Denis Ramirez, Chairperson, Mechoopda Indian Tribe
- Ronald Kirk, Chairperson, Grindstone Indian Rancheria of Wintun-Wailaki
- Andrew Alejandre, Chairperson, Paskenta Band of Nomlaki Indians
- Glenda Nelson, Chairperson, Estom Yumeka Maidu Tribe of the Enterprise Rancheria

Pacific Legacy made follow-up phone calls to all persons on the NAHC contact list on April 2, 2019 to ensure that they had received the letters. Pacific Legacy received phone calls from the following persons in response to the contact letters and follow-up phone calls, which had resulted in leaving voice messages since there were no answers. Mr. Andrew Alejandre of the Paskenta Band of Nomlaki Indians called on April 3, 2019 and said that the APE was outside of their territory. Mr. Dennis Ramirez, Chairperson of the Mechoopda Indian Tribe, called on April 3, 2019 and deferred to the Grindstone Indian Rancheria or the Paskenta Band of Nomlaki Indians. No response was received from the Estom Yumeka Maidu Tribe of the Enterprise Rancheria.

Pacific Legacy made additional efforts to contact the Grindstone Rancheria of Wintun-Wailaki on April 9, 2019. A phone message was left with the receptionist for Chairperson Ronald Kirk, asking if he had received the notification letter. An additional follow-up phone call on April 11, 2019 was answered by the Grindstone Rancheria receptionist/secretary who indicated that they had no concerns with the project.

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

Pacific Legacy answered a phone call on April 27, 2019 from Ronald Kirk, Chairperson of Grindstone Rancheria indicating that he remembered receiving the letters, but that he had no concerns regarding the project.

Prior to the Extended Phase I investigation in January 2022, Pacific Legacy made repeated attempts via phone and email to contact Grindstone Rancheria to notify the tribe of the investigation and request a tribal monitor. Pacific Legacy was able to reach the office and leave a message on one occasion, but a return call was not received.

Pacific Legacy maintained a consultation log of Native American individuals and groups contacted during the course of their archaeological investigation and it is provided as Appendix B in the Extended Phase I report.

☒ Local Historical Society / Historic Preservation Group

Letters were sent to the following Historical Societies on March 29, 2019.

- Orland Historical and Cultural Society
- Sacramento Valley Museum

Neither of the historical societies has responded. Historical society outreach is provided in Attachment 2: Appendix C.

## 4. SUMMARY OF IDENTIFICATION EFFORTS

☒ National Register of Historic Places (NRHP)

☒ California Register of Historical Resources (CRHR)

☒ National Historic Landmark (NHL)

☒ California Historical Landmarks (CHL)

☒ California Points of Historical Interest

☒ California Historical Resources Information System (CHRIS)

☒ Caltrans Historic Bridge Inventory

☐ Caltrans Cultural Resources Database (CCRD)

☒ Other Sources consulted:

- 1855, 1890 GLO Plat Map
- 1948 Elk Creek, CA USGS 15-minute Quadrangle
- 1968 Chrome, CA USGS 15-minute Quadrangle
- Directory of Properties in the Historic Property Data File for Glenn County (2012): None listed

☒ Results:

A record search was conducted by the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS) on January 18, 2018 at the request of Pacific Legacy (I.C. File No. D19-8).

The NEIC reported that no archaeological sites are in the APE and three previously recorded sites are in the ¼ mile radius. The previously recorded sites within the record search radius around the APE include the Grindstone Cemetery (PL-11-000346)

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

located 500 ft (152 m) west of the APE and two prehistoric midden sites, one located 190 ft (58 m) north of the APE (PL-11-000078) and the other (PL-11-000345) 740 ft (226 m) to the southwest and adjacent to Grindstone Creek.

The NEIC reported that three previous studies have included the APE. These combined archaeological investigations included the entirety of the APE and ¼ mile radius. As such, the previous inventories completely covered (100%) of the APE and the study area.

In addition to the three archaeological resources in the ¼ mile radius, Grindstone Creek (P56) is listed as a Point of Interest. The listing refers to Grindstone Creek at the Confluence of Stony Creek, which is outside of the APE. The area was listed as a Point of Interest in 1967 to document the extraction and manufacture of grindstones by W.C. Moon and Ezekiel Merritt, members of the Bear Flag Party, and Peter Lassen in 1845 (Hoover et al. 2002; Rogers 1891). It is listed on the OHP Directory of Properties in the Historic Property Data File for Glenn County with a status code of 7L (State historical landmarks 1-769 and Points of Historical Interest designated prior to January 1988–needs to be reevaluated using current standards).

A systematic survey of the APE was performed by archaeologists from Pacific Legacy on June 14, 2019. Intensive survey coverage was completed whenever possible in the APE using 5 m to 10 m (16-32 ft.) wide transects. These included the relatively open areas alongside County Roads 305 and 306 and the north and west staging areas, which together comprise approximately 4.2 acres (67%) of the APE. Cursory coverage was required for a small area, totaling 2.1 acres (33%) of the APE.

No archaeological resources were identified in the APE. The only cultural resource identified in the APE is the Watson Creek Bridge (Br. No. 11C-0091), which will be replaced by the undertaking. The bridge, constructed in 1920, is listed as not eligible (Category 5) for the NRHP.

During the Phase I inventory, the APE was identified as having a moderate to high sensitivity for buried resources. An Extended Phase I (XPI) investigation was undertaken in January 2022 to determine if subsurface archaeological deposits are present that may be adversely affected by ground-disturbing activities associated with project construction. The XPI investigation included the mechanical excavation of approximately 15.7 cubic meters from eight exploratory trenches located in the APE. The XPI investigation found no evidence of subsurface archaeological deposits in the exploratory trenches, and only modern refuse was noted near or at the surface. However, one buried soil of limited lateral extent was identified in trench sidewalls and spoils in the northwestern portion of the APE (Trench 4), confirming a moderate to high sensitivity for buried archaeological resources in that area. These buried soils are characterized by weakly developed buried AC horizons that are interpreted as being late Holocene in age and available for human occupation for a relatively brief period of time as evidenced by the lack of soil development. Apart from this buried soil, coarse alluvium of extremely gravelly sand and loamy sand that lacked any soil development was observed in a majority of the Project APE. The coarse gravelly alluvium, although of geologically recent deposition, is unlikely to contain any intact archaeological deposits, and none were observed.

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

## 5. PROPERTIES IDENTIFIED

☒ Caltrans, in accordance with Section 106 PA Stipulation VIII.C.5 has determined there are cultural resources within the APE that were **previously determined not eligible** for inclusion in the NRHP with SHPO concurrence and those determinations remain valid. Copy of SHPO/Keeper correspondence is attached.

☒ Bridges listed as **Category 5** (previously determined not eligible for listing in the NRHP) in the Caltrans Historic Bridge Inventory are present within the APE and those determinations remain valid. Appropriate pages from the Caltrans Historic Bridge Inventory are attached.

- Watson Creek Bridge (11C-0091)

## 6. FINDING FOR THE UNDERTAKING

☒ Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of **No Historic Properties Affected** is appropriate for this undertaking because there are no historic properties within the APE.

## 7. CEQA CONSIDERATIONS

☒ Not applicable; **Caltrans is not the lead agency under CEQA**.

## 8. LIST OF ATTACHED DOCUMENTATION

☒ Project Vicinity, Location, and APE Maps **(Exhibit 1 of the ASR)**

☒ Caltrans Historic Bridge Inventory Sheet **(Attachment 1 to this HPSR)**

☒ Archaeological Survey Report (ASR) **(Attachment 2 to this HPSR)**

DiMaggio, Gia, and Amy Kovak
2022 *Archaeological Survey Report for the County Road 305 Over Watson Creek Bridge Replacement Project, Glenn County, California*. Pacific Legacy, Inc, El Dorado Hills, CA. Submitted to County of Glenn Public Works Agency, Willows and California Department of Transportation, District 3, Marysville.

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

☒ Extended Phase I (XPI) Report **(Attachment 3 to this HPSR)**

Dalldorf, Graham

2022 *Extended Phase I Investigation for the County Road 305 over Watson Creek Bridge Replacement Project, Glenn County, California*. Submitted to County of Glenn Public Works Agency, Willows and California Department of Transportation, District 3, Marysville.

## 9. HPSR PREPARATION AND CALTRANS APPROVAL

Prepared by: Amy Kovak 9/8/2022

Amy Kovak, M.A., PI– Prehistoric Archaeology Date
Pacific Legacy, Inc., El Dorado Hills, CA

Reviewed for Approval by: William E Larson 10/4/2022

District 3 William Larson Date
Caltrans PQS: PI– Prehistoric Archaeology

Approval by: Laura Loeffler 10/04/22

District 3 EBC Laura Loeffler Date

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

## Attachment 1

## Caltrans Historic Bridge Inventory Sheet

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

# Structure Maintenance & Investigations




## Historical Significance - Local Agency Bridges

## District 03

### Glenn County

| Bridge Number | Bridge Name | Location | Historical Significance | Year Built | Year Wid/Ext |
|---|---|---|---|---|---|
| 11C0072 | CAMPBELL SLOUGH | 1/4 MI W CO RD Z | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0074 | CAMPBELL SLOUGH | 0.96 MI N OF S.H. 162 | 5. Bridge not eligible for NRHP | 1930 | 1960 |
| 11C0075 | ANGEL SLOUGH | 0.3 MI N OF S.H. 162 | 5. Bridge not eligible for NRHP | 1925 | 1960 |
| 11C0078 | DRUMHELLER CANAL | 0.9 MI E ROAD XX | 5. Bridge not eligible for NRHP | 1940 | |
| 11C0079 | AFTON DRAIN | 1.1 MI N ROAD 69 | 5. Bridge not eligible for NRHP | 1940 | |
| 11C0081 | CENTRAL IRRIGATION CANAL | JUST E OF ROAD 203 | 5. Bridge not eligible for NRHP | 1941 | 1990 |
| 11C0083 | ANGEL SLOUGH | 0.2 MI E OF CO RD Z | 5. Bridge not eligible for NRHP | 1972 | |
| 11C0084 | ANGEL SLOUGH | 0.8 MI N OF CO RD #67 | 5. Bridge not eligible for NRHP | 1950 | |
| 11C0091 | WATSON CREEK | JUST EAST OF ROAD 306 | 5. Bridge not eligible for NRHP | 1920 | |
| 11C0092 | WATSON CREEK | 0.3 MI N OF RD #305 | 5. Bridge not eligible for NRHP | 1930 | 1970 |
| 11C0093 | DRY GULCH | 25.76 MI N COLUSA CO LIN | 5. Bridge not eligible for NRHP | 1930 | 1961 |
| 11C0094 | NO NAME DRAIN | 0.7 MI S STATE HWY 162 | 5. Bridge not eligible for NRHP | 1925 | 1982 |
| 11C0097 | WILLOW CREEK | 1.0 MI W/O ROAD 'D' | 5. Bridge not eligible for NRHP | 1935 | |
| 11C0098 | PANCAKE DRAW | 1 MI E OF RD 'Z' | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0101 | SOUTH FORK WILLOW CREEK | 0.25 MI W OF 99 W | 5. Bridge not eligible for NRHP | 1965 | |
| 11C0103 | WHITE CABIN CREEK | 0.6 MI W/O ROAD 'D' | 5. Bridge not eligible for NRHP | 1925 | |
| 11C0104 | ARTOIS DRAWLET | JUST W/O ROAD 'H' | 5. Bridge not eligible for NRHP | 1930 | 1970 |
| 11C0105 | WALKER CREEK | 1.0 MI E/O ROAD 'F' | 5. Bridge not eligible for NRHP | 1974 | |
| 11C0106 | BRANCH WALKER CREEK | 0.5 MI EAST OF RD 'F' | 5. Bridge not eligible for NRHP | 1984 | |
| 11C0107 | BRANCH WALKER CREEK | 0.3 MI W/O ROAD 'F' | 5. Bridge not eligible for NRHP | 1925 | 1975 |
| 11C0108 | BRANCH WALKER CREEK | 0.2 MI S/O ROAD 28 | 5. Bridge not eligible for NRHP | 1975 | |
| 11C0109 | BRANCH WALKER CREEK | 0.5 MI N/O ROAD 28 | 5. Bridge not eligible for NRHP | 1928 | |
| 11C0110 | TEHAMA-COLUSA CANAL | 0.3 MI S/O ROAD 25 | 5. Bridge not eligible for NRHP | 1970 | |
| 11C0111 | BRANCH WALKER CREEK | 0.2 MI W CO RD 'H' | 5. Bridge not eligible for NRHP | 1970 | |
| 11C0114 | HAMBRIGHT CREEK | 0.5 MI SOUTH OF RD 9 | 5. Bridge not eligible for NRHP | 1990 | |
| 11C0115 | HAMBRIGHT CREEK | 1.0 MI N RD 200 | 5. Bridge not eligible for NRHP | 1940 | |
| 11C0116 | HAMBRIGHT CREEK | 0.8 MI N ROD 200 N NHVLE | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0117 | HAMBRIGHT CREEK | 0.5 MI N ROAD 200 | 5. Bridge not eligible for NRHP | 1960 | |
| 11C0124 | SALT CREEK | 2.1 MI W OF CO RD 306 | 5. Bridge not eligible for NRHP | 1955 | |
| 11C0127 | BRANCH LOGAN CREEK | 1.3 MI E OF 99W | 5. Bridge not eligible for NRHP | 1930 | 1950 |
| 11C0128 | WALKER CREEK | 1.1 MI E OF I-5 | 5. Bridge not eligible for NRHP | 1965 | |
| 11C0131 | DRAIN A | 0.1 MI S ROAD 41 | 5. Bridge not eligible for NRHP | 1940 | |
| 11C0132 | BRANCH SALT CREEK | 0.8 MI W OF RD #306 | 5. Bridge not eligible for NRHP | 1925 | |
| 11C0138 | SWALLOW DRAIN | 1.0 MI W RD V | 5. Bridge not eligible for NRHP | 1945 | |
| 11C0139 | COLUSA DRAIN | 1.4 MI W HWY 45 | 5. Bridge not eligible for NRHP | 1945 | |
| 11C0140 | PROVIDENT CANAL | JUST S OF HWY 162 | 5. Bridge not eligible for NRHP | 1949 | |
| 11C0146 | PRINCETON-CODORA CANAL | JUST W HWY 45 | 5. Bridge not eligible for NRHP | 1941 | |
| 11C0148 | PRINCETON-CODORA CANAL | 0.15 MI W OF SR 45 | 5. Bridge not eligible for NRHP | 1989 | |
| 11C0149 | PRINCETON CODORA CANAL | WEST OF ROAD X. | 5. Bridge not eligible for NRHP | 1935 | 1960 |
| 11C0151 | VANSYCKLE SLOUGH | 0.2 MII SOUTH OF ROAD 19 | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0152 | CENTRAL IRRIGATION CANAL | 0.02 MI W HWY 45 | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0153 | CENTRAL IRRIGATION CANAL | JUST E OF CUTLER AVE | 5. Bridge not eligible for NRHP | 1930 | |
| 11C0155 | BRANCH STONY CREEK | 1 MI N OF RD #303 | 5. Bridge not eligible for NRHP | 1930 | 1970 |

## Attachment 2

## Archaeological Survey Report

 *Copyright © 2020 State of California. All rights reserved.*
***Alteration to the title and section headings is prohibited***.

Pacific Legacy

Historic Preservation

# Archaeological Survey Report for the County Road 305 over Watson Creek Bridge Replacement Project, Glenn County, California

03-GLE-305, Federal Aid #: BRLO-5911(056)



***Prepared for*:**

County of Glenn Public Works Agency
777 N. Colusa Street, Willows, California 95988

*and*

California Department of Transportation, District 3
703 B Street, Marysville, California 95901

***Prepared by*:**

Gia DiMaggio, M.A., and Amy Kovak, M.A.
Pacific Legacy, Inc.
4919 Windplay Drive, Suite 4
El Dorado Hills, California 95762

*USGS Topographic Quadrangle*: Chrome, California 1969, Township 21 North, Range 6 West

August 2022

# ARCHAEOLOGICAL SURVEY REPORT FOR THE COUNTY ROAD 305 OVER WATSON CREEK BRIDGE REPLACEMENT PROJECT, GLENN COUNTY, CALIFORNIA

03-GLE-305, Federal Aid #: BRL0-5911 (056)

***Prepared For:***

County of Glenn Public Works Agency
777 N. Colusa Street, Willows, CA 95988

*and*

California Department of Transportation, District 3
703 B Street, Marysville, CA 95901

Prepared for: _____ Date: 10.20.22
Donald Rust
Director, County of Glenn Public Works Agency

Reviewed by: William C Larson Date: 10/4/2022
William Larson
Associate Environmental Planner-Archaeology
PQS-PI- Prehistoric Archaeology
California Department of Transportation, District 3-Marysville

Reviewed by: Laura Loeffler Date: 10/4/22
Laura Loeffler, Environmental Branch Chief
North Regional Environmental Planning
California Department of Transportation, District 3-Marysville

Prepared by: Amy Kovak Date: 8/2/2022
Gia DiMaggio, M.A., and Amy Kovak, M.A.
Pacific Legacy, Inc.
4919 Windplay Drive, Suite 4, El Dorado Hills, CA 95762

*APE Acreage*: 6.27 acres
*USGS 7.5-Minute Topographic Quadrangle:* Chrome, California

August 2022

## *Confidential Information*

Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites that should not be disclosed to unauthorized persons.

Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 USC. 470w-3 (National Historic Preservation Act) and 16 USC. § 470hh (Archaeological Resources Protection Act) and California State Government Code, Section 6254.10.

If any information in this document is to be released for public review, all locational information associated with archaeological resources must be redacted before distribution.

***Cover Photo: Overview Watson Creek Bridge (Bridge No. 11C-0091), view northwest.***

## SUMMARY OF FINDINGS

The County of Glenn Public Works Agency, in conjunction with the California Department of Transportation (Caltrans), is proposing the replacement of Watson Creek Bridge (Bridge No. 11C-0091), in between the communities of Chrome and Elk Creek in Glenn County, California (Exhibit 1–Figures 1 and 2). The project proposes to replace Watson Creek Bridge with a new structure of similar size. Funding for the project is provided through the Federal Statewide Transportation Improvement Program administered by the California Department of Transportation (Caltrans) Local Highway Bridge Program (Federal Aid # BRLO-5911(056)). The County is the California Environmental Quality Act (CEQA) lead agency and Caltrans, under the delegated authority of the Federal Highway Administration (FHWA), is providing project oversight under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA). The purpose of the project is to improve traffic safety conditions on a public roadway and comply with current County and American Association of State Highway and Transportation Officials guidelines.

The Area of Potential Effects (APE) defined for the project includes lands surrounding the Watson Creek Bridge (Bridge No. 11C-0091). The APE is a 6.27-acre area that extends east from the bridge over Watson Creek for approximately 569 feet (ft) and west encompassing the junction between County Roads 305 and 306. The APE continues around a curve heading southeast for approximately 376 ft following County Road 306 ending just before Grindstone Creek Bridge. The horizontal APE includes the roadway approaches, equipment staging areas and bridge abutments. The vertical APE includes all ground disturbances for the new roadway (2 ft), installation of the bridge abutments (5 ft maximum depth), and 24-inch CIDH piles for the bents (23 ft deep).

Pacific Legacy, Inc. (Pacific Legacy), under agreement with Stantec Consulting Services, Inc. (Stantec), conducted a Phase I archaeological inventory as reported herein. The initial inventory consisted of archival research and record searches, communication with Native Americans and local historical societies, and pedestrian field survey of the APE. A record search from the Northeastern Information Center (NEIC) identified the Watson Creek Bridge (Bridge No. 11C-0091) within the APE, and no other previously recorded cultural resources were identified. The bridge (Category 5) has previously been determined as not eligible for the National Register of Historic Places (NRHP). A systematic and complete pedestrian survey of the APE was conducted on June 14, 2019 (Exhibit 1–Figures 3 and 4). The inventory of the APE found no archaeological resources, resulting in negative findings.

It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if sites cannot be avoided by the project. If buried cultural materials are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. Additional survey will be required if the project changes to include areas not previously surveyed.

# TABLE OF CONTENTS


**Section** **Page**

**1.0 INTRODUCTION ..... 1**

1.1 PROJECT LOCATION AND DESCRIPTION ..... 1
*1.1.1 Area of Potential Effects ..... 2*
1.2 REGULATORY CONTEXT ..... 2
1.3 LAND OWNERSHIP AND PERMITS ..... 2
1.4 PERSONNEL ..... 3

**2.0 SOURCE CONSULTED ..... 4**

2.1 ARCHIVAL AND RECORD SEARCH ..... 4
2.2 NATIVE AMERICAN CONSULTATION ..... 5
2.3 HISTORICAL SOCIETY OUTREACH ..... 6

**3.0 BACKGROUND ..... 7**

3.1 ENVIRONMENT ..... 7
*3.1.1 Potential for Buried Archaeological Deposits ..... 7*
3.2 ETHNOGRAPHY ..... 8
3.3 PREHISTORY ..... 9
3.4 HISTORICAL OVERVIEW ..... 10

**4.0 FIELD METHODS ..... 13**

4.1 SURVEY METHODS AND COVERAGE ..... 13

**5.0 FINDINGS AND CONCLUSIONS ..... 15**

5.1 ARCHAEOLOGICAL SITE INVENTORY AND ELIGIBILITY ..... 15
*5.1.1 Non-Exempt Archaeological Resources in the APE ..... 15*
*5.1.2 Resources Previously Determined Not Eligible for the NRHP ..... 15*
5.2 ARCHAEOLOGICAL SITE INVENTORY AND EVALUATION SUMMARY ..... 15

**6.0 REFERENCES CITED ..... 16**


# LIST OF FIGURES


**Section** **Page**

FIGURE 1. OVERVIEW OF APE, COUNTY ROAD 305, VIEW WEST. ..... 14
FIGURE 2. OVERVIEW OF WATSON CREEK BRIDGE, VIEW NORTHWEST. ..... 14


# LIST OF TABLES


**Section** **Page**

TABLE 1. PREVIOUS STUDIES IN THE APE AND ¼ MILE RADIUS. ..... 5

## ATTACHMENTS

**EXHIBIT 1. PROJECT MAPS**

Figure 1. Project Vicinity

Figure 2. Project Location

Figure 3. Area of Potential Effects

Figure 4. Survey Coverage

**APPENDIX A. RECORD SEARCH (CONFIDENTIAL)**

**APPENDIX B. NATIVE AMERICAN CORRESPONDENCE**

**APPENDIX C. HISTORICAL SOCIETY OUTREACH**

# 1.0 INTRODUCTION

## 1.1 PROJECT LOCATION AND DESCRIPTION

This Archaeological Survey Report (ASR) documents a Phase I archaeological survey and cultural resources inventory conducted by Pacific Legacy, Inc. on behalf of Stantec Consulting Services, Inc. (Stantec) for the proposed County Road 305 Bridge over Watson Creek Replacement Project in Glenn County, California (Exhibit 1–Figure 1). The County of Glenn Public Works Agency (County) in conjunction with the California Department of Transportation (Caltrans) proposes to replace the existing bridge, known as the Watson Creek Bridge (Bridge No. 11C-0091), with a new structure of similar size. Funding for the project is provided through the Federal Statewide Transportation Improvement Program administered by the Caltrans Local Highway Bridge Program (Federal Aid # BRLO-5911(056).

The project is located on County Road 305, one mile north of State Route 162, approximately 5.06 miles north of the community of Elk Creek and approximately 3.5 miles south of the community of Chrome. The project location is within Township 21 North, Range 6 West, Sections 15 and 16, as depicted on the *Chrome, California* (1973) 7.5-minute USGS Topographic Quadrangle (Exhibit 1–Figure 2).

The purpose of the project is to improve traffic safety conditions on a public roadway and comply with current County and American Association of State Highway and Transportation Officials (AASHTO) guidelines by: (1) replacing a structurally deficient bridge with a new structure that meets current standards and (2) reconstructing the approaching roadway to transition between the new construction and the existing roadway from both east-bound and west-bound directions.

The proposed project would replace the existing one-lane bridge with a new, standard width, two-lane, multi-span, continuous reinforced concrete slab bridge, including replacing/reconstructing the approaching roadway to transition between the new construction and the existing roadway. In addition, two potential staging areas are proposed. One is located on the west side of County Road 306 north of Grindstone Creek and the other at the northeast corner of County Roads 306 and 305. The proposed alignment would tie into County Road 306, 20 feet (ft.) south of the existing intersection. The County Road 305 east approach will conform back to the existing road section 450 ft. east of Watson Creek.

The new roadway geometrics will bring the alignment up to current Caltrans and AASHTO design standards. The new bridge would be located 45 ft. to 50 ft. downstream (south) of the existing bridge location with a more favorable skew angle to the creek with respect to hydraulics and seismic design. As a result of the project improvements, the new bridge will increase the width of the current bridge from 19 ft. to 32 ft. to safely accommodate two-way travel. Traffic will be maintained through the construction area using the existing west approach roadway and existing bridge. The east approach roadway will be detoured to the north to allow for contractor haul activities and reduce phasing complications associated with constructing the pavement conforms under traffic. The detour road profile will generally follow existing grade.

### 1.1.1 Area of Potential Effects

The Area of Potential Effects (APE) defined for the project encompasses all project-related impacts including staging areas, bridge construction, and roadway realignment (Exhibit 1–Figure 3). The horizontal APE includes the roadway approaches, equipment staging areas, and bridge abutments. The APE comprises 6.27 acres: the main bridge area covers approximately 4.81 acres and the two separate staging areas to the north and west measure approximately 1.46 acres. The vertical APE includes all ground disturbances for the new roadway (2 ft), installation of the bridge abutments (5 ft maximum depth), and 24-inch CIDH piles for the bents (23 ft deep). The APE was approved by William Larson, Caltrans PQS: PI- Historical Archaeology and Co-PI-Prehistoric Archaeology, and Robert Brown, Project Local Assistance Engineer, on July 19, 2022.

## 1.2 Regulatory Context

Local assistance funding, approval or assistance to the County through Caltrans for activities that may affect historic properties constitutes an "undertaking" subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966. Phase I identification of cultural resources in the APE is necessary for the County/Caltrans to comply with their obligations under Section 106 and its implementing regulations found at 36 CFR 800.4(c)(1).

The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 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* (Section 106 PA).The Section 106 PA stipulates that Caltrans shall identify historic properties that may be within an undertaking's APE in accordance with 36 CFR § 800.4(a)(2-4) and 800.4(b).

Stipulation VIII of the Section 106 PA governs evaluation of potential historic properties in order to determine whether a site or portions of a site within the APE contain data that would contribute towards its potential National Register of Historic Places (NRHP) eligibility. In addition, the project is subject to state historic preservation laws and regulations set forth in CEQA (PRC§21000 et seq.).

This ASR has been prepared following the format specified in the *Caltrans Standard Environmental Reference Handbook, Volume 2* (Exhibit 5.1, updated 2015), available online at https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-2-cultural-resources

## 1.3 Land Ownership and Permits

The APE spans County right-of-way (ROW) and includes two private parcels under the following assessor parcel numbers (APNs); APN 025-090-001 and APN 025-320-003. The County was responsible for obtaining Temporary Right of Entry Permits from the landowners prior to the field study. The County in turn provided Stantec with the permits. Stantec (Mark Wuestehube and Tim Hanson) notified Pacific Legacy on June 6, 2019 that there were no private property access constraints for the APE.

## 1.4 PERSONNEL

Archaeological background research and fieldwork for the project and preparation of this ASR was directed by supervisory personnel from Pacific Legacy as follows:

- Robert Jackson, Principal Investigator; M.A. in Anthropology from the University of California, Davis; RPA certified; 45 years archaeological experience in California; 35 years in cultural resources management.

- Gia DiMaggio, Supervisor/Reporting Author; M.A. in Applied Anthropology from Boise State University, 5 years of archaeological experience; 4 years in cultural resources management.

- Lisa Shapiro, Project Supervisor/Reporting Author; M.A. in Anthropology from California State University, Chico; RPA certified; 39 years archaeological experience in California; 25 years in cultural resources management.

- Amy Kovak, Senior Supervisor; M.A. in Anthropology from the Pennsylvania State University, 22 years of archaeological experience; 13 years in cultural resources management.

The archaeological survey was conducted on June 14, 2019 by Pacific Legacy archaeological supervisor Gia DiMaggio, M.A. and archaeological field technician Jennifer Mak, B.A. Project oversight was provided by Principal Investigator Robert Jackson, M.A. All work for the project was conducted by individuals who meet the professional qualification standards described in *Archaeology and Historic Preservation: Secretary of Interior's Standards and Guidelines.*

# 2.0 SOURCE CONSULTED

## 2.1 ARCHIVAL AND RECORD SEARCH

A record search was conducted by the staff at the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS) on January 18, 2019 at the request of Pacific Legacy (I.C. File No. D19-8). The record search was structured to identify previous sites and studies in the APE and surrounding ¼ mile radius. The record search also included two other project areas within Glenn County. The search included a review of site records, maps, and documentary information on file at the NEIC. The results of the records search were examined to identify those resources and inventories pertinent to the APE (identified in the record search results as County Road 305). Results for the APE are summarized below. A copy of the records search is provided in Appendix A.

- National Register of Historic Places (NRHP): Listed Properties and Determined Eligible Properties (2012): None listed
- California Register of Historical Resources (2012): None
- California Points of Historical Interest (2012): One listed- Grindstone Creek (P56)
- California Inventory of Historic Resources (1976): None listed
- California Historical Landmarks (2012): None listed
- Gold Districts of California-Bulletin 193 (2012): None listed
- National Historic Landmark (NHL); None listed
- California Historical Landmarks (CHL): None listed
- Historical Maps:
    - GLO Plat Maps: 1855, 1890
    - 1948 Elk Creek, CA USGS 15-minute Quadrangle
    - 1968 Chrome, CA USGS 15-minute Quadrangle
- Directory of Properties in the Historic Property Data File for Glenn County (2012): Grindstone Creek listed in 1967; Status Code 7L
- Caltrans Historic Bridge Inventory:
    - Watson Creek Bridge (Bridge No. 11C-0091), constructed in 1920, within the APE; not eligible for the NRHP (Category 5)

The NEIC results identified no archaeological resources in the APE but did identify three previously recorded cultural resources in the ¼ mile radius. The Caltrans Historic Bridge Inventory listed the Watson Creek Bridge (Bridge No. 11C-0091), built in 1920, as determined ineligible for the NRHP (Category 5).

The three resources in the ¼ mile radius consist of the Grindstone Cemetery (PL-11-000346) located 500 ft (152 m) west of the APE and two prehistoric midden sites, one located 190 ft (58 m) north of the APE (PL-11-000078) and the other (PL-11-000345) 740 ft (226 m) to the southwest and adjacent to Grindstone Creek. The oldest tombstone in the Grindstone Cemetery belongs to Jesse Vanderford and dates to 1822. The cemetery houses entire families such as Millsap, Ellis and Powell, among others. All three sites were recorded by Basin Research Associates, Inc. during a

cultural resource overview and inventory project in 1982 for the Thomas Newville Reservoir but none of the sites have previous evaluations.

The NEIC reported that three previous studies (NEIC Report Nos. 714, 4170, and 4170) have included portions of the APE (Table 1). Two of the studies included cultural resource inventories for an AT&T fiber optic cable project which was conducted from 1996–1997. The other study was an overview of cultural resources for the proposed Thomas Newville Reservoir. These combined archaeological investigations included the entirety of the APE and ¼ mile radius. As such, the previous inventories completely covered (100%) of the APE and ¼ mile radius.

**Table 1. Previous Studies in the APE and ¼ Mile Radius.**

| Report No. | Year | Author | Title | Affiliation |
|---|---|---|---|---|
| 00714 | 1983 | Kobori, Larry S., James C. Bard, and Colin I. Busby | A Cultural Resources Overview and Inventory of the Proposed Thomes-Newville Reservoir, Glenn and Tehama Counties, California | Basin Research Associates, Inc. |
| 004170 | 1996 | Jones & Stokes Associates, Inc. | Cultural Resource Inventory Report for the AT&T Fiber Optic Cable Project, Bandon, Oregon to Cloverdale, California | Jones & Stokes Associates, Inc. |
| 004170 | 1997 | Jones & Stokes Associates, Inc. | Cultural Resource Inventory Report for the AT&T Fiber Optic Cable Project, Bandon, Oregon to Cloverdale, California | Jones & Stokes Associates, Inc. |

Grindstone Creek (P56) is listed as a Point of Interest that is within the ¼ mile radius. The listing refers to Grindstone Creek at the Confluence of Stony Creek, which is outside of the APE. The area was listed as a Point of Interest in 1967 to document the extraction and manufacture of grindstones by W.C. Moon and Ezekiel Merritt, members of the Bear Flag Party, and Peter Lassen in 1845 (Hoover et al. 2002; Rogers 1891). The grindstones were packed on mules over 20 miles to the Sacramento River where they were loaded on canoes and drifted down river to Sutter's Fort and San Francisco. According to John Bidwell, this was the first "civilized" manufacture in the county, if not the northern part of the state (Hoover et al. 2002:99–100). Grindstone Creek is listed on the OHP Directory of Properties in the Historic Property Data File for Glenn County with a status code of 7L (State historical landmarks 1-769 and Points of Historical Interest designated prior to January 1988–needs to be reevaluated using current standards).

## 2.2 NATIVE AMERICAN CONSULTATION

Pacific Legacy conducted Native American outreach by contacting the Native American Heritage Commission (NAHC), preparing and sending NAHC contact letters, making follow-up phone calls, and maintaining a consultation log of Native American correspondence for the project.

Pacific Legacy mailed a notification letter about the project to the NAHC on January 18, 2019 requesting a review of their Sacred Lands File and contact information for potentially interested individuals and groups. The NAHC responded via fax on January 24, 2019 providing contact information for four potentially interested parties. The response also stated that Grindstone Rancheria may know of or have concerns about cultural and/or sacred sites in the project area.

Pacific Legacy mailed notification letters to all parties on the NAHC contact list on March 19, 2019. The letters provided a brief description of the project and project maps. Pacific Legacy made follow-

up phone calls to all persons on the NAHC contact list on April 2, 2019 to ensure that they had received the letters. Pacific Legacy received phone calls from the following persons in response to the contact letters and follow up phone calls, which had resulted in leaving voice messages since there were no answers. Mr. Andrew Alejandre of the Paskenta Band of Nomlaki Indians called on April 3, 2019 and said that the APE was outside of their territory. Mr. Dennis Ramirez, Chairperson of the Mechoopda Indian Tribe, called on April 3, 2019 and deferred to the Grindstone Indian Rancheria or the Paskenta Band of Nomlaki Indians. No response was received from the Estom Yumeka Maidu Tribe of the Enterprise Rancheria.

Pacific Legacy made additional efforts to contact the Grindstone Rancheria of Wintun-Wailaki on April 9, 2019. A phone message was left with the receptionist for Chairperson Ronald Kirk, asking if he had received the notification letter. An additional follow-up phone call on April 11, 2019 was answered by the Grindstone Rancheria receptionist/secretary who indicated that they had no concerns with the project.

Pacific Legacy answered a phone call on April 27, 2019 from Ronald Kirk, Chairperson of Grindstone Rancheria indicating that he remembered receiving the letters, but that he had no concerns regarding the project. Native American correspondence for the project is provided in Appendix B.

### 2.3 HISTORICAL SOCIETY OUTREACH

Pacific Legacy mailed letters to historical societies on March 29, 2019 that included the Orland Historical and Cultural Society and Sacramento Valley Museum (Appendix C). The letters provided the project description and location. The historical societies were also asked if they could provide any information on known historical sites in the APE and surrounding area. No response has been received from either party.

# 3.0 BACKGROUND

## 3.1 ENVIRONMENT

The project is situated in Glenn County on Watson Creek and runs along Grindstone Creek just north of the junction between the two drainages. The APE sits within the interface between the Sacramento Valley and western foothills of the North Coast Ranges. Geologically the vicinity is dominated by the Northern Coast Ranges to the west, which was formed by an uplifted Franciscan basement overlain by Cretaceous sedimentary rock of the Great Valley sequence (Norris and Webb 1990:398) and the expanse of the Sacramento Valley to the east and south.

The project area is situated on an open, slightly undulating landscape covered in low prairie grasses, star thistle, various forbs and bushes, and scattered oaks. A variety of vegetation communities including California prairie, blue woodland, chaparral, and riparian woodland are found in the greater vicinity (Jackson et al. 2013). Within the APE, types of vegetation observed includes black walnut, valley oak, elderberry, cottonwood, wild grape, star thistle, various types of grasses, willow and tamarisk (an invasive species). Climate is classified as Mediterranean, with hot, dry summers and cool, wet winters. Average rainfall in the area is approximately 23.5 inches per year (U.S. Climate Data 2018).

Major drainages in the area crosscut the north-south trending ridgelines creating east-west trending valleys (Jackson et al. 2013). Stony Creek, a major tributary in the Tehama Watershed, flows north from Stony Gorge to Black Butte Reservoir. In addition, numerous unnamed tributaries flow into the nine streams that compose the Tehama East Watershed. Watson Creek flows roughly north-south through the Sacramento Valley, and combines with other creeks and streams in the area, eventually feeding into the Stony Gorge Reservoir.

The present environment supports a variety of fauna, and an even larger diversity of species would have been available during prehistoric times. The valley has a large number of mammals including cottontail (*Sylvilagus* sp.), jackrabbit (*Lepus* sp.), California ground squirrel (*Spermophilus beecheyi*), western gray squirrel (*Sciurus griseus*), beaver (*Castor canadensis*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), river otter (*Lutra canadensis*), bobcat (*Felis rufus*), and deer (*Odocoileus hemionus*) (Jameson and Peeters 1988). Early Euro-American arrivals to the area in the 1840s noted large herds of tule elk (*Cervus elaphus*) and pronghorn (*Antilocapra americana*), as well as an occasional grizzly bear (*Ursus arctos*) (Smith 1997:10).

### 3.1.1 Potential for Buried Archaeological Deposits

Meyer and Rosenthal (2008) provide a thorough overview of the potential for buried archaeological deposits in Caltrans District 3 which includes the APE. Because the project area straddles Watson Creek just north of its confluence with Grindstone Creek, landforms within the APE all consist of alluvium, but are of different ages. The landforms, ranging from youngest to oldest, are the active channel, the floodplain, and elevated terraces. Meyer and Rosenthal (2008:115) have modeled these landforms to be mostly latest Holocene to historic in age, although the scale of their map makes differentiating the different landforms and their respective ages difficult. Inasmuch as these landforms are depositional and formed in the latest Holocene, they can be considered to have a moderate to high sensitivity for buried archaeological resources spanning the entire period of human

occupation in the region (Meyer and Rosenthal 2008:161). However, the active channel may be considered less sensitive for intact buried deposits because it is an erosional landform on account of its dynamic and high energy geomorphic setting.

Soil units present in the project area as part of the Soil Survey Geographic (SSURGO) mapping (USDA NRCS 2018) support these age assignments based on their relative lack of horizon development and that they are formed in alluvium. Soil map units in the project area from west to east are:

- Gravelly Alluvial Lands (unnamed soil series): located on the floodplain on the western side of the bridge above the active channel, this map unit is modeled to be latest Holocene in age (Meyer and Rosenthal 2008:B6).
- Riverwash (unnamed soil series): located in the active channel both under and southwest of the bridge (i.e., south of County Road 305), this map unit is modeled to be historical to modern in age (Meyer and Rosenthal 2008:B11).
- Orland-Cortina Complex: located on the east side of the bridge on an elevated terrace above the active channel, this map unit is modeled to be latest Holocene in age (Meyer and Rosenthal 2008:B9).

In summary, the APE outside of the active channel should be considered to have a high potential for buried archaeological resources.

### 3.2 ETHNOGRAPHY

The APE is located within Hill Nomlaki or Central Wintun ethnographic territory near the northern border of Hill Patwin (Kroeber 1925: Plate 1934; Merriam 1967: Figure 5). The ethnographic territory of the Hill Nomlaki is depicted slightly differently by Goldschmidt (1978: Fig. 1), who places the APE closer to the boundary with the Patwin. Sources documenting the Nomlaki include Merriam (1967) and Kroeber (1925) with excellent overviews provided by Goldschmidt (1951, 1978) and Johnson et al. (1984).

The Hill Nomlaki spoke a Wintuan language within the Penutian linguistic stock closely related to Wintu and Patwin (Goldschmidt 1978:341). The Nomlaki are divided into two primary groups, the Hill Nomlaki and River Nomlaki. According to Goldschmidt (1951, 1978), Hill Nomlaki territory included the western Sacramento Valley floor and foothills to the west, extending to the summit of the Coast Range. The River Nomlaki occupied the Sacramento Valley proper on both sides of the Sacramento River, from Cottonwood Creek in the north to just below Toomes Creek in the south. The Hill Nomlaki were subdivided into dialects extending along the creeks. Those living along Grindstone Creek were known as *noykewe*l or *kolayel*.

Hill Nomlaki village settlements were centered along the major drainages of Stony Creek, Grindstone Creek, and Thomes Creek. The closest Nomlaki ethnographic village is *Adontidi* situated on the south side of Grindstone Creek at the confluence of Stony Creek, roughly 0.8 mile from southeast of the APE. Other ethnographic villages in vicinity include *dahcimcini* on the west side of Stony Creek 1.5 miles south-southeast of the APE and *kotayel* south of the community of Newville, approximately 7 miles north of the APE (Goldschmidt 1978: Fig. 1).

Nomlaki settlement and subsistence practices mirrored those of neighboring hunting and gathering groups. They maintained permanent winter villages, but much of the population moved annually through their territory according to resource availability (Goldschmidt 1951:429). The main food resources of the Nomlaki included acorns, wild seeds (e.g., sunflower, oats), pine nuts and tubers, as well as deer, elk, rabbit, other small game, birds, and fish. Gathering and hunting of terrestrial food resources was more important than fishing (Goldschmidt 1978:347).

The technological tool kit of the Nomlaki included flaked stone tools (projectile points, knives, scrapers) made from locally available basalt and metavolcanics, as well as non-local chert and obsidian (Goldschmidt 1978:347). Chert was available from the Yolla Bolly Mountains to the west and obsidian from various sources through trade networks, particularly from the Mount Shasta region (Goldschmidt 1951:418-419; Hamusek 1996; Johnson et al. 1984). Long, tapered pestles and hopper mortars were common, with the raw materials derived from local stream beds (Hamusek 1996). Johnson et al. (1984:86) states that the long, tapered pestles were rare and were an important trade item.

Ethnographic research indicates that Nomlaki territory included established trade routes between the San Francisco Bay Area, Sacramento River headwaters, and Oregon border (Davis 1961:Map 1; Goldschmidt 1978:345). The Nomlaki were middlemen in an exchange network involving obsidian from the Medicine Lake Highlands and marine shell from southern areas. This north-south trade route was so firmly established that it was later "exploited" by Euro-Americans (Goldschmidt 1951:337). Nomlaki exchange with the Maidu, Patwin, Wintu, Yuki, and Yana was an important part of the economic system and involved numerous commodities, like obsidian, clam shell disk beads, bearskins, acorns, seeds, bows, and baskets (Davis 1961:17-18). Trade was conducted using shell money and the exchange of valuables, and often accompanied warfare, where the exchange of items formalized a "peace settlement" (Goldschmidt 1951:336).

The Nomlaki were outside of the direct influence of Spanish missionary activities and had only peripheral contact with explorers and fur trappers. The 1833 malaria epidemic was the first major impact to the Nomlaki, killing an untold number of people. The Nome Lackee Reservation was established in 1854 on 25,000 acres between Elder and Thomes creeks. The reservation was so successful and prosperous that white settlers took over the farmlands in 1856 (Goldschmidt 1978:342). In 1863, the Nomlaki were forcibly moved to Round Valley to live with the Yukis, a traditional enemy. This living situation was fraught with conflict and many Nomlaki returned to their old territory. Grindstone Rancheria was established in 1907 and is situated on the north side of Grindstone Creek at the confluence of Stony Creek.

Today, the Grindstone Indian Rancheria of Wintun-Wailaki Indians, a federally recognized tribe and rancheria of Wintun and Wailaki Native Americans, occupy Grindstone Rancheria. As of the 2010 U.S. Census, the population was 164. Roughly 60% of the tribe resides on the 120 acre rancheria.

### 3.3 PREHISTORY

Synthetic summaries of the regional prehistory are provided by Hildebrandt (2007:83-97) and particularly Fredrickson's chapter *The North Coastal Region* in Moratto's (1984) overview of California archaeology. Fredrickson's (1973, 1974, 1984) framework still remains widely useful for understanding the prehistory of the northern coastal region. Fredrickson (1984) defines five broad

cultural periods, extending from the Paleo-Indian Period during the Pleistocene-Holocene Transition, through the Holocene, and terminating with the Emergent Pattern and Augustine Pattern assemblages. The framework is simply listed below but is well-documented in the regional archaeological literature.

**Paleo-Indian Period (11,000-6000 BC):** the earliest well-documented period of occupation on the North Coast, reflecting initial entry by people which focused on hunting that included distinctive fluted points.

**Lower Archaic Period (6000-3000 BC):** associated with the Borax Lake Pattern in the North Coast Ranges.

**Middle Archaic Period (3000-1000 BC):** widespread evidence of occupation in inland areas during this interval, but evidence from the coast is limited.

**Upper Archaic Period (1000 BC-AD 500):** Mendocino Pattern adaptations persist in the north, while Berkeley Pattern adaptations are evident in the southern North Coast Ranges. Pomoan assemblages are affiliated with the Augustine Pattern and show Central California influences.

**Emergent Period (AD 500-1850)**: assemblages reflect increasing elaboration of socio-political and exchange systems, increasing populations and diversification of subsistence regimes, greater dependence on acorns, and seasonal population movements. These Augustine Pattern assemblages have been linked to ethnographic Pomoan people, while Yukian components reflect northwestern influences associated with the Gunther Pattern.

### 3.4 HISTORICAL OVERVIEW

Historical themes characterizing the project area include initial exploration, settlement and farming, water management, and the railroad industry. The early 1800s marked Spain's growing interest in California. In 1808 Gabriel Moraga reached the area now known as the town of Glenn along the Sacramento River and later in 1821, representatives of Spain entered Glenn and Tehama counties (Beck and Haase 1974:18). Fur trapping expeditions in the region soon followed and included Jedediah Smith and the Hudson Bay Company in the 1830s and 1840s (Johnson et al. 1984:95; McComish et al. 1918:179). The growing population in California from foreign newcomers had a devastating effect on Native American indigenes, allowing for the takeover of the area in the coming decades (Johnson et al. 1984:95-96).

Settlers became attracted to what are now the Willows, Arbuckle, and College City areas beginning in 1853. Many settled along the sloughs and creeks of the valley. Gold mining became less profitable after the Gold Rush of 1849, river transportation became regular and dependable, and stage lines were extended in all directions, as more settlers began to call Colusi County home. Farming equipment and products began to be in high demand and by the time of the Civil War, Colusi County was a well-established and organized community (McComish et al. 1918:58).

Cattle farming became a major industry, prompting settlement by families. While most pioneers came to the area to raise cattle, it was apparent by the 1850s and 1860s that sheep fared better. By the late 1860s sheep ranching became the area's major industry. A severe drought during the 1860s

required more diversification of markets, and specifically led to grain-growing (McComish et al. 1918:206). By 1872 the grain industry had grown to unbelievable proportions before eventually declining (McCormish et al. 1918:209-210).

Water has always been of vital importance in the Stony Creek area and in 1888 local residents formed the Stony Creek Irrigation Company. A canal was built to irrigate about 150 acres around the city of Orland. In 1906 the Water Users Association petitioned the Secretary of the Interior for the construction of an irrigation project along Stony Creek, which resulted in East Park Dam, approximately 40 miles upstream of Orland (Russell 1977:32; Wigmore 1955:25). The construction of Black Butte Dam began in response to a severe winter flood in 1940 (Johnson et al. 1984: 107).

The need for irrigation in Glenn County was recognized by the late 1870s. The first irrigation district was formed in 1887, known as the Orland Irrigation District, and others soon followed in Glenn and Tehama counties (McComish et al. 1918:227). In 1875 Will S. Green developed the idea of an irrigation canal using water from the Sacramento River, under the Central Irrigation District. The canal began at the Sacramento River near the Tehama County border and continued to a midway point between Willows and Arbuckle (McComish et al. 1918:229).

The Pacific Railway Act, signed by President Abraham Lincoln in 1862, authorized land grants and government bonds for the Central Pacific and Union Pacific railroads (Linda Hall Library 2012). The Central Pacific Railroad worked eastward from Sacramento, while the Union Pacific worked westward from Omaha and Levensworth. The two lines met at Promontory Summit north of Salt Lake, thus creating a railroad from Nebraska to California. Other railroads in the project vicinity were established by the 1870s, including the Southern Pacific and the Northern Railway (now the Southern Pacific).

Glenn and Colusa counties were originally part of Colusi County, created by the State Legislature in 1850. By 1882, residents of northern Colusa County sought to divide the county, with a newly formed Glenn County to the north. By 1891, the third bill advocating for the division of Colusa County into Glenn and Colusa counties had passed both houses of Legislature and was signed by Governor Markham (McComish et al. 1918:212-214). Glenn County was named after Dr. Hugh J. Glenn, the largest wheat farmer in the state at that time. The county seat was created in March 1891 in the city of Willows.

The closest community is Elk Creek located roughly 5 miles south of the project area. Established in the late 1860s as a trading center for the surrounding valleys, the town was a stage stop for travelers going between Colusa, 35 miles to the southeast, to Newville, 13 miles north (Hoover et al. 2002:99).

Review of historical maps provides a history of early land use in the project area. The earliest depiction of County Roads 305 and 306 appears on the 1919 USGS Elk Creek, CA 15-minute map. County Road 305 seems to have been re-routed to bend around the curve of Stony Creek to connect with County Road 306 the following year in 1920, with the construction of the Watson Creek Bridge. By 1968, both roads were reconfigured to the present-day alignment. The 1948 USGS Elk Creek, CA 15-minute map provides the first depiction of the Grindstone Rancheria Indian Reservation, located a 0.4-mile southeast of the APE, as well as the Grindstone Cemetery. None of the historical topographic maps (Elk Creek [1:62,500] 1919, 1948, 1957; Chrome [1:24,000] 1968) depict any structures or development in the APE other than the road alignments. The APE between

Grindstone Creek and CR 305 is depicted as a wide wash. Scattered structures are depicted on the Elk Creek (1948) 15-minute map in the ¼ mile radius, with the closest structure roughly 0.1-mile north of the APE.

# 4.0 FIELD METHODS

Inventory methods to identify cultural resources in the APE involved documentary research, records searches, and archaeological field survey. Although the APE has been previously surveyed, the records search results (Section 2.0) indicated that no cultural resources were previously recorded in the APE other than the Watson Creek Bridge (Bridge No. 11C-0019) which is proposed for replacement by the undertaking.

## 4.1 SURVEY METHODS AND COVERAGE

A systematic field survey of the APE which comprises 6.27 acres was accomplished by a two-person archaeological crew on June 14, 2019 using standard pedestrian survey methods. Intensive survey coverage was completed whenever possible in the APE using 5 m to 10 m (16-32 ft.) wide transects. These included the relatively open areas alongside County Roads 305 and 306 and the north and west staging areas, which together comprise approximately 4.2 acres (67%) of the APE.

Most of the APE is covered in vegetation (grasses, tamarisk, poison oak, star thistle) which obscured surface visibility and required alternate survey coverage methods. In areas where vegetation is too dense for intensive survey, cursory coverage methods were used to identify areas of archaeological sensitivity. This survey method entailed walking through brush where possible (following game trails) and conducting shallow scrapes into the mineral soil to identify the presence or absence of small cultural materials (e.g., flaked stone, historical artifacts such as glass, nails, and metal) by removing surface grasses and duff. Cursory coverage was required for a small area, totaling 2.1 acres (33%) of the APE.

All areas of ground disturbance and rodent burrows were studied for evidence of prehistoric and historic cultural materials (e.g., flaked stone, historical artifacts such as glass and nails). No archaeological resources were identified in the APE and this precluded the need for site recording and mapping. Representative photographs were taken in digital format to document the fieldwork, setting, and current conditions of the APE.

Photographic overviews show typical conditions in the APE (Figures 1 and 2). The survey coverage map for the APE is provided in Exhibit 1–Figure 4.



**Figure 1. Overview of APE, County Road 305, view west.**



**Figure 2. Overview of Watson Creek Bridge, view northwest.**

# 5.0 FINDINGS AND CONCLUSIONS

## 5.1 ARCHAEOLOGICAL SITE INVENTORY AND ELIGIBILITY

The inventory of the APE found no archaeological resources, resulting in negative findings.

### 5.1.1 Non-Exempt Archaeological Resources in the APE

The inventory of the APE identified no archaeological resources that are non-exempt as described in Stipulation VIII.C.1 and Attachment 4 of the Section 106 PA. As such, no properties in the APE require further study under Section 106 of the NHPA (36 CFR Part 800) and pursuant to the CEQA Guidelines (Section 15064.5).

### 5.1.2 Resources Previously Determined Not Eligible for the NRHP

The historic period Watson Creek Bridge (Bridge No. 11C-0091), which is proposed for widening by the undertaking, is in the APE. The bridge, constructed in 1920, is listed as not eligible (Category 5) for the NRHP. As a resource that was previously determined ineligible for the NRHP, no further study is required under Section 106 of the NHPA.

## 5.2 ARCHAEOLOGICAL SITE INVENTORY AND EVALUATION SUMMARY

No archaeological resources were identified in the APE that require further study under Section 106 of the NHPA (36 CFR Part 800) or CEQA. The only cultural resource identified in the APE is the historic period Watson Creek Bridge (Bridge No. 11C-0091) that was previously determined ineligible for the NRHP. No further study under Section 106 of the NHPA (36 CFR part 800) is required for this resource.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits. While it is Caltrans policy to avoid impacts to cultural resources whenever possible, if a site cannot be avoided by the proposed project, testing to determine its potential NRHP and CRHR eligibility will be necessary.

# 6.0 REFERENCES CITED


Beck, Warren A., and Ynez D. Haase
1974 *Historical Atlas of California*. University of Oklahoma Press, Norman.

Davis, Johnathan T.
1961 Trade Routes and Economic Exchange Among the Indians of California. *University of California Archaeological Survey Reports* 54.

Fredrickson, David
1973 *Early Cultures of the North Coast Ranges, California.* Unpublished Ph.D. dissertation. Department of Anthropology, University of California, Davis.

1974 Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41-53.

1984 The North Coastal Region. In *California Archaeology,* edited by M. J. Moratto, pp. 471-527. Academic Press, New York.

Goldschmidt, Walter
1951 Nomlaki Ethnography. *University of California Publications in American Archaeology and Ethnology* 42(4). University of California Press, Berkeley.

1978 Nomlaki. In *California*, edited by R. F. Heizer, pp. 341-349. Handbook of North American Indians, Vol. 8, W. C. Sturtevant, general editor. Smithsonian Institution, Washington D.C.

Hamusek, Blossom J.
1996 *A Cultural Resource Survey in the Upper Sacramento Valley*, *Tehama County, California*. California State University, Chico, Archaeological Field School Survey Class. Submitted to the Bureau of Land Management, Redding, California, under Cooperative Agreement No. B950-A3-0005.

Hildebrandt, William R.
2007 Northwest California: Ancient Lifeways. In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry Jones and Kathryn A. Klar, pp. 83-97. Alta Mira Press, Lanham.

Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Grace Rensch, William N. Abeloe, and Kyle, Douglas E.
2002 *Historic Spots in California*. Fifth Edition. Stanford University Press, Stanford.

Jackson, Robert, William Shapiro, Michael Bever, Tsim Schneider, and Patricia Welsh
2013 *Archaeological Salvage Excavations at CA-COL-33, Colusa County, California*. Pacific Legacy, Inc. Eldorado Hills, CA. Prepared for California Department of Transportation, District 3, Marysville.

Jameson, E. W. Jr., and H. J. Peeters
1988 California Mammals. California Natural History Guides, No. 52. University of California Press, Berkeley.

Johnson, Jerald J., Steven Dondero, Ruth Begell, Ann H. Johnson, Clinton M. Blount, Dorothea J. Theodoratus, Dana McGowan Seldner
1984 *Black Butte Lake Intensive Cultural Resources Survey*. The Foundation of California State University, Sacramento and Theodoratus Cultural Research, Fair Oaks. Submitted to the U.S. Army Corps of Engineers, Sacramento District.

Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. Smithsonian Institution, Bureau of American Ethnology Bulletin 78. Berkeley. Reprinted (1976) Dover Publications, Inc., New York.

Linda Hall Library
2012 *The Pacific Railway. A Brief History of Building the Transcontinental Railroad.* Electronic document, https://railroad.lindahall.org/essays/brief-history.html, accessed 2018.

McComish, Charles Davis, and Rebecca Lambert
1918 History of Colusa and Glenn Counties, California, with biographical sketches of the leading men and women of the counties who have been identified with their growth and development from the early days to the present. Historic Record Company, Los Angeles.

Merriam, C. Hart
1967 Ethnographic notes on California Indian Tribes, 3 parts, edited by R.F. Heizer. *University of California Archaeological Survey Reports* 68.

Meyer, Jack, and Jeffrey S. Rosenthal
2008 *A Geoarchaeological Overview and Assessment of Caltrans District 3*. Far Western Anthropological Research Group, Inc., Davis. Report submitted to California Department of Transportation, District 3, Marysville.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, Orlando.

Norris, Robert M., and Robert W. Webb
1990 *Geology of California*. John Wiley & Sons, Inc., New York.

Rogers, Justus H.
1891 *Colusa County: Its History and Resources*. Justus H. Rogers, Orland.

Russell, Gene
1977 Orland's Colorful Past. Orland Community Scholarship Association. On file, Northeast California Collections, California State University, Chico.

Smith, Dottie
1997 *Historical Overview of the Western Tehama County Foothills*. Cultural Resources Publications, E. W. Ritter, general editor, Bureau of Land Management, Redding.

United States Climate Data
2018 Climate Willows-California. Electronic document, https://www.usclimatedata.com/climate/willows/california/united-states/usca1244, accessed May 23, 2018.

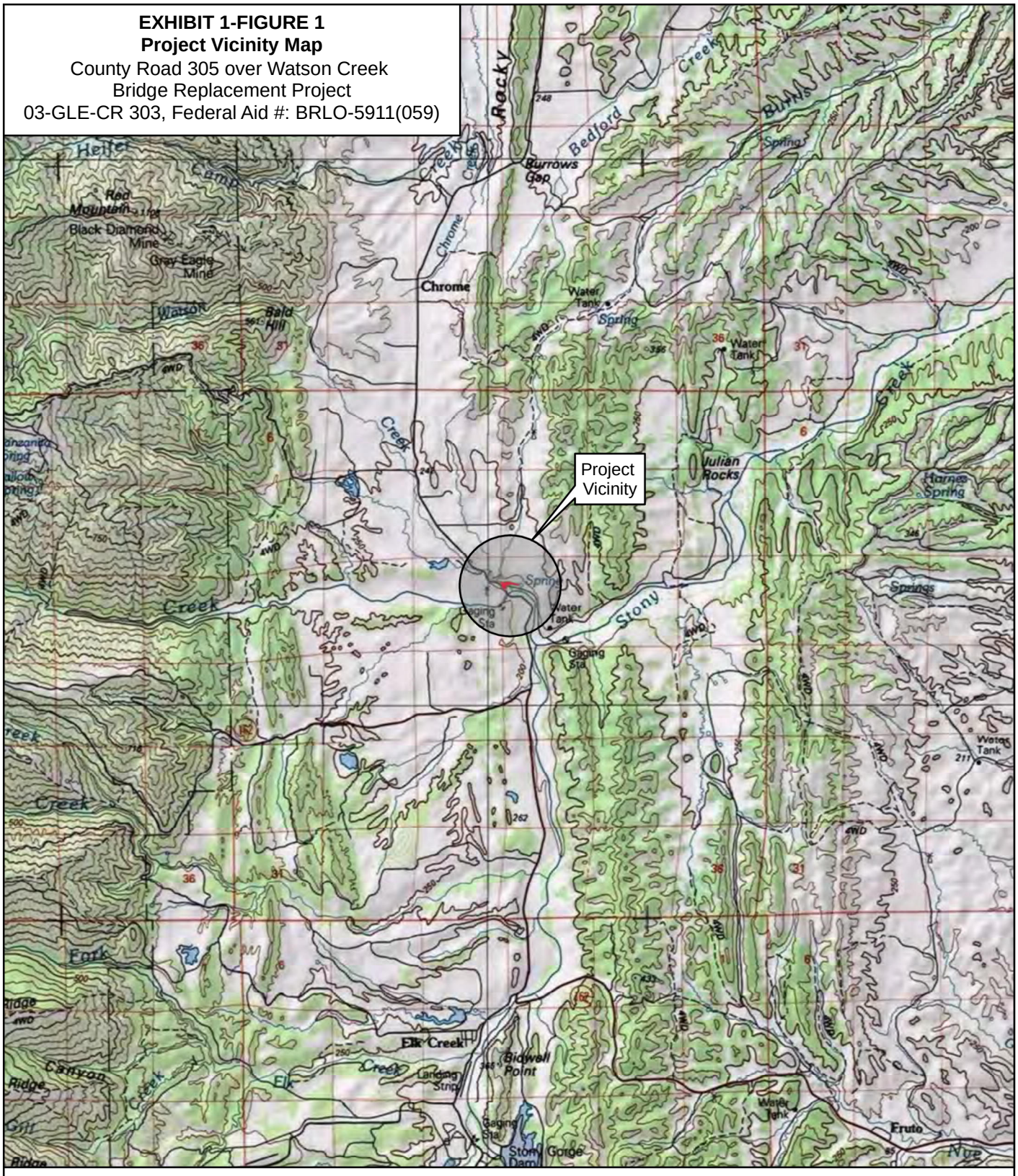
United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS)
2018 Web Soil Survey. Electronic document, http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed July 2019.

Wigmore, L. W.
1955 *The Story of the Land of Orland*. The Orland Register. December 12, 1955. Orland.

# Exhibit 1- Project Maps

Figure 1. Project Vicinity
Figure 2. Project Location
Figure 3. Area of Potential Effects
Figure 4. Survey Coverage

**EXHIBIT 1-FIGURE 1**
**Project Vicinity Map**
County Road 305 over Watson Creek
Bridge Replacement Project
03-GLE-CR 303, Federal Aid #: BRLO-5911(059)




SOURCE: National Geographic TOPO! through ArcGIS Online. SCALE: 1:100,000.

Quadrangle Location

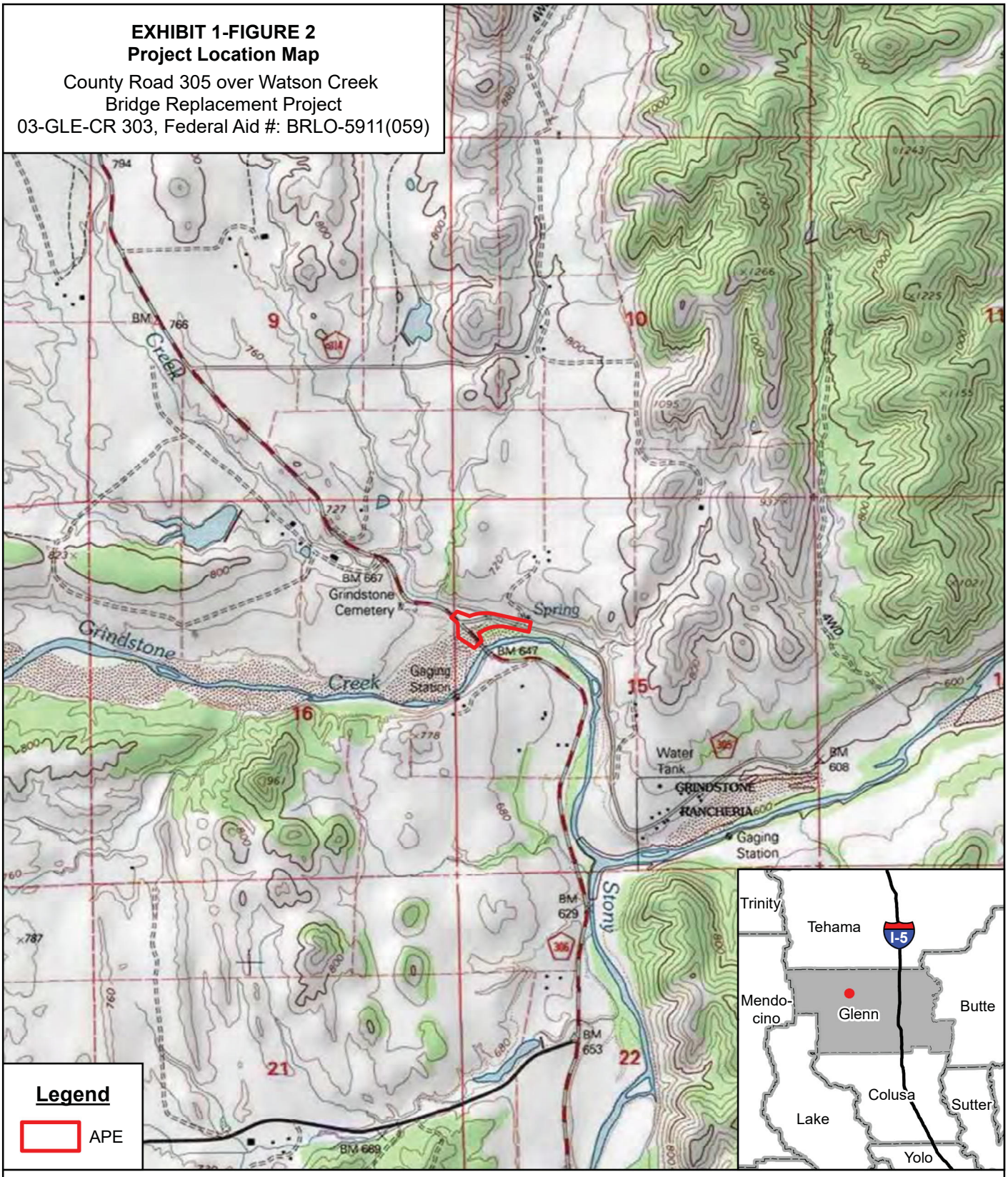
Miles
0 4

0 4
Kilometers

TN
mN
14°

**EXHIBIT 1-FIGURE 2**
**Project Location Map**

County Road 305 over Watson Creek
Bridge Replacement Project
03-GLE-CR 303, Federal Aid #: BRLO-5911(059)




SOURCE: ArcGIS Online Topographic Basemap. SCALE: 1:24,000.

Quadrangle Location

Miles
0 0.5 1

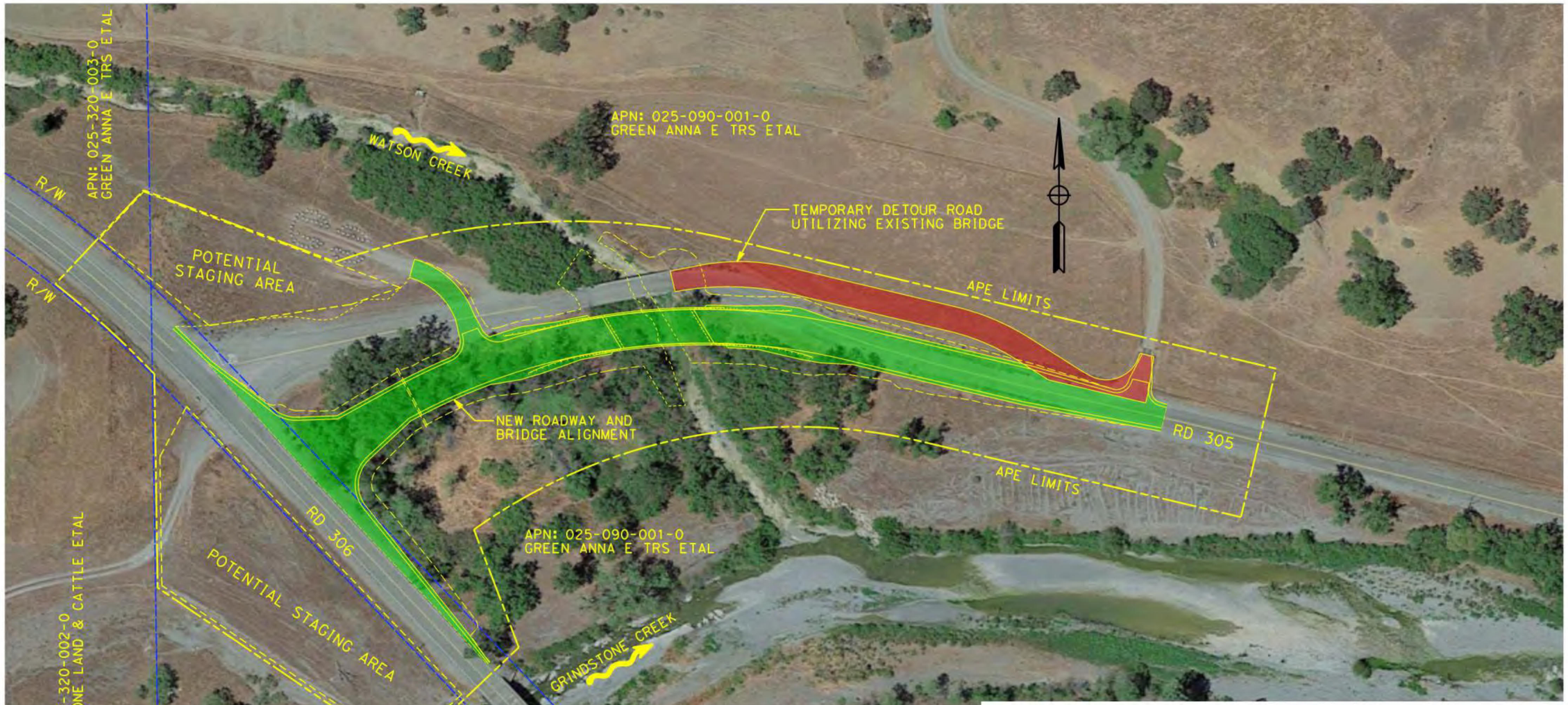
0 0.5 1
Kilometers

TN
mN
14°

| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 305 | N/A | 1 | 1 |

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988




AREA OF POTENTIAL EFFECTS APPROVED BY

*William E. Larson* — 6/8/22

William Larson Associate Environmental Planner - Archaeology
POS: PI/Prehistoric Archaeology — Date

*Robert S. Brown* — 07/19/2022

Vlad Popko, Local Assistance Engineer, Office of
Local Assistance Caltrans — Date

# COUNTY ROAD 305 AT WATSON CREEK
# AREA OF POTENTIAL EFFECT

SCALE: 1" = 100'

CALCULATED-DESIGNED BY: R. UHLMANN
CHECKED BY:
PROJECT ENGINEER: GARY M. GORDON
REVISED BY
DATE REVISED

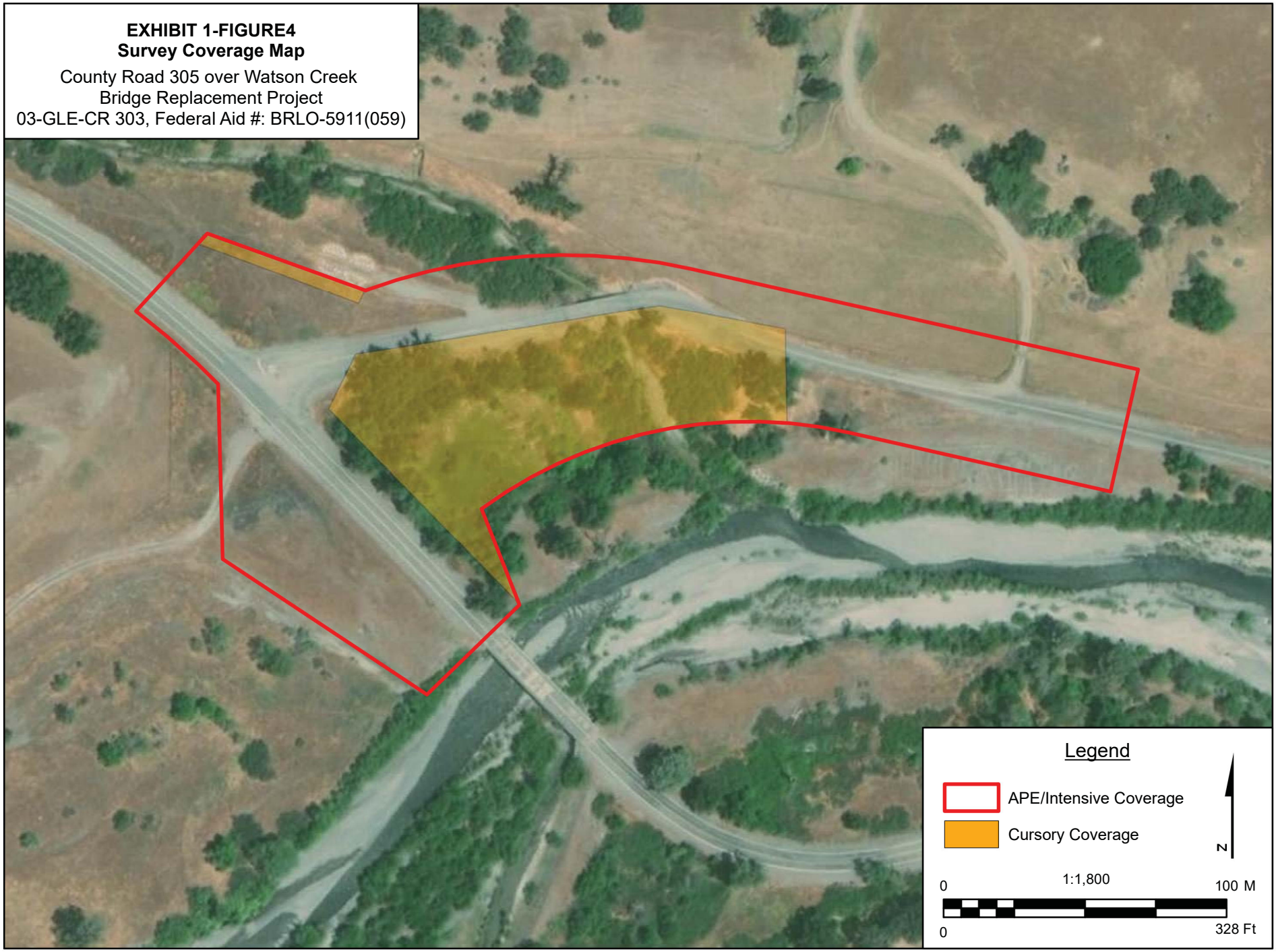
USERNAME => Richard
DGN FILE => Watson Creek Bridge APE.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

LAST REVISION DATE PLOTTED => 6/7/2022
00-00-00 TIME PLOTTED => 4:49:30 PM

**EXHIBIT 1-FIGURE4**
**Survey Coverage Map**

County Road 305 over Watson Creek
Bridge Replacement Project
03-GLE-CR 303, Federal Aid #: BRLO-5911(059)



# Appendix A

## Records Search
## (Confidential)

REDACTED - GLENN COUNTY 9/7/2023

# Appendix B

# Native American Correspondence

# Sacred Lands File & Native American Contacts List Request

**NATIVE AMERICAN HERITAGE COMMISSION**
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95501
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

*Information Below is Required for a Sacred Lands File Search*

Project: County Road 305 Bridge Replacement Project

County: Glenn

USGS Quadrangle

Name: Chrome, CA

Township: 21N Range: 6W Section(s): 15,16

Company/Firm/Agency:

Pacific Legacy Inc.

Contact Person: Gia DiMaggio

Street Address: 4919 Windplay Drive, Ste. 4

City: El Dorado Hills Zip: 95762

Phone: 916-358-5156 Extension: 112

Fax:

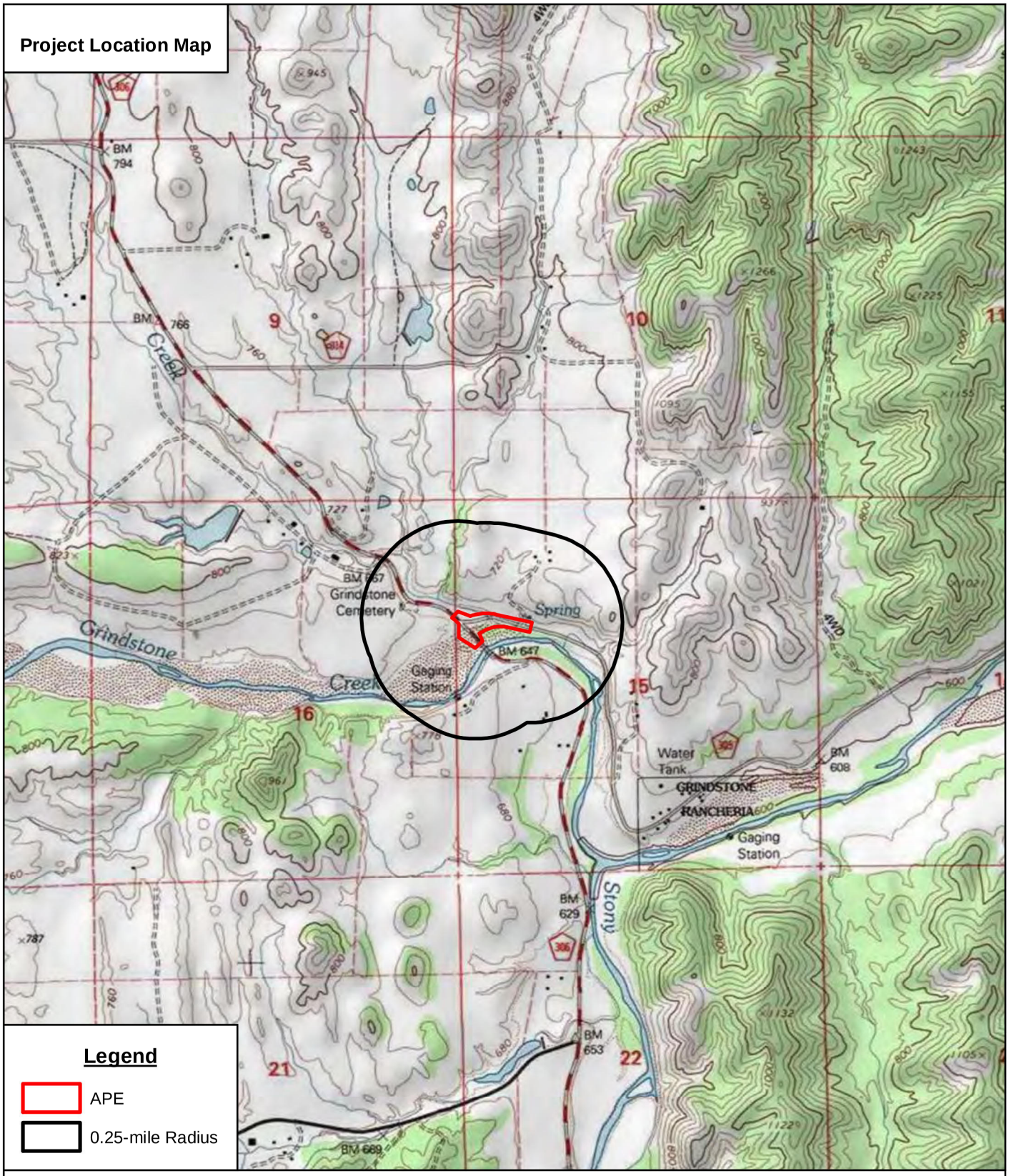
Email: dimaggio@pacificlegacy.com

Project Description:

Glenn County is proposing a realignment and bridge replacement project on County Road 305 in Glenn County.

☑ Project Location Map is attached

# Project Location Map




SOURCE: ArcGIS Online Topographic Basemap. SCALE: 1:24,000.



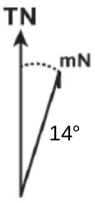
Quadrangle Location

Miles

0 0.5 1

0 0.5 1

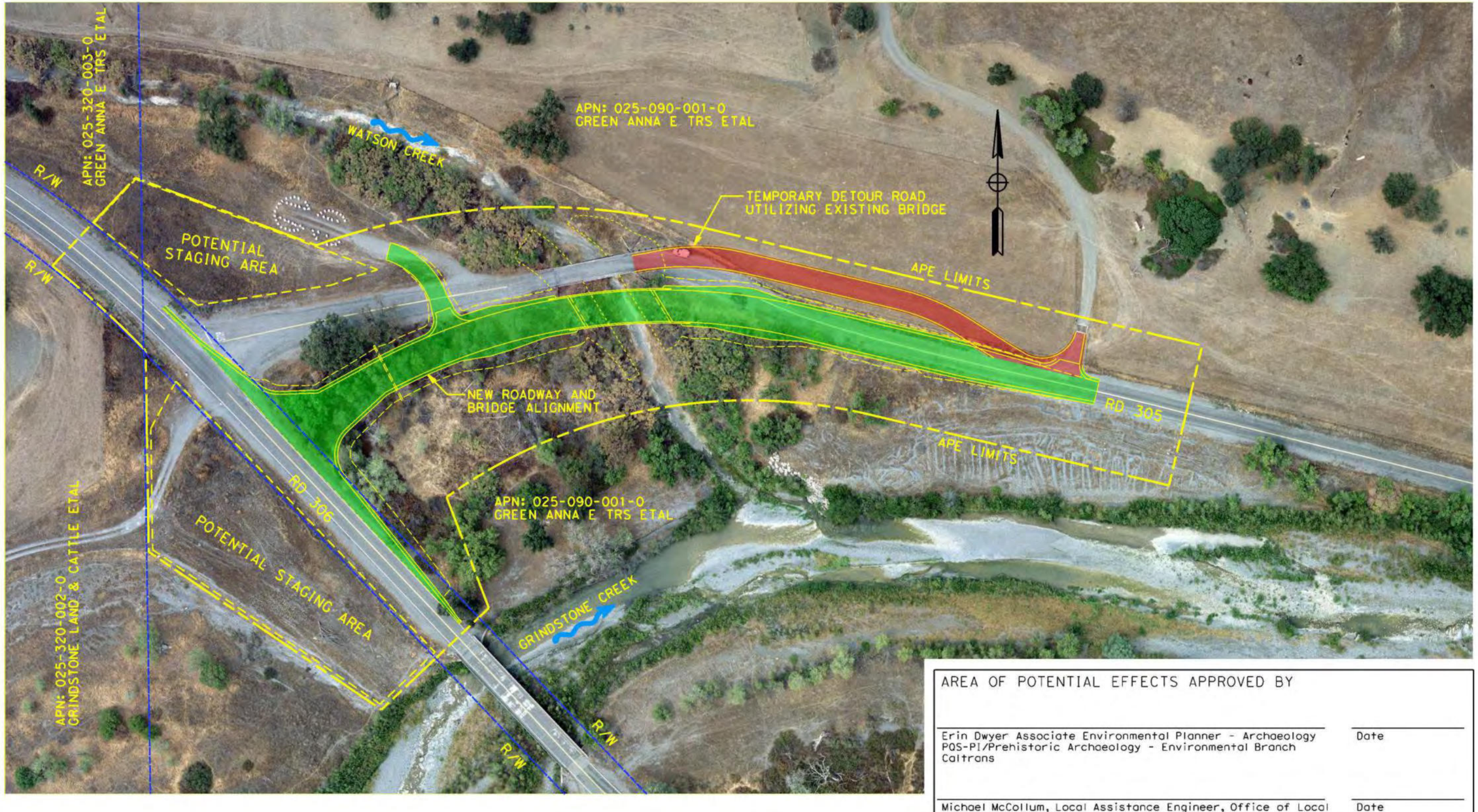
Kilometers



| Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS |
|---|---|---|---|---|---|
| 03 | Gle | CR 305 | N/A | 1 | 1 |

WILLDAN ENGINEERING
2400 WASHINGTON AVENUE, SUITE 101
REDDING, CALIFORNIA 96001

COUNTY OF GLENN
PUBLIC WORKS AGENCY
777 N. COLUSA STREET
WILLOWS, CALIFORNIA 95988




AREA OF POTENTIAL EFFECTS APPROVED BY

Erin Dwyer Associate Environmental Planner - Archaeology
POS-PI/Prehistoric Archaeology - Environmental Branch
Caltrans — Date

Michael McCollum, Local Assistance Engineer, Office of Local Assistance Caltrans — Date

# COUNTY ROAD 305 AT WATSON CREEK
# AREA OF POTENTIAL EFFECT

SCALE: 1" = 100'

CALCULATED-DESIGNED BY
CHECKED BY
R. UHLMANN
REVISED BY
DATE REVISED
PROJECT ENGINEER
GARY M. GORDON

USERNAME => Richard
DGN FILE => Watson Creek Bridge APE.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

LAST REVISION DATE PLOTTED => 11/28/2018
00-00-00 TIME PLOTTED => 6105:09 PM

**STATE OF CALIFORNIA** **Gavin Newsom, Governor**

**NATIVE AMERICAN HERITAGE COMMISSION**
**Cultural and Environmental Department**
**1550 Harbor Blvd., Suite 100**
**West Sacramento, CA 95691**
**Phone: (916) 373-3710**
**Email: nahc@nahc.ca.gov**
**Website: http://www.nahc.ca.gov**
**Twitter: @CA_NAHC**

January 24, 2019

Gia DiMaggio
Pacific Legacy, Inc.

VIA Email to: dimaggio@pacificlegacy.com

RE: County Road 305 Bridge Replacement Project, near Grindstone Rancheria; Chrome USGS Quadrangle, Glenn County

Dear Ms. DiMaggio:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the **Grindstone Rancheria of Wintun-Wailaki at (530) 968-5365** for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: gayle.totton@nahc.ca.gov.

Sincerely,

Gayle Totton

Gayle Totton, B.S., M.A., Ph. D
Associate Governmental Program Analyst

Attachment

**Native American Heritage Commission**
**Native American Contact List**
**Glenn County**
**1/24/2019**

***Estom Yumeka Maidu Tribe of the Enterprise Rancheria***
Glenda Nelson, Chairperson
2133 Monte Vista Avenue — Maidu
Oroville, CA, 95966
Phone: (530) 532 - 9214
Fax: (530) 532-1768
info@enterpriserancheria.org

***Grindstone Rancheria of Wintun-Wailaki***
Ronald Kirk, Chairperson
P.O. Box 63 — Nomlaki
Elk Creek, CA, 95939 — Patwin
Phone: (530) 968 - 5365 — Wailaki
Fax: (530) 968-5366

***Mechoopda Indian Tribe***
Dennis Ramirez, Chairperson
125 Mission Ranch Blvd — KonKow
Chico, CA, 95926 — Maidu
Phone: (530) 899 - 8922
Fax: (530) 899-8517
dramirez@mechoopda-nsn.gov

***Paskenta Band of Nomlaki Indians***
Andrew Alejandre, Chairperson
P.O. Box 709 — Nomlaki
Corning, CA, 96021 — Wintu
Phone: (530) 528 - 3538
Fax: (530) 528-3595
office@paskenta.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed County Road 305 Bridge Replacement Project, Glenn County.

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Chairperson Glenda Nelson
Estom Yumeka Maidu Tribe of the Enterprise Rancheria
2133 Monte Vista Avenue
Oroville, CA 95966

March 18, 2019

Re: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Chairperson Nelson,

Glenn County is proposing to replace the structurally deficient Watson Creek Bridge (Bridge No. 11C-0091). Pacific Legacy, Inc. is performing a cultural resources inventory on behalf of Glenn County. The purpose of this letter is to inform you of the project and initiate Native American consultation on the County Road 305 Bridge 11C-0091 Replacement Project. We invite any comments or concerns you might have regarding this project.

The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the Chrome, CA 7.5-minute USGS topographic quadrangle.

This project will replace the Watson Creek Bridge (Bridge No. 11C-0091). The scope of work will include a new bridge, new road alignment, road widening, road cut/fill, disposal/borrow sites, equipment staging areas, drainage/culverts, right-of-way acquisition, utility relocation, vegetation removal, and pile driving.

The Native American Heritage Commission (NAHC) Sacred Lands File has been reviewed. This review indicated the presence of cultural resources in the immediate project area but did not provide specific information. The NAHC provided us with your name as a contact to identify any locations of concern to local Native American Tribes within the project area. If appropriate, please provide us with any information you may have regarding locations of concern in the project area. This information will be used for project planning and will be kept confidential.

You may respond to me by mail, phone, or email, and your comments or concerns will be conveyed to Glenn County. Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio, M.A.
Supervisor/Archaeologist
Pacific Legacy, Inc.

Attached: Project Location Map and Area of Potential Effects Map.

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Chairperson Andrew Alejandre
Paskenta Band of Nomlaki Indians
P.O. Box 709
Corning, CA 96021

March 18, 2019

Re: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Chairperson Alejandre,

Glenn County is proposing to replace the structurally deficient Watson Creek Bridge (Bridge No. 11C-0091). Pacific Legacy, Inc. is performing a cultural resources inventory on behalf of Glenn County. The purpose of this letter is to inform you of the project and initiate Native American consultation on the County Road 305 Bridge 11C-0091 Replacement Project. We invite any comments or concerns you might have regarding this project.

The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the Chrome, CA 7.5-minute USGS topographic quadrangle.

This project will replace the Watson Creek Bridge (Bridge No. 11C-0091). The scope of work will include a new bridge, new road alignment, road widening, road cut/fill, disposal/borrow sites, equipment staging areas, drainage/culverts, right-of-way acquisition, utility relocation, vegetation removal, and pile driving.

The Native American Heritage Commission (NAHC) Sacred Lands File has been reviewed. This review indicated the presence of cultural resources in the immediate project area but did not provide specific information. The NAHC provided us with your name as a contact to identify any locations of concern to local Native American Tribes within the project area. If appropriate, please provide us with any information you may have regarding locations of concern in the project area. This information will be used for project planning and will be kept confidential.

You may respond to me by mail, phone, or email, and your comments or concerns will be conveyed to Glenn County. Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio, M.A.
Supervisor/Archaeologist
Pacific Legacy, Inc.

Attached: Project Location Map and Area of Potential Effects Map.

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Chairperson Dennis Ramirez
Mechoopda Indian Tribe
125 Mission Ranch Blvd
Chico, CA 95926

March 18, 2019

Re: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Chairperson Ramirez,

Glenn County is proposing to replace the structurally deficient Watson Creek Bridge (Bridge No. 11C-0091). Pacific Legacy, Inc. is performing a cultural resources inventory on behalf of Glenn County. The purpose of this letter is to inform you of the project and initiate Native American consultation on the County Road 305 Bridge 11C-0091 Replacement Project. We invite any comments or concerns you might have regarding this project.

The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the Chrome, CA 7.5-minute USGS topographic quadrangle.

This project will replace the Watson Creek Bridge (Bridge No. 11C-0091). The scope of work will include a new bridge, new road alignment, road widening, road cut/fill, disposal/borrow sites, equipment staging areas, drainage/culverts, right-of-way acquisition, utility relocation, vegetation removal, and pile driving.

The Native American Heritage Commission (NAHC) Sacred Lands File has been reviewed. This review indicated the presence of cultural resources in the immediate project area but did not provide specific information. The NAHC provided us with your name as a contact to identify any locations of concern to local Native American Tribes within the project area. If appropriate, please provide us with any information you may have regarding locations of concern in the project area. This information will be used for project planning and will be kept confidential.

You may respond to me by mail, phone, or email, and your comments or concerns will be conveyed to Glenn County. Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio, M.A.
Supervisor/Archaeologist
Pacific Legacy, Inc.

Attached: Project Location Map and Area of Potential Effects Map.

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Chairperson Ronald Kirk
Grindstone Rancheria of Wintun-Wailaki
P.O. Box 63
Elk Creek, CA 95939

March 18, 2019

Re: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Chairperson Kirk,

Glenn County is proposing to replace the structurally deficient Watson Creek Bridge (Bridge No. 11C-0091). Pacific Legacy, Inc. is performing a cultural resources inventory on behalf of Glenn County. The purpose of this letter is to inform you of the project and initiate Native American consultation on the County Road 305 Bridge 11C-0091 Replacement Project. We invite any comments or concerns you might have regarding this project.

The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the Chrome, CA 7.5-minute USGS topographic quadrangle.

This project will replace the Watson Creek Bridge (Bridge No. 11C-0091). The scope of work will include a new bridge, new road alignment, road widening, road cut/fill, disposal/borrow sites, equipment staging areas, drainage/culverts, right-of-way acquisition, utility relocation, vegetation removal, and pile driving.

The Native American Heritage Commission (NAHC) Sacred Lands File has been reviewed. This review indicated the presence of cultural resources in the immediate project area but did not provide specific information. The NAHC provided us with your name as a contact to identify any locations of concern to local Native American Tribes within the project area. If appropriate, please provide us with any information you may have regarding locations of concern in the project area. This information will be used for project planning and will be kept confidential.

You may respond to me by mail, phone, or email, and your comments or concerns will be conveyed to Glenn County. Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio, M.A.
Supervisor/Archaeologist
Pacific Legacy, Inc.

Attached: Project Location Map and Area of Potential Effects Map.

# PACIFIC LEGACY NATIVE AMERICAN CONSULTATION LOG

**County Road 305 over Watson Creek Bridge Replacement Project**
**Federal Project No. BRLO-5911 (056)**

**All correspondence by Pacific Legacy, Inc. (Gia DiMaggio, M.A.)**

| Group/ Organization/ Individual Contacted | Date of Initial Consultation Letter/Email | Follow-up Phone Call | Response Received | Summary of Consultation |
|---|---|---|---|---|
| Native American Heritage Commission (NAHC) | Letter sent 1/18/2019 | None | 1/24/2019 | The Sacred Lands File search did identify sacred lands within the buffer around the project area. They provided a list of four individuals with potential information or interests in the project. |
| Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Glenda Nelson, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | None | Letter to begin informal Section 106 and NEPA Consultation. Left message on the Tribe's main voicemail. |
| Grindstone Rancheria of Wintun-Wailaki, Ronald Kirk, Chairperson | Letter sent 3/19/2019 | 4/2/2019<br>4/11/2019 | 4/27/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left message on his voicemail. Received a call back from the secretary indicating that they had no issue with the project. Received a second call back from Mr. Kirk himself, who explained that he had no concerns with the project. |
| Mechoopda Indian Tribe Dennis Ramirez, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | 4/3/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left message on his voicemail. Received a call back deferring to the Grindstone Indian Rancheria. |
| Paskenta Band of Nomlaki Indians, Andrew Alejandre, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | 4/3/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left a message on his voicemail. Received a call back explaining that the APE was outside of their territory. |

# Appendix C

# Historical Societies Outreach

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Orland Historical and Cultural Society
PO Box 183
Orland, CA 95963

March 29, 2019

RE: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Orland Historical and Cultural Society,

Pacific Legacy, Inc. is conducting a cultural resources inventory for the County Road 305 over Watson Bridge Replacement Project, Glenn County proposed by the County of Glenn Public Works Agency. The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the *Chrome*, CA 7.5-minute USGS topographic quadrangle.

We would greatly appreciate your assistance in locating and identifying known cultural resources in and adjacent to the project area so that we can incorporate the resources and any concerns in the inventory report. Any culturally sensitive locations that you may disclose to Pacific Legacy, Inc. will be held under strict confidentiality and not be made available to the public.

Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio
Project Supervisor

Enclosed: Project Location Map and APE Map.

Pacific Legacy Historic Preservation
Sierra/Central Valley Division
4919 Windplay Drive, Suite 4
El Dorado Hills, CA 95762
Phone: 916.358.5156
Fax: 916.358.5161
www.pacificlegacy.com

Sacramento Valley Museum
PO Box 1437
Williams, CA 95987

March 29, 2019

RE: County Road 305 Bridge 11C-0091 Replacement Project, Glenn County, Federal ID BRL0-5911 (056)

Dear Sacramento Valley Museum,

Pacific Legacy, Inc. is conducting a cultural resources inventory for the County Road 305 over Watson Bridge Replacement Project, Glenn County proposed by the County of Glenn Public Works Agency. The proposed project is located on County Road 305 just east of the intersection with County Road 306 near the confluence of Watson and Grindstone Creeks. The project area is in Township 21 North, Range 6 West, Sections 15 and 16 of the *Chrome*, CA 7.5-minute USGS topographic quadrangle.

We would greatly appreciate your assistance in locating and identifying known cultural resources in and adjacent to the project area so that we can incorporate the resources and any concerns in the inventory report. Any culturally sensitive locations that you may disclose to Pacific Legacy, Inc. will be held under strict confidentiality and not be made available to the public.

Please contact me at 916-358-5156, ext. 112 or diamaggio@pacificlegacy.com.

Sincerely,

Gia DiMaggio
Project Supervisor

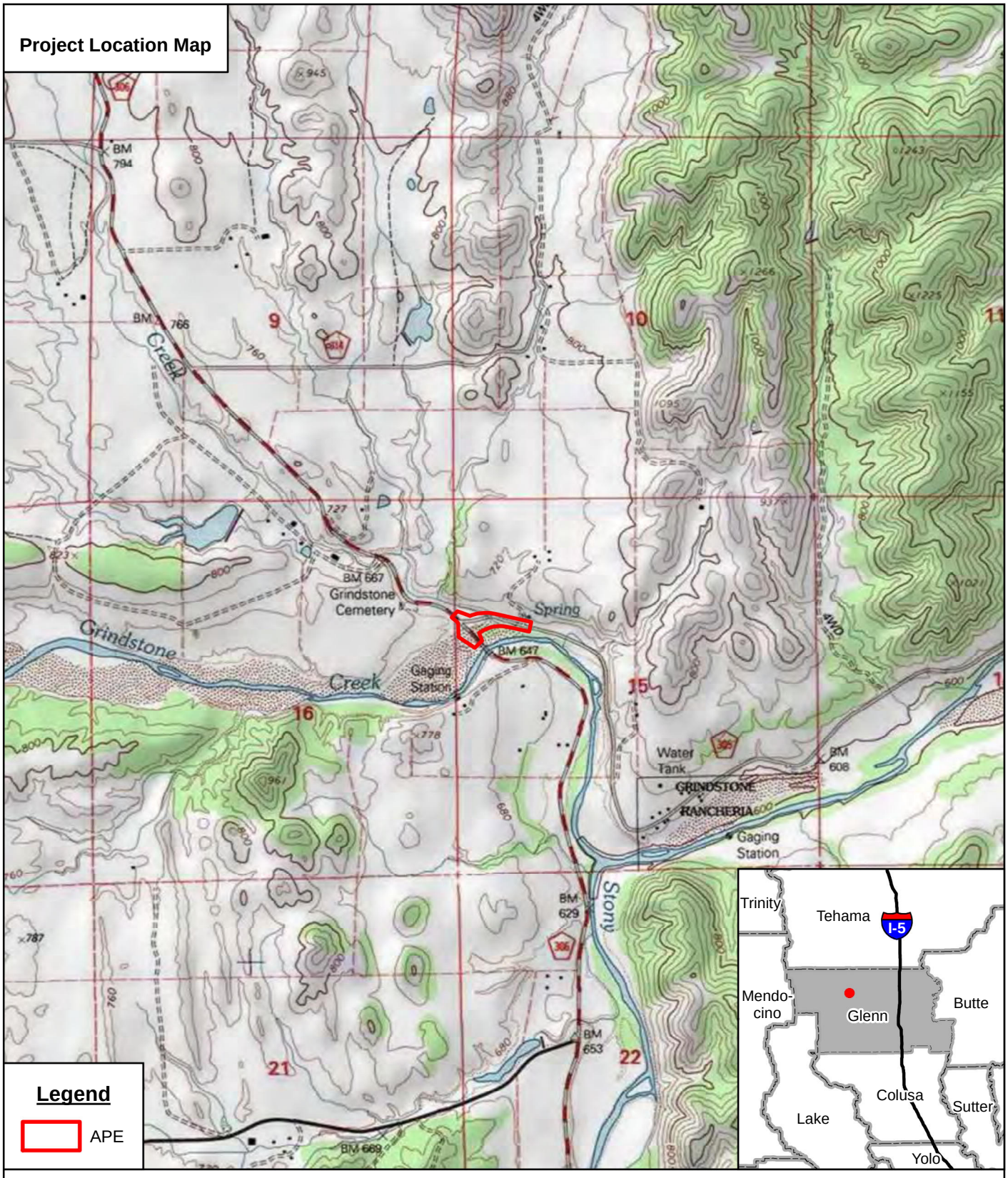
Enclosed: Project Location Map and APE Map.

**Bay Area**
900 Modoc St.
Berkeley, CA 94707
510.524.3991 Ph.
510.524.4419 Fax

**Pacific Basin**
30 Aulike St. #301
Kailua, HI 96734
808.263.4800 Ph.
808.263.4300 Fax

**Business Office**
PO Box 6050
Arnold, CA 95223
209.795.4481 Ph.
209.795.1967 Fax

# Project Location Map




**Legend**

APE

SOURCE: ArcGIS Online Topographic Basemap. SCALE: 1:24,000.

Quadrangle Location

Miles
0 0.5 1

0 0.5 1
Kilometers

TN
mN
14°

## Attachment 3

## Extended Phase I Report

 Copyright © 2020 State of California. All rights reserved.
***Alteration to the title and section headings is prohibited***.

Pacific Legacy

Incorporated

Cultural Resources Consultants

# EXTENDED PHASE I INVESTIGATION FOR THE COUNTY ROAD 305 OVER WATSON CREEK BRIDGE REPLACEMENT PROJECT, GLENN COUNTY, CALIFORNIA

Federal Aid #: BRL0-5911 (056)



Prepared for:

County of Glenn Public Works Agency
777 N. Colusa Street, Willows, CA 95988
and
California Department of Transportation, District 3
703 B Street, Marysville, CA 95901

Prepared by:

Graham Dalldorf and Heidi Klingler
Pacific Legacy, Inc.
4919 Windplay Drive, Suite 4, El Dorado Hills, CA 95762

June 2022

# EXTENDED PHASE I INVESTIGATION FOR THE COUNTY ROAD 305 OVER WATSON CREEK BRIDGE REPLACEMENT PROJECT, GLENN COUNTY

03-GLE-305, Federal Aid #: BRL0-5911 (056)

***Prepared For:***

County of Glenn Public Works Agency
777 N. Colusa Street, Willows, CA 95988

*and*

California Department of Transportation, District 3
703 B Street, Marysville, CA 95901

Prepared for: _____ Date: 10.20.22
Donald Rust
Director, County of Glenn Public Works Agency

Reviewed by: William E Larson Date: 10/4/2022
William Larson
Associate Environmental Planner-Archaeology
PQS: PI-Prehistoric Archaeology
California Department of Transportation, District 3- Marysville

Reviewed by: Laura Loeffler Date: 10/04/22
Laura Loeffler, Environmental Branch Chief
North Regional Environmental Planning
California Department of Transportation, District 3-Marysville

Prepared by: _____ Date: 6/6/22
Graham Dalldorf, M.A. and Heidi Klingler, B.S.
Project Supervisor/Geoarchaeologist
Pacific Legacy, Inc., 4919 Windplay Drive, Suite 4, El Dorado Hills, CA 95762

***USGS 7.5-Minute Topographic Quadrangle:*** Chrome, CA (1995)

June 2022

*Confidential Information*

**Archaeological and other heritage resources can be damaged or destroyed through uncontrolled public disclosure of information regarding their location. This document contains sensitive information regarding the nature and location of archaeological sites that should not be disclosed to unauthorized persons.**

**Information regarding the location, character or ownership of a historic resource is exempt from the Freedom of Information Act pursuant to 16 U.S.C. 470w-3 (National Historic Preservation Act) and 16 U.S.C. § 470hh (Archaeological Resources Protection Act) and California State Government Code, Section 6254.10.**

**If any information in this document is to be released for public review, all locational information associated with archaeological resources must be redacted before distribution.**

## SUMMARY OF FINDINGS

This report documents an Extended Phase I (XPI) archaeological investigation for the proposed County Road (CR) 305 at Watson Creek Bridge Replacement Project (Project) in rural north-central Glenn County, California (Figure 1). The County of Glenn Public Works Agency (County), in conjunction with the California Department of Transportation (Caltrans), is proposing the replacement of Watson Creek Bridge (Bridge No. 11C-0091). The purpose of the Project is to improve traffic safety conditions on a public roadway and comply with current County and American Association of State Highway and Transportation Officials (AASHTO) guidelines by: (1) replacing a structurally deficient bridge with a new structure that meets current standards and (2) reconstructing the approaching roadway to transition between the new construction and the existing roadway from both east-bound and west-bound directions.

The XPI investigation was conducted by Pacific Legacy, Inc. under authorization from the County in support of the Project and in compliance with Section 106 of the National Historic Preservation Act. The primary purpose of the XPI investigation was to determine if subsurface archaeological deposits are present that may be adversely affected by ground-disturbing activities associated with Project construction. The Area of Potential Effects (APE) is an irregularly shaped corridor with maximum dimensions of about 329 meters (m) (1,080 ft) east to west and 178.3 m (585 ft) north to south. It extends from west of the intersection of CR 305 and CR 306 eastward beyond the Watson Creek Bridge. The APE is 6.2 acres (2.5 hectares) and encompasses all possible project-related activities including the new road alignment and staging areas. Pedestrian survey of the APE produced negative results for cultural resources (DiMaggio 2020), but the APE lies in an area of very recent sediment deposition adjacent to Grindstone and Watson Creeks, resulting in a high sensitivity for buried archaeological resources that likely lack surface indicators (Meyer and Rosenthal 2008).

The XPI investigation included the mechanical excavation of approximately 15.7 cubic meters ($m^3$) total from eight exploratory trenches located in the APE. The XPI investigation found no evidence of subsurface archaeological deposits in the exploratory trenches, and only modern refuse was noted near or at the surface. However, one buried soil of limited lateral extent was identified in trench sidewalls and spoils in the northwestern portion of the APE (Trench 4), confirming a moderate to high sensitivity for buried archaeological resources in that area. These buried soils are characterized by weakly developed buried AC horizons that are interpreted as being late Holocene in age and available for human occupation for a relatively brief period of time as evidenced by the lack of soil development. Apart from this buried soil, coarse alluvium of extremely gravelly sand and loamy sand that lacked any soil development was observed in a majority of the Project APE. The coarse gravelly alluvium, although of geologically recent deposition, is unlikely to contain any intact archaeological deposits, and none were observed.

# TABLE OF CONTENTS


| Section | Page |
|---|---|
| **1.0 INTRODUCTION** | **1** |
| 1.1 PROJECT LOCATION AND DESCRIPTION | 1 |
| *1.1.1 Regulatory Requirements* | *2* |
| *1.1.2 Area of Potential Effects* | *2* |
| 1.2 MANAGEMENT OBJECTIVES | 2 |
| 1.3 INVESTIGATION ADMINISTRATION | 3 |
| *1.3.1 Dates of Fieldwork and Personnel* | *3* |
| *1.3.2 Land Ownership, Permits, and Permission* | *3* |
| *1.3.3 Native American Coordination* | *3* |
| *1.3.4 Curation Agreements* | *3* |
| **2.0 BACKGROUND CONTEXT** | **4** |
| 2.1 ENVIRONMENTAL SETTING | 4 |
| *2.1.1 Late Quaternary Geology, Geomorphology, and Soils* | *4* |
| *2.1.2 Potential for Buried Archaeological Deposits* | *5* |
| **3.0 SCOPE OF WORK** | **6** |
| 3.1 EXTENDED PHASE I FIELDWORK | 6 |
| *3.1.1 Exploratory Trenching* | *6* |
| *3.1.2 Soil Stratigraphic Identification and Description* | *6* |
| **4.0 STUDY RESULTS** | **8** |
| 4.1 EXPLORATORY TRENCHING | 8 |
| 4.2 SOILS AND STRATIGRAPHY | 8 |
| *4.2.1 Older Floodplain Terraces* | *8* |
| *4.2.2 Modern/Historic Era Floodplain Deposits* | *9* |
| 4.3 CULTURAL DEPOSITS | 10 |
| **5.0 SUMMARY AND CONCLUSIONS** | **11** |
| **6.0 REFERENCES CITED** | **12** |
| **7.0 PREPARER'S QUALIFICATIONS** | **14** |

**APPENDIX A. Trench/Cutbank Descriptions and Dimensions**
**APPENDIX B. Native American Consultation Log**

## FIGURES


| Figure | Page |
|---|---|
| FIGURE 1. PROJECT VICINITY MAP. | 15 |
| FIGURE 2. PROJECT LOCATION MAP. | 16 |
| FIGURE 3. OVERVIEW PHOTOGRAPHS OF TRENCHING OPERATIONS AT TRENCH 2 (ABOVE) AND TRENCH 4 (BELOW). | 17 |
| FIGURE 4. EXPLORATORY TRENCH LOCATIONS. | 18 |
| FIGURE 5. PHOTOGRAPHS AND GENERALIZED PROFILES OF SOIL STRATIGRAPHY AT TRENCH 4 (ABOVE) AND TRENCH 6 (BELOW). | 19 |


## TABLES


| Table | Page |
|---|---|
| TABLE 1. EXPLORATORY TRENCH SUMMARY. | 8 |

# 1.0 INTRODUCTION

## 1.1 PROJECT LOCATION AND DESCRIPTION

This report documents an Extended Phase I (XPI) archaeological investigation for the proposed County Road (CR) 305 at Watson Creek Bridge Replacement Project (Project) in rural north-central Glenn County, California (Figure 1). The County of Glenn Public Works Agency (County), in conjunction with the California Department of Transportation (Caltrans), is proposing the replacement of Watson Creek Bridge (Bridge No. 11C-0091).

The Project is located on CR 305, one mile north of State Route 162, approximately 5.06 miles north of the community of Elk Creek and 3.5 miles south of the community of Chrome. The Project location is within Township 21 North, Range 6 West, Sections 15 and 16, as depicted on the Chrome, California (1995) 7.5-minute USGS Topographic Quadrangle (Figure 2).

The purpose of the Project is to improve traffic safety conditions on a public roadway and comply with current County and American Association of State Highway and Transportation Officials (AASHTO) guidelines by: (1) replacing a structurally deficient bridge with a new structure that meets current standards and (2) reconstructing the approaching roadway to transition between the new construction and the existing roadway from both east-bound and west-bound directions.

The Project would replace the existing one-lane bridge with a new, standard width, two-lane, multi-span, continuous reinforced concrete slab bridge, including replacing/reconstructing the approaching roadway to transition between the new construction and the existing roadway. In addition, two potential staging areas are proposed. One is located on the west side of CR 306 north of Grindstone Creek and the other at the northeast corner of CR 306 and CR 305. The proposed alignment would tie into CR 306, 20 feet (ft.) south of the existing intersection. The CR 305 east approach would conform back to the existing road section 450 ft. east of Watson Creek.

The new roadway geometrics would bring the alignment up to current Caltrans and AASHTO design standards. The new bridge would be located 45 ft. to 50 ft. downstream (south) of the existing bridge location with a more favorable skew angle to the creek with respect to hydraulics and seismic design. As a result of the Project improvements, the new bridge would increase the width of the current bridge from 19 ft. to 32 ft. to safely accommodate two-way travel. Traffic would be maintained through the construction area using the existing west approach roadway and existing bridge. The east approach roadway would be detoured to the north, immediately adjacent to the existing road, to allow the contractor to utilize the existing road for haul activities and reduce phasing and traffic staging complications associated with constructing the new approach roadway under traffic. The detour road profile would generally follow existing grade.

A Phase I (i.e., surface) archaeological survey of the Area of Potential Effects (APE) conducted by Pacific Legacy in June 2019 was negative for archaeological resources (DiMaggio 2020). However, the geomorphic setting of the APE indicates that there is a high potential for buried archaeological deposits. Because these archaeological materials are unlikely to be identified through standard

pedestrian surface survey, an XPI study is the best means to accomplish the objective of determining the presence or absence of buried cultural deposits within the APE.

### 1.1.1 Regulatory Requirements

Local assistance funding, approval, or assistance to the County through Caltrans for activities that may affect historic properties constitute an "undertaking" subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966. A good faith effort to identify cultural resources in the APE is necessary for the County/Caltrans to comply with their obligations under Section 106 and its implementing regulations found at 36 CFR 800.4(c)(1).

The studies for this undertaking were carried out in a manner consistent with Caltrans' regulatory responsibilities under Section 106 of the National Historic Preservation Act (36 CFR Part 800) and pursuant to the January 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* (Section 106 PA). The Section 106 PA stipulates that Caltrans shall identify historic properties that may be within an undertaking's APE in accordance with 36 CFR § 800.4(a)(2-4) and 800.4(b).

Stipulation VIII of the Section 106 PA governs evaluation of potential historic properties in order to determine whether a site or portions of a site within the APE contain data that would contribute towards its potential National Register of Historic Places (NRHP) eligibility. In addition, the project is subject to state historic preservation laws and regulations set forth in the California Environmental Quality Act (PRC§21000 et seq.).

To assist in compliance with the regulatory requirements, Pacific Legacy was retained by Stantec Consulting Services Inc. (Stantec) on behalf of the County to perform the present XPI investigation of the APE to identify any historic properties located therein.

### 1.1.2 Area of Potential Effects

The APE is an irregularly shaped corridor with maximum dimensions of roughly 329 meters (m) (1080 ft) east to west and 178.3 m (585 ft) north to south (Figure 2). It extends from west of the intersection of CR 305 and CR 306 beyond the Watson Creek Bridge. The APE is 6.2 acres (2.5 hectares) and encompasses all possible project-related activities including the new road alignment and staging areas. The vertical APE includes all ground disturbances for the new roadway 0.6 m (2 ft), installation of the bridge abutments (1.5 m [5 ft]), and 24-inch CIDH piles for the bents (7.0 m [23 ft]).

## 1.2 MANAGEMENT OBJECTIVES

Given the potential for buried prehistoric archaeological deposits in the APE, the objectives of the XPI investigation are limited primarily to determining if archaeological deposits lacking surface manifestation are buried within the APE. A secondary objective is to confirm and corroborate previous determinations that the area has potential to contain buried archaeological deposits (DiMaggio 2020; Meyer and Rosenthal 2008). As such, it is an extension of the survey and identification effort in an area of high sensitivity where recent sediment deposition may have buried archaeological deposits, per Chapter 5, Section 5.4.7 of the Caltrans (2021) *Standard Environmental*

*Reference, Vol. 2: Cultural Resources*. Archaeological deposits are defined as those that require further investigation (i.e., Phase II) per the Section 106 PA. The results of the XPI investigation would thus assist the County/Caltrans in determining if future archaeological studies are necessary per the Section 106 PA.

## 1.3 INVESTIGATION ADMINISTRATION

### 1.3.1 Dates of Fieldwork and Personnel

Fieldwork for the XPI investigation consisted of exploratory trenching and was conducted from January 11–12, 2022 by Pacific Legacy's Principal Geoarchaeologist Graham Dalldorf, M.A., with assistance from Staff Geoarchaeologist Heidi Klingler, B.S. Amy Kovak, M.A., serves as Project Manager. Anthony Pacheco of Pacheco Backhoe Service based in Willows, California operated the backhoe that was used to excavate the trenches for the XPI investigation. Although repeated attempts were made to contact tribal groups and solicit participation of a tribal monitor, no tribal monitor was present during the fieldwork.

### 1.3.2 Land Ownership, Permits, and Permission

Excavations conducted for the XPI investigation were located within the APE defined for the Project. All excavations were either within the County Right-of-Way (ROW) or Assessor's Parcel Number 025-090-001, for which a Permit to Enter had previously been signed by the previous owner George F. Pride. Due to a recent change in ownership, a new Permit to Enter, signed by the current owner Daryl Pride, was obtained at the Project site on January 11, 2022. The executed contract with Stantec constitutes the encroachment permit to work within the County ROW.

Pacific Legacy notified USA North of an underground service alert (Tickets X134101127 and X134101077) related to the XPI excavations in the Project area prior to the fieldwork. USA North member utilities did not identify any utilities near the exploratory trenches.

### 1.3.3 Native American Coordination

Glenn County is responsible for initiating and continuing consultation with Native American groups regarding the Project, and for identifying a tribal monitor for the XPI fieldwork excavations. Previous consultation efforts for the Project are reported in the cultural resources inventory report (DiMaggio 2020). Despite repeated attempts by Pacific Legacy to contact tribal groups for monitoring services during the XPI fieldwork, no such services could be obtained. Pacific Legacy maintained a consultation log of Native American individuals and groups contacted during the course of the XPI investigation, including when and how they were contacted, and any concerns voiced. The consultation log is provided in Appendix B.

### 1.3.4 Curation Agreements

The XPI investigation was designed as a non-collection study with the goal of determining the presence or absence of archaeological deposits within areas of proposed subsurface impact in the APE. Any archaeological material encountered during the course of the XPI investigation was to be buried in the trench from which it was recovered, after in-field analysis, per the XPI proposal (Kovak 2021).

# 2.0 BACKGROUND CONTEXT

XPI studies are limited, and their management objectives are focused on determining the presence or absence and extent of cultural deposits. Because the Caltrans (2021) Standard Environmental Reference, Vol. 2: Cultural Resources, Exhibit 5.3 guidance eschews lengthy XPI reports that provide extensive background discussion, the following provides a focused framework for understanding how deeply archaeological deposits may be buried in the APE. For a thorough treatment of late Quaternary landscape evolution in the foothills of the eastern North Coast Ranges and its impact on the archaeological record, the reader is referred to the Caltrans District 3 geoarchaeological overview (Meyer and Rosenthal 2008). Background information regarding the prehistory, ethnography, and history of the project area are provided in the ASR (DiMaggio 2020).

## 2.1 ENVIRONMENTAL SETTING

The Project is situated in rural north-central Glenn County on Watson Creek just north of its confluence with Grindstone Creek. The APE sits within the interface between the Sacramento Valley and eastern foothills of the North Coast Ranges. Physiographically, the vicinity is characterized by the steep slopes of the Northern Coast Ranges to the west, and the gently rolling hills and flat Sacramento Valley to the east and south. The Northern Coast Ranges in the area were formed by an uplifted Franciscan basement and overlain by Cretaceous sedimentary rock of the Great Valley sequence (Norris and Webb 1990:398). The Sacramento Valley is formed primarily from Quaternary-age alluvium. Jennings et al. (1977) map the Project area as Quaternary alluvium and marine deposits that date from the Pliocene to Holocene.

### 2.1.1 Late Quaternary Geology, Geomorphology, and Soils

The Project area is mapped at a regional scale (1:100,000) by Blake et al. (1992) as consisting of Holocene-age stream channel deposits (Qsc). The Qsc deposits are described as gravel, sand, and silt deposited in open, active stream channels lacking vegetation. The Qsc deposits are transported under modern hydrologic conditions, and are light tan and gray in appearance. In the Project APE, these Qsc deposits are transported by Watson and Grindstone Creeks, which are incised into much older alluvial deposits forming elevated terraces to the north and west. West of the Project APE, the elevated terrace is mapped as the Pleistocene-aged Upper Riverbank Formation (Qru). North of the Project APE, the elevated terrace is mapped as the Pleistocene-aged Lower Modesto Formation (Qml). The Qru and Qml deposits are not described here further as they are located outside of the Project APE.

Soil units present in the project area as part of the Soil Survey Geographic (SSURGO) mapping (USDA NRCS 2021) support these age assignments based on their relative lack of horizon development and that they are formed in geologically young alluvium. Soil map units in the project area from west to east are:

- Gravelly Alluvial Lands (unnamed soil series): located on the floodplain on the western side of the bridge above the active channel, this map unit is modeled to be latest Holocene in age (Meyer and Rosenthal 2008:B6).

- Riverwash (unnamed soil series): located in the active channel both under and southwest of the bridge (i.e., south of CR 305), this map unit is modeled to be historical to modern in age (Meyer and Rosenthal 2008:B11).
- Orland-Cortina Complex: located on the east side of the bridge on the first low terrace above the active channel, this map unit is modeled to be latest Holocene in age (Meyer and Rosenthal 2008:B9).

### 2.1.2 Potential for Buried Archaeological Deposits

Meyer and Rosenthal (2008) provide a thorough overview of the potential for buried archaeological deposits in Caltrans District 3 which includes the Project APE. Because the Project area straddles Watson Creek just north of its confluence with Grindstone Creek, landforms within the APE all consist of Holocene alluvium, but are of slightly different ages. The landforms, ranging from youngest to oldest, are the active channel, the floodplain, and low terraces. Meyer and Rosenthal (2008:115) have modeled these landforms to be mostly latest Holocene to historic in age, although the scale of their map makes differentiating the various landforms and their respective ages difficult. Inasmuch as these landforms are depositional and formed in the latest Holocene, they can be considered to have a moderate to high sensitivity for buried archaeological resources spanning the entire period of human occupation in the region (Meyer and Rosenthal 2008:161). However, the active channel may be considered less sensitive for intact buried deposits because it is an erosional landform on account of its dynamic and high energy geomorphic setting. In summary, the APE outside of the active channel has been previously modeled to have a high potential for buried archaeological resources.

# 3.0 SCOPE OF WORK

The scope of work for the present XPI investigation was designed to achieve the objectives articulated above in Section 1.2. This was accomplished with XPI field efforts that involved excavation and inspection of eight exploratory trenches to confirm the presence or absence of subsurface archaeological deposits. All work was carried out under an experienced and professionally qualified archaeological Field Director who meets the Secretary of Interiors standards set forth at 36 CFR Part 61.

## 3.1 EXTENDED PHASE I FIELDWORK

### 3.1.1 Exploratory Trenching

Pacific Legacy contracted with Pacheco Backhoe Service of Willows, California, to mechanically excavate eight trenches in the APE to search for archaeologic deposits. The trenches were excavated by a Deere 310SL tractor-mounted backhoe at an approximate interval spacing of 30 m (98.4 ft) to 50 m (164 ft) in the APE. Such trench spacing has been recommended as an appropriate sampling interval in areas of high and very high sensitivity (Meyer 2013:168) such as the Project APE.

Backhoe trenches measured 0.6 m (2.0 ft) wide and ranged in length from 1.7 to 4.9 m (5.6 to 16.1 ft). Trenches were ramped at one end to allow ingress/egress, with maximum depths ranging from 1.8 to 2.4 m (5.9 to 7.9 ft). Roughly 15.7 $m^3$ of material was excavated from the trenches, and trench spoils were closely monitored for archaeological deposits. Per California OSHA regulations, no project personnel were allowed to enter sections of an exploratory trench deeper than 1.5 m (5.0 ft) without proper shoring or benching. Where appropriate and safe, at depths up to 1.5 m (5.0 ft), trench sidewalls were also closely examined for cultural materials. When the trench depth surpassed 1.5 m (5.0 ft), the spoils pile continued to be closely examined for archaeological material and changes in soil stratigraphy. Where buried soils were observed, samples of trench spoils were passed through ¼- inch mesh screen to search for cultural materials. Selected samples consisting of 3 to 5 five-gallon buckets of any suspected buried soils were screened through ¼" wire mesh to determine presence or absence of cultural material. The location of each trench was recorded with a Trimble GeoXT GPS unit. Digital photographs of trench locations, trench sidewalls, and trenching operations were taken. After documentation, attempts were made to return the excavation area to pre-excavation appearance and grade, including backfilling and compaction. About 44 person-hours were expended during the field portion of the XPI study, including travel and mobilization/demobilization time.

### 3.1.2 Soil Stratigraphic Identification and Description

The natural and cultural stratigraphy (if present), of each trench was identified by carefully examining the deposits exposed in the sidewalls and spoils of the subsurface exploratory trenches. Soil stratigraphic units (strata) were identified on the basis of physical composition, superposition, relative soil development, and/or textural transitions. In the field, each stratum was assigned a Roman numeral (I, II, III, etc.) beginning with the oldest or lowermost stratum identified in each trench.

The master soil horizons were designated by upper-case letters (O, A, B, C, or R) and preceded by Arabic numerals (2, 3, etc.) when the horizon is associated with a different stratum (i.e., 2Cu);

number 1 is not labeled in such a sequence. The upper part of a complete soil profile is usually called the A-horizon, with a B-horizon being the zone of accumulation in the middle of a profile, and the C-horizon representing the relatively unweathered parent material near the base of a profile. Lower-case letters were used to designate subordinate soil horizons as indicated below:

| **Horizon suffix** | **Description** |
|---|---|
| b | Buried horizon at the location it was described (not used with C-horizons) |
| ox | Residual pedogenic sesquioxide accumulation |
| p | Zone of artificial fill or disturbance (e.g., plowing) |
| w | Weak color or structure within B-horizon |

Combinations of these numbers and letters indicate the important characteristics of each major stratum and soil horizon; they are consistent with those outlined by Birkeland (1999), Birkeland et al. (1991), and Schoeneberger et al. (2012). Detailed notes regarding the soil stratigraphy of each trench excavated for the XPI study can be found in Appendix A.

Buried soils or paleosols representing formerly stable ground surfaces were identified in the field on the basis of color, structure, horizon development, bioturbation, lateral continuity, and the nature of the upper boundary (contact) with the overlying deposit (Birkeland et al. 1991). The results of this analysis are critical for developing an understanding of the timing and extent of landscape change in the Project APE. Absent positive identification of substantial archaeological deposits, such information allows for certain areas or depths (e.g., Pleistocene landforms and deposits) to be determined non-sensitive for buried archaeological deposits, essentially confirming the absence in these areas, because they pre-date human occupation of the area. Such information can also guide monitoring efforts during construction if the age and depth of buried paleosols are known.

# 4.0 STUDY RESULTS

The present XPI study involved the excavation of eight exploratory trenches within the Project's APE on both sides of Watson Creek Bridge, and the examination of an exposed cutbank roughly 100 m (328 ft) north of the Project's APE from January 11 to 12, 2022. The following subsections summarize the results of the exploratory trenching efforts and describe the soil stratigraphy of the APE in detail based on landform type and age. The locations of the trenches and cutbank and profiles of representative trenches are shown in Figures 4 and 5, respectively.

## 4.1 EXPLORATORY TRENCHING

The eight exploratory trenches in the APE were mechanically excavated by a Deere 310SL backhoe operated by Anthony Pacheco of Pacheco Backhoe Services. Approximately 15.7 $m^3$ of material was excavated from the trenches and inspected for archaeological materials, for an average of about 1.96 $m^3$ of excavated soil per trench. Barring modern refuse, no cultural materials were identified in the trenches during the XPI investigation. In addition to the eight exploratory trenches, the present study examined an exposed cutbank located approximately 100 m (328 ft) north of the Project's APE. Table 1 lists the characteristics of each trench. Detailed trench and cutbank soil stratigraphic descriptions are provided in Appendix A.

**Table 1. Exploratory Trench Summary.**

| Trench | Dimensions l x w (m) | Maximum Depth (mbs) | Estimated Volume ($m^3$)* | Findings |
|---|---|---|---|---|
| 1 | 2.8 x 0.6 | 2.3 | 3.6 | No cultural material |
| 2 | 1.8 x 0.6 | 1.8 | 1.9 | No cultural material |
| 3 | 4.6 x 0.6 | 1.8 | 5.0 | No cultural material |
| 4 | 4.7 x 0.6 | 2.4 | 6.8 | No cultural material |
| 5 | 4.9 x 0.6 | 1.9 | 5.6 | No cultural material |
| 6 | 3.4 x 0.6 | 1.4 | 2.9 | No cultural material |
| 7 | 1.7 x 0.6 | 1.8 | 1.8 | No cultural material |
| 8 | 3.5 x 0.6 | 1.8 | 3.8 | No cultural material |
| Total | - | - | 15.7 | - |

*Total Volume = 15.7 $m^3$ (estimated volume, as trenches were ramped at one end).

## 4.2 SOILS AND STRATIGRAPHY

The present XPI investigation revealed coarse-grained alluvium (i.e., coarse sand, coarse gravel, river cobbles) marked by weak soil development. The source of the alluvium is both Watson and Grindstone Creeks. In addition, artificial fill ranged between 0 and 180 centimeters below surface (cmbs). At least four strata are present in the Project APE, which are described in detail below. Soil stratigraphic profiles and photographs are shown in Figure 5.

### 4.2.1 Older Floodplain Terraces

The present study identified intact older floodplain terraces marked by weak soil development on both sides of Watson Creek Bridge. These deposits represent the most stable portion of the

floodplain, and based on the degree of soil development, are interpreted as being late Holocene in age (<4,000 years old). As demonstrated in Trench 4, these deposits are underlain by the Great Valley Sequence of California, which formed between the Late Jurassic and Cretaceous Period. There are four strata documented in this landform, as depicted in Trench 4 (Figure 5).

### *Stratum I*

Stratum I is characterized by dark grey decomposing bedrock of the Great Valley Sequence of California. Stratum I was identified in Trench 4 between 222 and 240 cmbs, and along an exposed cutbank to the west of the trench. Fossil shells were observed within the deposit, confirming the stratums advanced antiquity.

### *Stratum II*

Stratum II is characterized by coarse-grained (coarse sand, coarse gravel, river cobbles) alluvium lacking soil development. Depths to Stratum II range from 84 cmbs in Trench 1 and Trench 8 to 200 cmbs in Trench 4 and the stratum ranges in thickness from 22 cm in Trench 4 to 96 cm in Trench 8. Stratum II consists of a single C horizon, as typified in Trench 4 (Figure 5). The color associated with Stratum II is dark gray.

### *Stratum III*

Stratum III is characterized by fine-grained (loam, silt loam, silty clay loam, clay loam) alluvium exhibiting weak soil development. Depths to Stratum III range from 0 cmbs in Trench 8 to 83 cmbs in Trench 4 and the stratum ranges in thickness from 7 cm in Trench 1 to 117 cm in Trench 4. Stratum II exhibits a profile of 2Ab/2C in Trench 1, 2Ab/2BCkb/2C in Trench 4, and A/C in Trench 8. Colors associated with Stratum III include very dark gray, dark gray, dark grayish brown, brown, and dark yellowish brown. Based on its weak soil development, Stratum III is interpreted as a latest Holocene deposit.

### *Stratum IV*

Stratum IV consists of loams intermixed with angular gravel interpreted as a layer of artificial fill (i.e., an Ap horizon). Stratum IV was only identified in Trench 1 between 0 and 77 cmbs.

### 4.2.2 Modern/Historic Era Floodplain Deposits

The majority of trenches (Trenches 2, 5, 6, and 7) and the exposed cutbank represent modern/Historic Era floodplain deposits associated with Watson and Grindstone Creeks. There are two strata documented in this landform, as depicted in Trench 6 (Figure 5).

### *Stratum I*

Stratum I is characterized by gray coarse-grained (coarse sand, coarse gravel, river cobbles) alluvium lacking soil development. Depths to Stratum I range from 20 cmbs in the exposed cutbank to 103 cm in Trench 5, and the stratum ranges in thickness from 130 cm in the cutbank to 80 cm in Trench 6. Stratum II consists of a C horizon, as exhibited in Trench 6 (Figure 5).

### *Stratum II*

Stratum II consists of loams intermixed with sand, gravel, and river cobbles and is interpreted as a layer of artificial fill (i.e., an Ap horizon) that was likely procured from nearby riverwash deposits. The artificial fill ranges from the surface to depths of up to 180 cmbs at its thickest point in Trench 2 in the western portion of the Project APE.

## 4.3 CULTURAL DEPOSITS

Although a buried paleosol (former surface) was identified in Trench 4, as noted above, no cultural materials were observed or recovered during the XPI investigations in the APE.

# 5.0 SUMMARY AND CONCLUSIONS

As part of the XPI investigation for the Project, eight exploratory trenches were excavated and inspected for cultural deposits. The exploratory trenches were located in the Project APE, focused in areas of proposed ground disturbance. The trenches were mechanically excavated using a tractor-mounted backhoe to a maximum depth of 2.4 m (7.9 ft), thus producing an estimated 15.7 $m^3$ of soil that was inspected for cultural materials. Aside from modern refuse, no cultural artifacts or deposits were observed in any of the trenches. However, one buried soil of limited lateral extent was identified in trench sidewalls and spoils in the northwestern portion of the APE (Trench 4), confirming a moderate to high sensitivity for buried archaeological resources in that area. These buried soils are characterized by weakly developed buried AC horizons that are interpreted as being late Holocene in age and available for human occupation for a relatively brief period of time as evidenced by the lack of soil development. Apart from this buried soil, coarse alluvium of extremely gravelly sand and loamy sand that lacked any soil development was observed in a majority of the Project APE. The coarse gravelly alluvium, although of geologically recent deposition, is unlikely to contain any intact archaeological deposits, and none were observed.

# 6.0 REFERENCES CITED


Blake, M.C., E.J. Helley, A.S. Jayko, D.L. Jones, and H.N. Ohlin
1992 *Geologic map of the Willows 1:100,000 Quadrangle, California.* US Geological Survey Open File Report OFR 92-271. Electronic document, https://pubs.er.usgs.gov/publication/ofr92271, accessed January 18, 2022.

Birkeland, Peter W.
1999 *Soils and Geomorphology*. Third Edition. Oxford University Press, New York.

Birkeland, Peter W., Michael N. Machette, and Kathleen M. Haller
1991 Soils as a Tool for Applied Quaternary Geology. Miscellaneous Publication 91-3, Utah Geological and Mineral Survey Division of Utah Department of Natural Resources.

California Department of Transportation (Caltrans)
2021 *Standard Environmental Reference, Vol. 2: Cultural Resources*. Electronic document, http://www.dot.ca.gov/ser/vol2/vol2.htm, accessed January 2022.

DiMaggio, Gia
2020 *Archaeological Survey Report for the County Road 305 at Watson Creek Bridge Replacement Project, Glenn Couny, California.* Pacific Legacy, Inc., El Dorado Hills. Submitted to the California Department of Transportation, District 3, Marysville, and the County of Glenn Public Works Agency, Willows.

Jennings, C.W., Strand, R.G., Rogers, T.H., Boylan, R.T., Moar, R.R., and Switzer, R.A.
1977 Geologic Map of California: California Division of Mines and Geology, Geologic Data Map 2, scale 1:750,000.

Kovak, Amy
2021 *Proposal for an Extended Phase I Workplan for the County Road 305 at Watson Creek Bridge Replacement Project.* Pacific Legacy, Inc., El Dorado Hills. Submitted to the California Department of Transportation, District 3, Marysville, and the County of Glenn Public Works Agency, Willows.

Meyer, Jack, and Jeffrey S. Rosenthal
2008 *A Geoarchaeological Overview and Assessment of Caltrans District 3*. Far Western Anthropological Research Group, Inc., Davis. Report submitted to California Department of Transportation, District 3, Marysville.

Meyer, Jack
2013 *A Geoarchaeological Overview and Assessment of Northeast California, Cultural Resources Inventory of Caltrans District 2 Rural Conventional Highways: Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama, and Trinity Counties, Volume I: Report.* Far Western Anthropological Research Group, Inc., Davis. Submitted to the California Department of Transportation, District 2, North Region, Redding.

Norris, Robert M., and Robert W. Webb
1990 *Geology of California.* John Wiley & Sons, Inc., New York.

Schoeneberger, P.J., D.A. Wysocki, E.C. Benham, and W.D. Broderson
2012 *Field Book for Describing and Sampling Soils.* National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture, Lincoln, Nebraska.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS)
2021 Web Soil Survey. Electronic document,
http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed January 18, 2022.

# 7.0 PREPARER'S QUALIFICATIONS

Graham Dalldorf has an M.A. in Geography from the University of Oregon. He is a member in good standing with the Register of Professional Archaeologists. Mr. Dalldorf has over 25 years of experience in California archaeology and geoarchaeology. He is the Principal Geoarchaeologist with Pacific Legacy in the El Dorado Hills office. Heidi Klingler has a B.S in Anthropology and is currently working on her M.A. with a specialization in geoarchaeology.

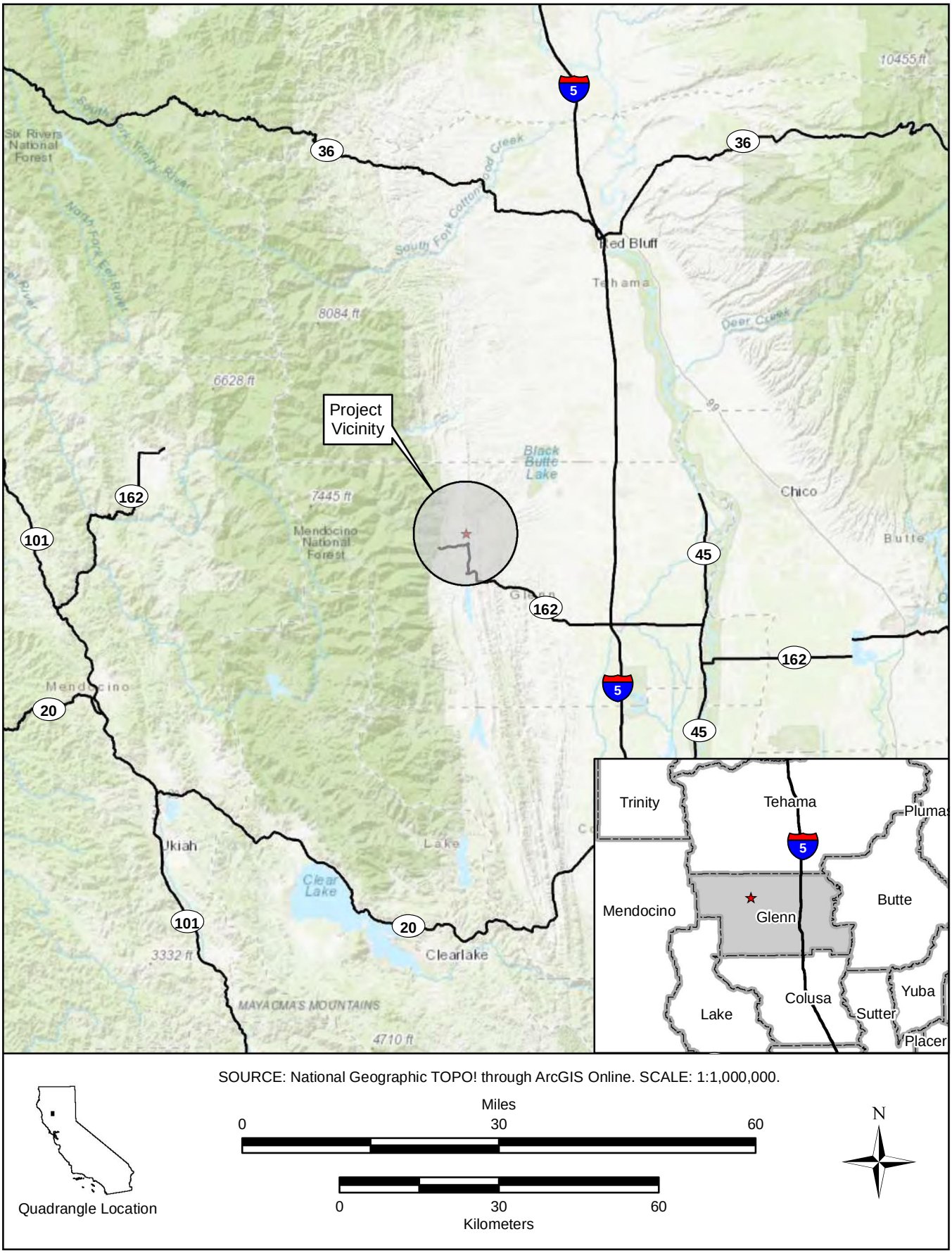



**Figure 1. Project Vicinity Map.**

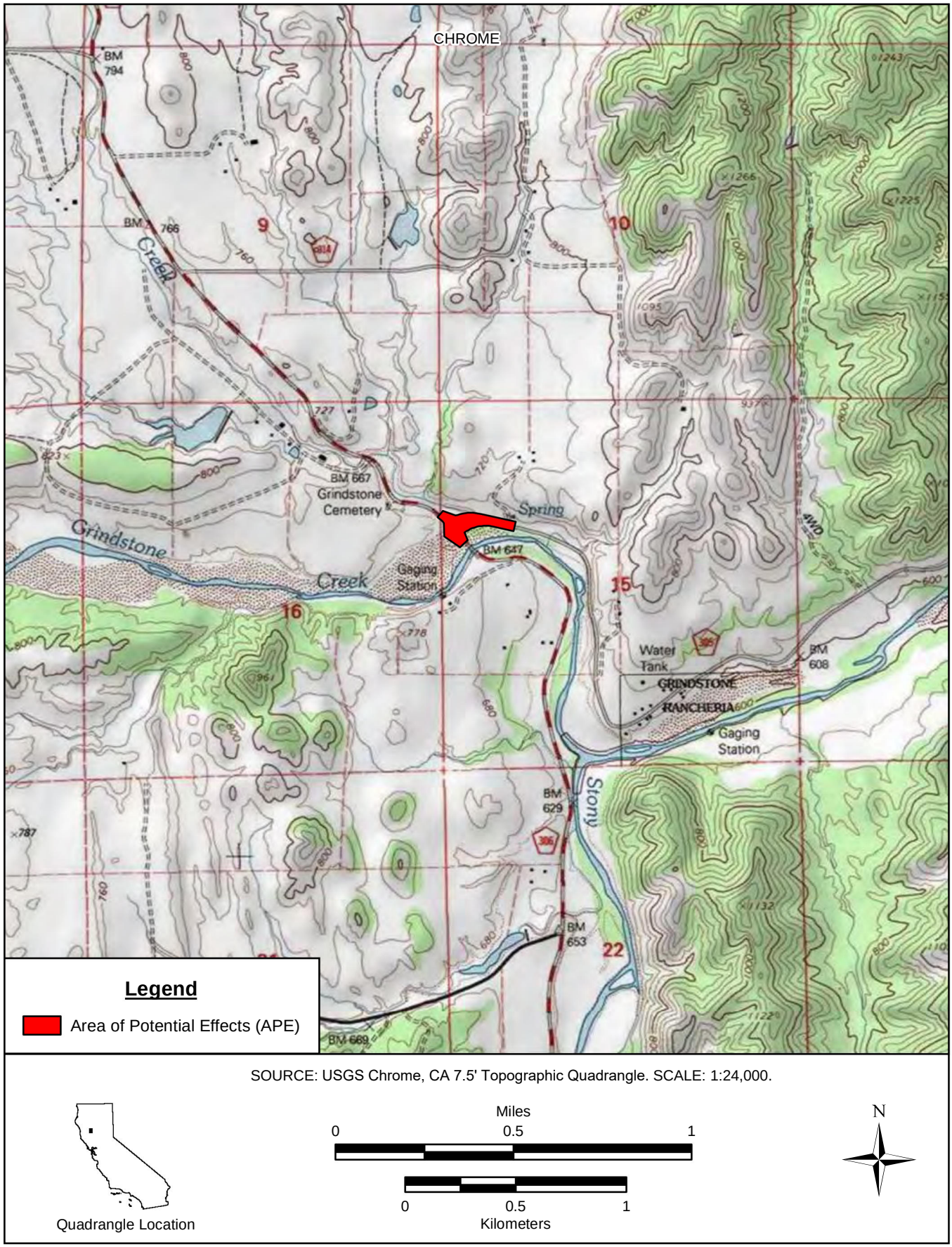



**Figure 2. Project Location Map.**



**Figure 3. Overview Photographs of Trenching Operations at Trench 2 (Above) and Trench 4 (Below).**

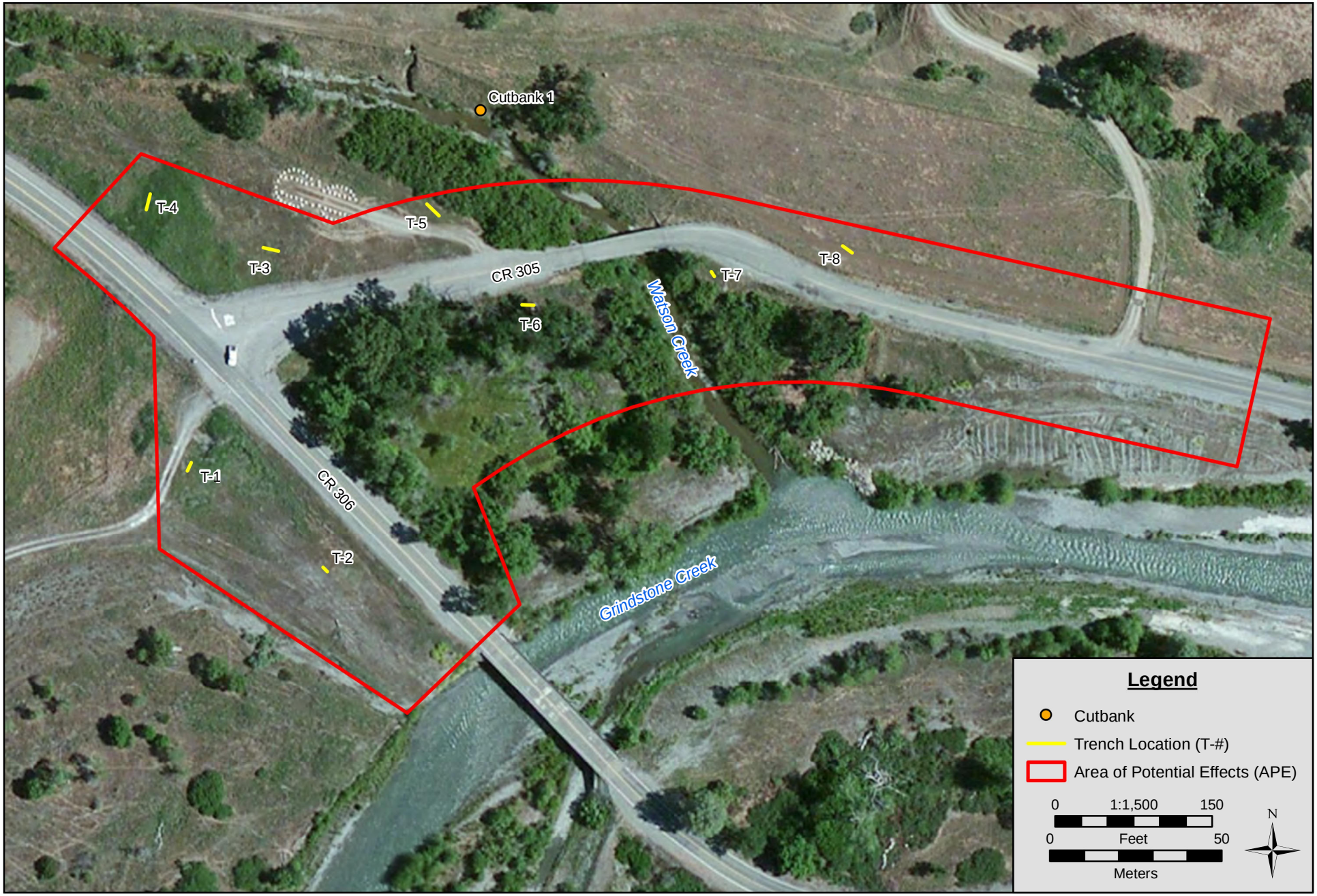



**Figure 4. Exploratory Trench Locations.**

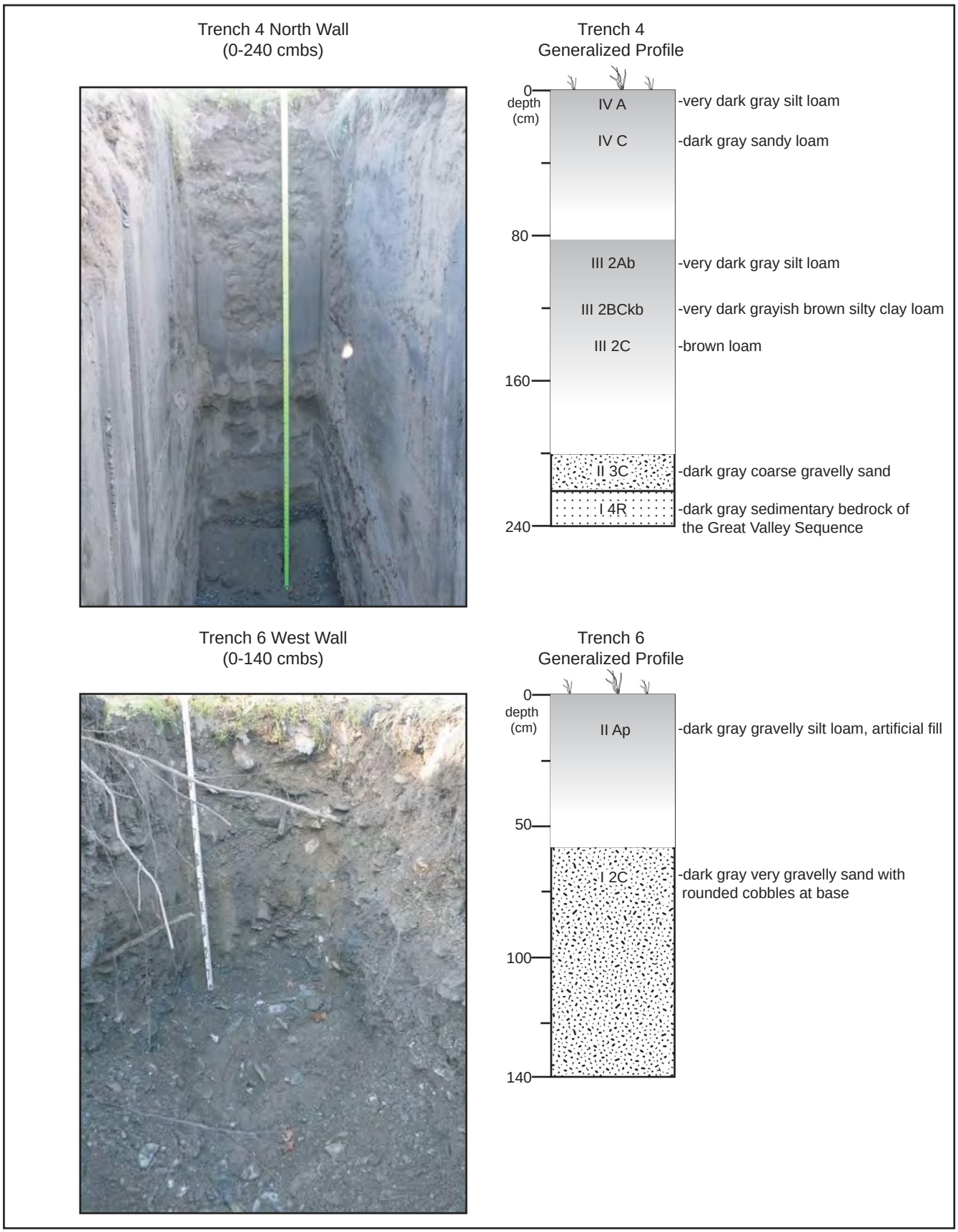



**Figure 5. Photographs and Generalized Profiles of Soil Stratigraphy at Trench 4 (top) and Trench 6 (bottom).**

# APPENDIX B

## Native American Consultation Log

# PACIFIC LEGACY NATIVE AMERICAN CONSULTATION LOG

**County Road 305 over Watson Creek Bridge Replacement Project**
**Federal Project No. BRLO-5911 (056)**
**Correspondence by Pacific Legacy, Inc. (Gia DiMaggio and Amy Kovak)**

| Group/ Organization/ Individual Contacted | Date of Initial Consultation Letter/Email | Follow-up Phone Call | Response Received | Summary of Consultation |
|---|---|---|---|---|
| Native American Heritage Commission (NAHC) | Letter sent 1/18/2019 | None | 1/24/2019 | The Sacred Lands File search did identify sacred lands within the buffer around the project area. They provided a list of four individuals with potential information or interests in the project. |
| Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Glenda Nelson, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | None | Letter to begin informal Section 106 and NEPA Consultation. Left message on the Tribe's main voicemail. |
| Grindstone Rancheria of Wintun-Wailaki, Ronald Kirk, Chairperson | Letter sent 3/19/2019 | 4/2/2019<br>4/11/2019 | 4/27/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left message on his voicemail. Received a call back from the secretary indicating that they had no issue with the project. Received a second call back from Mr. Kirk himself, who explained that he had no concerns with the project. |
| Mechoopda Indian Tribe Dennis Ramirez, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | 4/3/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left message on his voicemail. Received a call back deferring to the Grindstone Indian Rancheria. |
| Paskenta Band of Nomlaki Indians, Andrew Alejandre, Chairperson | Letter sent 3/19/2019 | 4/2/2019 | 4/3/2019 | Letter to begin informal Section 106 and NEPA Consultation. Left a message on his voicemail. Received a call back explaining that the APE was outside of their territory. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365) | 11/24/2021 | None | Called main office and left a voice mail notifying the tribe of the Extended Phase I investigation planned for 12/14-12/16/2021 and asked if they would be interested in providing a tribal monitor. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365) | 12/3/2021 | None | Spoke with the receptionists who took a message with Pacific Legacy contact information. She said that the person in charge of tribal monitoring would return my call. No call was received. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365) | 12/9/2021 | None | Called the main office and left a message that the Extended Phase I investigation was delayed due to weather. We are rescheduling the XPI for January and would still like to have a tribal monitor. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365) | 12/21/2021 | None | Attempted to call the call the main line. The phones were not working ("your call cannot be completed at this time"), and I could not get through to leave a message. |

| Group/ Organization/ Individual Contacted | Date of Initial Consultation Letter/Email | Follow-up Phone Call | Response Received | Summary of Consultation |
|---|---|---|---|---|
| Grindstone Rancheria of Wintun-Wailaki, Ronald Kirk, Chairperson | Email (ronaldkirk1963@gmail.com)<br><br>12/21/2021 | - | None | Sent Chairperson Kirk an email notifying him of the Extended Phase I investigation and requesting a tribal monitor. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365)<br><br>1/4/2022 | - | None | Attempted to call the call the main line. The phones were not working, and I could not get through to leave a message. |
| Grindstone Rancheria of Wintun-Wailaki, Ronald Kirk, Chairperson | Email (ronaldkirk1963@gmail.com)<br><br>1/4/2022 | - | None | Sent Chairperson Kirk an email notifying him of the Extended Phase I investigation and requesting a tribal monitor. |
| Grindstone Rancheria of Wintun-Wailaki | Phone call (530-968-5365)<br><br>1/10/2022 | - | None | Attempted to call the call the main line. The phones were not working, and I could not get through to leave a message. |