

ARCHAEOLOGICAL SURVEY REPORT

HICKMAN ROAD OVER TUOLUMNE RIVER BRIDGE
REPLACEMENT PROJECT, WATERFORD AND HICKMAN, STANISLAUS
COUNTY, CALIFORNIA

FEDERAL PROJECT NUMBER BRLS-5938(199)

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USGS Waterford, Calif. 7.5-minute topographic map (1969)
P-50-002112; P-50-000001/CA-STA-350H; LSA-HRB-1
25.2 acres

December 2016

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1.0 SUMMARY OF FINDINGS

Stanislaus County (County), in coordination with the California Department of Transportation (Caltrans) and in partnership with the Federal Highway Administration (FHWA), proposes the Hickman Road over Tuolumne River Bridge Replacement Project (Project) in the towns of Waterford and Hickman, Stanislaus County, California (Appendix A: Figures 1 and 2). The Project will replace the existing bridge on Hickman Road over Tuolumne River (No. 38C-0004) with a new bridge.

The Project will rely on federal funding and meets the definition of an “undertaking” according to 36 CFR §800.16(y). Caltrans, acting as the lead agency under the delegated authority of the FHWA, is providing oversight of this undertaking in accordance with the 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA).

This Archaeological Survey Report (ASR) addresses requirements of the National Environmental Policy Act (NEPA) under authority delegated to Caltrans by the FHWA in accordance with the provisions of the *Memorandum of Understanding between the FHWA and Caltrans concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program Pursuant to 23 U.S.C. 327*, which became effective October 1, 2012 (Caltrans 2012). The Memorandum of Understanding was signed pursuant to 23 U.S.C. 327, as amended by Moving Ahead for Progress in the 21st Century Act (MAP-21), which allows Caltrans environmental review and consultation responsibilities under NEPA. This ASR also addresses requirements of the California Environmental Quality Act (CEQA).

The cultural resources identification efforts conducted for this study consisted of a records search, literature and map review, field survey, and consultation with potentially interested parties. The Central California Information Center (CCIC) records search identified two previously recorded historic-period archaeological cultural resources (P-50-002111, P-50-002112) in the Archaeological Area of Potential Effects (APE), and the former alignment of a historic-period linear cultural resource (P-50-000001/CA-STA-350H) that is recorded elsewhere in the County. The records search also identified two previously recorded archaeological cultural resources and two built environment cultural resources within 0.5 miles of the Archaeological APE. Furthermore, the CCIC identified a roadside monument within 0.5 miles of the Archaeological APE that has not yet been formally recorded. The field survey of the Archaeological APE included an intensive pedestrian survey of portions of Assessor's Parcel Numbers (APNs) 080035009, 080035004, 080041005, 080009001, 080011001, and 080035008. During the field survey, ground visibility was limited by developed surfaces and vegetation; visibility in APNs 080041005

and 080011001 was approximately 30 percent, while visibility in APNs 080009001, 080035004, 080035008 and 080035009 was approximately 70 percent.

Both previously recorded archaeological resources, P-50-002112 and P-50-002111, were identified during the field survey. P-50-002112 includes nonnative vegetation likely associated with a former 1980s residential site and was identified in the Archaeological APE; however, the remains of P-50-002111, comprising concrete and metal fragments of abutments constructed as part of a bridge in 1914, were located outside of the Archaeological APE. A third archaeological resource, LSA-HRB-1, a historic-period concrete pad, was also observed within the APE, south of the Tuolumne River and east of Hickman Road. The field survey found no evidence or material remains of the historic-period linear resource (P-50-000001/CA-STA-350H) where it was formerly aligned in the Archaeological APE. CA-STA-350H and LSA-HRB-1 are exemptible per Attachment 4 of the Section 106 PA. Additionally, the vegetation associated with P-50-002111 appears modern and has no potential to be affected by the Project.

This study concludes that no further investigation is necessary, based on the alluvial nature of the soil within the APE as well as modern development of the area, lack of archaeological resources present, and the number of previous investigations that have been conducted within the APE.

It is Caltrans' policy to avoid cultural resources whenever possible. Further investigations may be needed if the site[s] 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.

2.0 INTRODUCTION

The field survey of the Archaeological APE for the Project was conducted on February 2, 2016, by LSA Associates, Inc. (LSA) Cultural Resources Analyst, Mariko Falke. Ms. Falke has a Bachelor of Arts degree in Anthropology and five years of experience in California archaeology. She meets the *Secretary of Interior's Professional Qualifications Standards* in History as well as Caltrans' *Professionally Qualified Staff Standards* as a Co-Principal Investigator for Prehistoric Archaeology (see Appendix E).

The Archaeological APE is located along Hickman Road, just outside of Waterford, in Stanislaus County, California. The Study Vicinity Map (Figure 1), Study Location Map (Figure 2), APE map (Figure 3), and Survey Coverage Area Map (Figure 4) are appended to this report in Appendix A.

3.0 PROJECT LOCATION AND DESCRIPTION

3.1 PROJECT LOCATION

The Project is located 0.15 mile south of State Route 132 along Hickman Road, Caltrans District 10, between the towns of Waterford and Hickman in northern Stanislaus County. As depicted in Appendix A: Figure 3, the APE spans portions of Sections 27, 28, 33, and 34 of Township 3 South, Range 11 East of the Mount Diablo Baseline and Meridian. The general setting is urban with recreational, commercial retail, and public facility uses. The bridge currently carries vehicular traffic over the Tuolumne River. The Federal Aid Number is BRLS-5938(199).

The Project area spans approximately 200 feet east and 800 feet west of the existing bridge located on Hickman Road, crossing Tuolumne River and spanning the area between South Appling Road and Yosemite Boulevard (Appendix A: Figures 1 through 4).

3.2 PROJECT DESCRIPTION

3.2.1 Introduction

The purpose of this project is to remove the existing structurally deficient structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts to the Tuolumne River and the surrounding riparian area. The project is funded primarily by the federal-aid Highway Bridge Program (HBP) administered by the Federal Highway Administration (FHWA) through Caltrans Local Assistance. The replacement bridge will meet current applicable County, American Association of State Highway and Transportation Officials (AASHTO), and Caltrans design criteria and standards.

3.2.2 Project Purpose and Need

The existing Hickman Road bridge was last inspected by Caltrans in 2013 and has a sufficiency rating (SR) of 64.7 out of a possible score of 100, and is classified as Structurally Deficient (SD). In addition, the existing bridge is deemed "Scour Critical" with a scour rating of 3, meaning that the local scour and predicted future degradation will continue to undermine the bridge supports.

The purpose of this project is to remove the existing structurally deficient structure and replace it with a new bridge designed to current structural and geometric standards while minimizing adverse impacts to the Tuolumne River and the surrounding riparian area.

3.2.3 Existing Bridge

Constructed in 1964, the existing Hickman Road over Tuolumne River Bridge is a reinforced concrete (RC) box girder on RC solid pier walls and RC wing abutments supported by steel piles. The bridge is 652.9 feet long, 33.5 feet wide, and within the existing 175 to 200 feet public right-of-way. The curb-to-curb width is 27.9 feet, with two 12-foot-wide travel lanes and two 2-foot-wide shoulders. The bridge is classified as SD and Scour Critical.

The Caltrans bridge inspection report identifies major deficiencies:

- The bridge deck has 12 to 16 inch long transverse and pattern cracks throughout.
- There are several edge spalls of up to 3 feet long by 4 inch wide and 1 inch deep along the right curb in Span 4.
- There is an erosion gully of approximately 3 feet wide by 5 feet deep along the right slope embankment at Abutment 8 due to roadway runoff.
- The scour protection at Piers 4 and 5 has deteriorated in front and at the upstream right side of the footing with up to 6 feet wide sections missing.
- Settlement and displacement has been observed at Piers 4 and 5.

3.2.4 Replacement Bridge

The replacement bridge will consist of a 750-foot long cast-in-place (CIP) post-tensioned box girder with two 12-foot-wide travel lanes and two 8-foot-wide shoulders and one 5-foot wide sidewalk placed along the upstream edge. The replacement bridge will be constructed immediately upstream of the existing structure, in order to keep the existing road and bridge open to public traffic during construction. The new upstream road alignment will transition and connect back to the existing Hickman Road alignment using a design speed of 45 mph.

3.2.5 Utility Relocation

Several utilities run through the project site, including a PG&E gas pipe and AT&T telecommunication lines which are mounted to the existing bridge on the upstream and downstream face respectively. There are no overhead utilities located within the project area. All existing utilities will be relocated onto the new bridge without the need for a temporary relocation.

3.2.6 Right-of-Way

Construction of the new bridge on the proposed upstream alignment will require additional permanent right-of-way takes. In addition, temporary construction easements will be required to construct the project.

3.2.7 Detour Route

The new bridge will be constructed on a new upstream alignment adjacent to the existing bridge. Traffic will be able to use the existing bridge to cross Tuolumne River during the construction of the replacement bridge. The existing bridge will be demolished upon completion of the new bridge construction.

3.2.8 Demolition and Construction Staging

Demolition of the existing bridge will be performed in accordance with the Caltrans Standard Specifications modified to meet environmental permit requirements. All concrete and other debris resulting from the demolition of the existing bridge will be removed from the project site and disposed of by the contractor. The construction contractor will prepare a bridge demolition plan.

3.2.9 Construction Activities

Construction will consist of the following activities:

- Removing trees, clearing, and grubbing to accommodate the new bridge structure and road approach work.
- Excavating for the new bridge foundations (maximum of 80 to 100 feet deep).
- Constructing the new bridge and road approaches, including excavating for and placing asphalt concrete.
- Removing the existing bridge.
- Placing erosion control native grass seeds and mulch.

Table 1 provides a description of the type of equipment likely to be used during the construction of the proposed project.

Table 1: Construction Equipment

Equipment	Construction Purpose
Drill Rig	Construction of drilled or driven pile foundations
Backhoe	Soil manipulation + drainage work
Bobcat	Fill distribution
Bulldozer / Loader	Earthwork construction + clearing and grubbing
Crane	Placement of precast concrete girders or false work beams
Dump Truck	Fill material delivery
Excavator	Soil manipulation
Front-End Loader	Dirt or gravel manipulation
Grader	Ground grading and leveling
Haul Truck	Earthwork construction + clearing and grubbing
Roller / Compactor	Earthwork and asphalt concrete construction
Paver	Asphalt concrete construction
Truck with seed sprayer	Erosion control landscaping

3.2.10 Construction Sequence/Schedule and Timing

Construction is currently scheduled to start in 2018 and take approximately 8 months to complete.

3.3 AREA OF POTENTIAL EFFECTS

A preliminary Study Area including all parcels adjacent to the project footprint that could potentially be part of the APE, as well as the extent of previously recorded archaeological site P-50-002112, was established early on for this project. As project details developed and the cultural resources studies were being conducted, two APEs were delineated: an Architectural APE and an Archaeological APE. The APE as referenced in this ASR refers to the Project's Archaeological APE, unless otherwise specified. The APE is situated along Hickman Road and has been bounded to include the Project's maximum extent of proposed ground disturbance, including staging areas and temporary construction easements (Appendix 1: Figure 3).

The horizontal extent of the APE is irregularly shaped. It generally spans approximately 200 feet east and 800 feet west of the existing bridge on Hickman Road. From north to south, the APE encompasses a 2,000-foot portion of Hickman Road between South Appling Road and Yosemite Boulevard (see Appendix 1: Figure 3). The Archaeological APE includes all areas that were surveyed as a part of this investigation.

An Area of Direct Impact (ADI) was defined within the APE and includes all areas where project related ground disturbing activities, including staging and access areas, are proposed (Appendix 1: Figure 3).

The vertical APE consists of all depths of ground disturbance associated with Project construction activities. In general, excavation up six feet will be required for the approach roadway work while excavation for the new bridge foundations will have a maximum depth of 80-100 feet within the river banks and channel.

4.0 SOURCES CONSULTED

LSA conducted background research to identify previously recorded cultural resources and cultural resources studies within the Study Area and 0.5-mile radius. The background research consisted of a records search, literature review, archaeological sensitivity assessment, and consultation with potentially interested parties.

4.1 SUMMARY OF METHODS AND RESULTS

4.1.1 Records Search

At the request of LSA, the CCIC conducted a records search (9582N) of the Study Area and a 0.5-mile radius on December 21, 2015. The CCIC, an affiliate of the State of California Office of Historic Preservation (OHP), is the official state repository of cultural resource records and reports for Stanislaus County. The records search included a review of the following inventories:

- *California Inventory of Historic Resources* (OHP 1976);
- *California Points of Historical Interest* (OHP 1992);
- *California Historical Landmarks* (OHP 1996);
- *Directory of Properties in the Historic Property Data File* (OHP March 20, 2014).

A summary of the record search results are presented below and a copy of the complete results have been included within Appendix F of this report.

Seven previous studies have been conducted within the Study Area. As a result, the records search identified the following previously-recorded resources in the Study Area:

- *P-50-002111*, remains of 1914 bridge;
- *P-50-002112*, a row of nonnative vegetation in a 2.3-acre lot that is a possible former residential site; and
- *P-50-000001/CA-STA-350H*, former alignment of the Southern Pacific Railroad line.

The segment of the former Southern Pacific Railroad alignment present in the Archaeological APE has not been formerly recorded.

The record search also identified two historic-period archaeological resources, two historic built environment resources, and one roadside monument within 0.5 miles of the Study Area. No prehistoric archaeological resources have been previously recorded within the Archaeological APE or within a 0.5 mile radius of the Study Area.

4.1.2 Literature and Map Review

LSA reviewed historical literature, inventories, and maps for archaeological, ethnographic, historical, and environmental information about the Archaeological APE and its vicinity. Literature reviewed includes:

- *National Register of Historic Places* (NPS 2015a);
- *National Historic Landmarks* (NPS 2015b)
- *Historical Atlas of California* (Beck and Haase 1988);
- *Annals of Stanislaus County, Vol I., River Towns and Ferries* (Brotherton 1982);
- *Chronology of Stanislaus County History* (Santos 2002);
- *Structure Maintenance & Investigations* (Caltrans 2015);
- *Five Views: An Ethnic Historic Sites Survey for California* (OHP 1988);
- *California Soil Resource Lab* (California Soil Resource Lab 2015);
- *The Epidemic of 1830-1833 in California and Oregon* (Cook 1955);
- *California Place Names: The Origin and Etymology of Current Geographical Names* (Gudde and Bright 2010);
- *California Geology* (Harden 1998);
- *Late Cenozoic Stratigraphic Units, Northeastern San Joaquin Valley, California* (Marchand and Allwardt 1981);
- *Historical Atlas of California* (Hayes 2007);
- Northern Valley Yokuts (Wallace 1978) In *Handbook of North American Indians Volume 8: California*;
- *Historic Spots in California* (Hoover et al. 2002);
- *Internet Archive*: non-profit archival collection available to the public (Internet Archive 2001);
- *Handbook of the Indians of California* (Kroeber 1925);
- *California 1850: A Snapshot in Time* (Marschner 2001);
- *California Archaeology* (Moratto 1984);
- The Central Valley: A View from the Catbird's Seat (Rosenthal et al. 2007) In *California Prehistory: Colonization, Culture, and Complexity*;
- *Geologic Map of the San Francisco - San Jose Quadrangle* (Wagner et al. 1991);
- *Waterford, Calif.* (United States Geological Survey [USGS] 1916, 1953, 1969);
- *Plat of Township 3 South, Range 11 East* (General Land Office [GLO] 1853-1854a);
- *Plat of Township 4 South, Range 11 East* (GLO 1853-1854b);

- *Official Map of the County of Stanislaus, California* (Stanislaus Land & Abstract Co. 1906).

The *Waterford, Calif.* (USGS 1916) 7.5-minute topographic quadrangle map depicts the Southern Pacific Railroad west of the APE and a segment of what is currently considered South Appling Road, which merges with the present alignment of Hickman Road just south of the APE. A later map (USGS 1953) shows a driveway or trail with two small structures located just southwest of the APE as well as the railroad. Paralleling the SPRR railroad line to the east, Hickman Road, south of present-day Appling Road, is depicted as it currently exists. The current alignment of South Appling Road then connected to the original bridge contours, approximately 0.25-mile east of the current bridge, connecting to present-day North Appling Road on the northern side of the Tuolumne River. Lastly, the 1969 7.5-minute topographic quadrangle of Waterford depicted Hickman Road, north of Appling Road, depicted in its current alignment. This map also depicts the alignment of the SPRR, west of Hickman Road.

4.2 SUMMARY OF OTHERS WHO WERE CONSULTED

4.2.1 Historical Organization Consultation

On December 31, 2015, LSA sent a letter describing the project and maps depicting the Study Area to the Waterford Historical Society requesting any information or concerns they may have about the Project (Appendix D). No response was received within three weeks, and LSA made a follow-up telephone call on January 20, 2016. LSA left a voicemail message for the Society asking for any questions or concerns regarding the Project. No response to this message has been received to date.

4.3 SUMMARY OF NATIVE AMERICAN CONSULTATION

On December 17, 2015, LSA sent a letter describing the Project with maps depicting the Study Area to the Native American Heritage Commission (NAHC) in Sacramento asking them to review their Sacred Lands File for any Native American cultural resources that might be affected by the Project. In an email dated December 30, 2015, Ms. Katy Sanchez, NAHC Associate Environmental Planner, informed LSA that a search of the Sacred Lands File did not “indicate the presence of Native American cultural resources in the immediate project area.” Ms. Sanchez also provided a list of Native Americans who might have additional information or concerns about the Project. Records of initial contact letters and follow-up contact with those groups and individuals listed by the NAHC can be found in Appendix B. The results are summarized below:

Katherine Erolinda Perez, Chairperson, North Valley Yokuts Tribe: On December 31, 2015, LSA sent letters describing the Project with maps depicting the Study Area to Ms. Perez asking for any information or concerns regarding cultural resources that may be affected by the project (Attachment 2). No response was received within three weeks, and LSA attempted to make a follow-up telephone call on January 20, 2016. LSA left a voicemail message for Ms. Perez asking for any questions or concerns regarding the Project. No response to this message has been received to date.

Lois Martin, Chairperson, Southern Sierra Miwuk Nation: On December 31, 2015, LSA sent letters describing the Project with maps depicting the Study Area to Ms. Martin asking for any information or concerns regarding cultural resources that may be affected by the project (Attachment 2). No response was received within three weeks, and LSA reached Ms. Martin via a follow-up telephone call on January 20, 2016. During that conversation, Ms. Martin stated that she did not have any information regarding the project at that time and thanked LSA for contacting her.

Les James, Spiritual Leader, Southern Sierra Miwuk Nation: On December 31, 2015, LSA sent letters describing the Project with maps depicting the Study Area to Mr. James asking for any information or concerns regarding cultural resources that may be affected by the project (Attachment 2). No response was received within three weeks, and LSA attempted to make a follow-up telephone call on January 20, 2016. LSA left a voicemail message for Mr. James asking for any questions or concerns regarding the Project. No response to this message has been received to date.

5.0 BACKGROUND

5.1 ENVIRONMENT

The Archaeological APE is situated in the San Joaquin Valley within the towns of Waterford and Hickman, California. The eastern side of the California Southern Coast Range is approximately 30 miles to the west and the Sierra Nevada foothills lie approximately 35 miles to the east. The nearest natural water source is the Tuolumne River, which originates in Yosemite National Park and crosses through the Archaeological APE before draining into the San Joaquin River approximately 23 miles to the west.

The Archaeological APE is situated almost entirely on alluvium associated with the Tuolumne River. The southern and eastern portions of the Archaeological APE are situated on the Modesto Formation landform, which was the last major aggradation in the San Joaquin Valley during the late Pleistocene (40,000-20,000 years ago). The Modesto Formation typically consists of discontinuous, lenticular clay and silt lenses interbedded with sand-rich sediments derived from the Sierra Nevada and the Coast Ranges (Wagner et al. 1991; Marchand and Allwardt 1981). Because of their age, it is rare for Pleistocene landforms to contain buried archaeological deposits. Specifically, in the San Joaquin Valley, Pre-Quaternary through latest Pleistocene fans and floodplain landforms contain a very low sensitivity for encountering buried archaeological deposits, while early to middle Holocene landforms have a moderate sensitivity (Rosenthal and Meyer 2004:104).

5.1.1 Sensitivity Assessment

Upper Modesto Formation terraces were mapped less than a half mile from the APE along the southern bank of the Tuolumne River (Marchand and Allwardt 1981). Marchand and Allwardt claimed that the Upper Modesto landforms identified in this area are Pleistocene-aged; however, recent research suggests that all four phases of the Upper Modesto Formation range from 20,000 to 9,000 years old (Rosenthal and Meyer 2004). Furthermore, Rosenthal and Meyer (2004) purport that surface soils commonly associated with the four phases of the Upper Modesto Formation (e.g., Hanford, Honcut, and Tujunga) are too weakly developed to be over 11,000 years old. These same soils are most often associated with Holocene-aged, post-Modesto terraces occurring along modern streams and rivers. Rosenthal and Meyer suggest that the soils likely represent localized, Holocene-aged surface deposits that have buried the mapped Lower and Upper Modesto landforms in this area. Soils like the Hanford series occur on all four of the upper Modesto subunit terraces along parts of the Tuolumne River.

The soil types in the Archaeological APE are variable. The portion of the Archaeological APE north of the Tuolumne River is composed of nearly equal parts Madera sandy loam, Hanford sandy loam, Grangeville very fine sandy loam, and terrace escarpments. The portion of the Archaeological APE south of the Tuolumne River consists primarily of terrace escarpments and riverwash, with portions consisting of Hanford sandy loam. An

overview of these soil types and their associated archaeological sensitivity is summarized below.

Madera soils exist on “hummocky, gently sloping to undulating terraces at elevations of 10 to 250 feet”; during winter, vernal pools are often formed when drainages and closed depressions in this area fill with water. These Madera soils are primarily formed from granite, but can be mixed. Madera sandy loams are associated with Early to Middle Pleistocene-aged landforms and have a very low sensitivity for buried archaeological deposits (California Soil Resource Lab 2014; Rosenthal and Meyer 2004).

In Stanislaus County, Grangeville very fine sandy loam is associated with late Holocene to Historic floodplain alluvial deposits. As such, they have a very high sensitivity for buried archaeological resources (Rosenthal and Meyer 2004).

Hanford soils exist on “stream bottoms, floodplains and alluvial fans at elevations of 150 to 3,500 feet.” These Hanford soils are predominantly formed from granite and other texturally similar quartz rocks. They are weakly-developed soil with an AC profile. Hanford sandy loam is associated with middle to late Holocene-aged alluvial deposits. Hanford soils have a very high sensitivity for buried archaeological deposits up to 30 centimeters (12 inches) below surface, where the C1 horizon begins (California Soil Resource Lab 2014; Rosenthal and Meyer 2004).

The APE contains a few areas of high sensitivity based on soil types; however, based on results from the field survey and the historic aerial and map review, as well as by the fact that these areas have been altered recently by agriculture, modern development, and by use as a heavy machinery yard by the City of Waterford, the probability of encountering buried deposits is greatly reduced. Furthermore, the lack of archaeological resources present and the number of previous investigations that have been conducted within the APE suggest that no further investigation is warranted.

5.2 ETHNOGRAPHY

Ethnographically, the Archaeological APE is situated within the territory of native Northern Valley Yokuts speakers (Wallace 1978:462). Northern Valley Yokuts territory extended from midway between the Mokelumne River and the Calaveras River south to near where the San Joaquin River makes a big bend toward the north (Wallace 1978:462). The western limit of Northern Valley Yokuts traditional territory has been identified as the eastern side of the Coast Range, while the eastern limit extended to the transition from the San Joaquin Plains to the foothills of the Sierra Nevada (Wallace 1978:462, 466). Yokuts settlements were typically found on low mounds near the banks of large watercourses, such as the San Joaquin River. These mounds elevated the inhabitants, their houses, and possessions above the spring flood waters. The abundant riverine environment allowed a sedentary lifestyle and influenced succeeding generations to remain at the same locations (Wallace 1978:466). Cook (1955) and Bennyhoff (1977) identified the area of Waterford as belonging to Taulamni or Tauhalames Northern Yokuts who occupied areas around the Tuolumne River.

The basic social and economic group of Northern Valley Yokuts speakers is the family or household unit, with the nuclear and/or extended family forming a corporate unit. These basic units were combined into distinct, named village or hamlet groups that functioned as headquarters of a localized patrilineage (Wallace 1978). Lineage groups were important political and economic units that combined to form tribelets numbering between 300 and 500 persons. Funerary practices were variable among Northern Valley Yokut groups but cremation was commonly used. According to Tinkham (1921), a portion of Knights Ferry, just 13 linear miles north of Waterford in Stanislaus County, was utilized as a Native American burial ground.

Subsistence activities included hunting, fishing, and plant resource collecting. They built a variety of structures, including residential dwellings, ceremonial structures, and semi-subterranean sweat lodges (Wallace 1978). The typical dwelling was a thatched house covered by brush, grass, or tules. A variety of flaked and ground stone tools (e.g., knives, arrow and spear points, and rough cobble and shaped pestles) were common. Obsidian was a highly valued material for tool manufacture and was generally imported. Northern Valley Yokuts also engaged in trading relationships with surrounding groups for commodities such as salt and marine shells.

By 1776, Spanish expeditions into the interior and the establishment of the Spanish mission system had contributed to the rapid disappearance of the native inhabitants. Studies of mission records indicate that Northern Valley Yokuts were relocated to Mission San José between 1815 and 1825 (Milliken 1995:256). European diseases (e.g., smallpox, cholera, typhus and measles), particularly the epidemic of 1833, claimed thousands of lives and wiped out entire communities of San Joaquin Valley Indians (Cook 1955). By 1834, the Mexican government had disbanded the missions, by which time the language and culture of both the Miwok and Yokuts had been permanently disrupted. Many natives abandoned the missions and returned to their former territories where they survived by hunting and gathering; others worked on ranches as laborers or house servants (Levy 1978:401-403; Wallace 1978:459-460, 462, 469). Stanislaus County was named after the missionized Chief Estanislao, who led many native revolts against the Spanish and Mexican regimes during this time (Tinkham 1921).

Today, many Yokuts descendants are members of the federally recognized Tachi-Yokut Tribe and Tule River Tribe, while many Northern Valley Yokuts, specifically, find membership among the Choinumni Council of Yokuts and the Northern Valley Yokuts Tribe. Language and cultural revitalization is an on-going effort among today's Yokut peoples, providing community and continuity for their descendants.

5.3 PREHISTORY

The San Joaquin Valley has had many population movements and waves of cultural influence from neighboring regions. The valley was settled by native Californians at the end of the Pleistocene (approximately 11,500 to 7,500 years ago) (Moratto 1984:214-5). Hokan speakers may have been the earliest occupants of the San Joaquin Valley, eventually becoming displaced by migrating Penutian speakers (ancestral Yokuts) coming

from outside of California. The Penutians entered the San Joaquin Valley in several minor waves, slowly replacing the original Hokan speakers and causing them to migrate to the periphery of the valley (Elsasser 1978:41; Shipley 1978:81). By about A.D. 300-500, the Penutians had pushed out the Hokan speakers from the San Joaquin Valley.

The Paleo-Archaic-Emergent cultural sequence developed by Fredrickson (1973, 1994) and recalibrated by Rosenthal, White and Sutton (2007) is commonly used to interpret the prehistoric occupation of the Central Valley (Milliken et al. 2007). This sequence defines specific cultural configurations identified by economic patterns, stylistic aspects, and temporally constructed regional phases. The recalibrated sequence is broken into three broad periods: the Paleoindian Period (11,550-8550 cal B.C.); the three-staged Archaic Period, consisting of the Lower Archaic (8550-5550 cal B.C.), Middle Archaic (5550-550 cal B.C.), and Upper Archaic (550 cal B.C. - cal A.D. 1100); and the Emergent Period (cal A.D. 1100-Historic) (Rosenthal et al. 2007).

The Paleo-Indian period began with the first entry of people into California. Human populations during the Paleo-Indian period were low and probably consisted of small groups moving frequently in order to exploit plant and animal resources.

The Archaic period in general is characterized by increased use of plant foods, elaboration of burial and grave goods, and increasingly complex trade networks (Bennyhoff and Fredrickson 1994, Moratto 1984). The three Archaic Periods proposed by Rosenthal, White and Sutton correspond to climatic changes and are summarized below.

- The Lower Archaic period is characterized by cycles of widespread floodplain and alluvial fan depositions. Chipped stone crescents, early wide stemmed points, and bi-pointed “humpies” are distinct markers of the Lower Archaic period in the Central Valley. Presence of marine shell beads and Eastern Sierra Nevada obsidian suggest evidence of trade during this period as well (Rosenthal et al. 2007). Small but diverse floral and faunal assemblages indicate that a variety of animal and plant species were utilized. Acorns, wild cucumber, and manzanita berries were the dominant plant resources. Obsidian from both the North Coast Ranges and eastern Sierra Nevada was utilized.
- The Middle Archaic period corresponds to a drier climatic period and two distinct settlement/subsistence adaptations have been identified: the foothills tradition and the valley tradition (Rosenthal et al. 2007). The foothills tradition is marked by functional artifact assemblages consisting almost exclusively of flaked or ground stone cobble-based tools. Few trade goods have been identified at Middle Archaic foothill tradition sites; artifacts associated with this period are primarily made from locally sourced materials. Burials marked by cairns have also been identified at Middle Archaic foothill tradition sites.

Few valley tradition sites have been identified in the archaeological record. Components associated with valley tradition sites represent more diverse subsistence practices and extended residential settlement, evidenced by specialized tools, trade goods, and faunal refuse associated with year-round occupation (Rosenthal et al. 2007). Among the distinctive artifacts associated with this component was one of the

oldest dated shell bead lots in Central California (4,160 BP) and a unique type of pestle apparently used with a wooden mortar (Meyer and Rosenthal 1997).

- The Upper Archaic period corresponds to an abrupt climatic change that resulted in wetter, cooler environmental conditions. The Upper Archaic period represents a time where the Central Valley experienced greater cultural diversity. Specialized artifacts associated with this time period include bone tools, ceremonial blades, polished and ground stone plummets, Haliotis shell ornaments, saucer and saddle Olivella shell beads; as well as groundstone implements such as handstones, milling slabs, mortars and pestles (Rosenthal et al. 2007).

The Emergent Period is marked by the introduction of the bow and arrow, the ascendance of wealth-linked social status, and the elaboration and expansion of trade networks, signified in part by the appearance of clam disk bead money (Moratto 1984). The distinctive cultural pattern of the Emergent Period, the Augustine Pattern, is marked by the appearance of small arrow-sized projectile points, trimmed show mortars, flanged pestles, flanged steatite pipes, and chevron-designed bird-bone tubes. Emergent Period deposits have been documented from most interior valleys and bayshore locations, as well as from upland contexts, where habitation and task-specific sites have been reported (Atchley 1994; Baker 1987; Banks and Orlins 1979; Bramlette 1989; Fredrickson 1966, 1968; Holson et al. 1993; Lillard, Heizer, and Fenenga 1939; Meyer and Rosenthal 1997; Wills 1994). Buried sites dating to the Emergent Period have been found in some of the interior valleys (Fredrickson 1966; Meyer and Rosenthal 1997; Wiberg 1996), although most of the recorded sites have surface manifestations. Typically, these sites consist of well-developed midden deposits containing both cremated and intact human burials, and residential features, including house floors. Obsidian from the Napa Valley was used almost exclusively, arriving in the form of small, un-modified pebbles or large flake blanks, later made into serrated arrow points (Meyer and Rosenthal 1997; Wiberg 1996). Large mammals appear to have taken a more prominent role in the diet, as did small-seeded resources. Marine shellfish and marine fishes were moved inland in much larger quantities during the Emergent Period (Baker 1987; Fredrickson 1968; Meyer and Rosenthal 1997).

5.4 HISTORY

5.4.1 Settlement

A series of explorations in present-day Stanislaus County was conducted by the Spanish beginning with a 1776 expedition led by Jose Joaquin Moraga. The exploration party followed the San Joaquin River into the vicinity of present-day Modesto. Another expedition in 1806, led by Moraga's son Gabriel, revisited the area and traveled east as far as present-day Knight's Ferry, followed by another expedition in 1810 (Beck and Haase 1974:32; Heizer and Almqvist 1971:4-22). Other expeditions were conducted by fur-trappers including Jedediah Smith and Ewing Young in 1820 and 1829-1830 respectively. Smith and Young traversed Walker's Pass to enter the valley and frequently exploited fur resources along the Tuolumne and San Joaquin Rivers (Tinkham 1921).

After Mexico declared its independence in 1821, the mission system was gradually reduced to destitution. Mission lands were granted to prestigious Mexican citizens in the form of large land grants, or *ranchos*. Within Stanislaus County, five ranchos were awarded: Orestimba (16,500 acres), El Pescadero (16,148 acres), Rancho del Puerto (13,340 acres), Rancheria del Rio Estanislao (36,300 acres), and Thompson Rancho (30,852 acres). Orestimba, El Pescadero, and Rancho del Puerto were located west of the San Joaquin River, while Rancheria del Rio Estanislao and Thompson Rancho were north of the Stanislaus River (Tinkham 1921).

American settlers flooded California with the discovery of gold (1848) on the American River, resulting in an influx in population, while the Mexican regime struggled to gain control over the land. Following the Mexican-American War, the United States annexed California until it was granted statehood via the Compromise of 1850 (Tinkham 1921). Stanislaus County was organized in 1854 from a portion of Tuolumne County. The approximately 800,000-acre county is located in the San Joaquin Valley, an area in the larger California Central Valley (Tinkham 1921:44-45; Beck and Haase 1974:61-62). Three major rivers flow through the county: the Stanislaus, Tuolumne, and San Joaquin, making it an ideal agricultural area. The discovery of gold in California 1848 caused an influx of travelers moving west which spawned rapid transportation developments such as roads, trails, river ferries, and railroads, as well as agriculture to support the growing population.

The City of Waterford was originally known as Bakersville, named after William Baker, who owned a homestead consisting of 160 acres on the south bank of the Tuolumne River, near the Tuolumne River Bridge. The town of Bakersville was planned out in 1866 (Brotherton 1982). That same year, Baker established a ferry business on the north bank of the Tuolumne. In 1871, the post office was established; however, the postal service required the town to change its name to avoid confusion with other similarly named towns in California, and the city's name was changed to Waterford. In 1891, when Southern Pacific constructed a railroad through Waterford, the entire town shifted nearer to the tracks and the Waterford depot. With the introduction of the railroad, the town grew precipitously.

Arrival of the railroad in 1891 fostered the development of Hickman. Located across the Tuolumne River south of Waterford, Hickman was first settled by rancher Charles Dallas circa 1850. In the late 1860s, Louis McLean Hickman settled on the Dallas Ranch after marrying Dallas's daughter, Mary. The area was sparsely settled by ranchers until the railroad established a stop in Hickman, at which point the town developed rapidly. Historical maps indicate that Appling Road served as the primary route traveled between the two towns as early as 1916. Although subsequent improvements have made changes to the original roadway, Appling Road and Hickman Road, south of the APE, generally follow the same alignment as it did a hundred years ago.

5.4.2 Transportation

The first ferry in Stanislaus County was the Heath & Emory Ferry, established circa 1850, which provided travel over the Stanislaus River to just east of Oakdale. The Dickerson Ferry, one of the most active ferries of the area, was established sometime before 1862 near Waterford on the Tuolumne River (Tinkham 1921). The Waterford Ferry Company, launched by Charles Dallas, was established in 1866. This company operated until 1889, when the first bridge crossing over Tuolumne River was built, thus making the ferry obsolete. The first bridge lasted until 1914 and was quickly followed by a second bridge, which consisted of two 200-foot spans and 340 feet of trestle approach (Davis-King 2013). This second bridge was demolished in 1964 and replaced by the current bridge constructed downstream, known as the F Street Bridge (Brotherton 1982). The original bridge piers and footings, P-50-002111, were observed outside of and easterly adjacent to the current APE. Additionally, the record for P-50-002111 includes a monument, preserved by the Waterford Senior Citizens in 1976, which states this site was also the crossing location for Baker Ferry purportedly established pre-1866. However, there are no other records of the ferry in official County documents (Davis-King 2013).

A segment of the Southern Pacific Railroad Oakdale Branch ran just west of the current Hickman Bridge. This segment of railroad was constructed by the Southern Pacific Company in 1891 as part of the Oakdale Branch that ran from Stockton to Merced. It provided an alternate route for passengers and freight heading north or south through the San Joaquin Valley (Robertson 1998). Railroad stops along this line included one in Bakersville (present-day Waterford) and one in Hickman. This alternate route, however, was not as profitable as the Southern Pacific Company expected.

Southern Pacific Company petitioned the Interstate Commerce Commission (ICC) for authority to abandon the Oakdale Branch segment from Montpelier to Merced in 1942 to provide the steel from the rails to the war effort. Then in 1973, Southern Pacific Company filed to abandon the segment of the Oakdale Branch track that extended from Claribel to Montpelier (including the segment within this Project's APE), and then again in 1979 for the segment from Claribel to Oakdale. In 1986, Southern Pacific Company abandoned the remaining segment of the Oakdale Branch that extended from Stockton to Oakdale. Since its abandonment, much of the Oakdale Branch tracks have been removed to accommodate modern development (Patterson 2010; Palmer 2012).

5.4.3 Agriculture

The first agriculture to arrive in the area of present-day Stanislaus County was wheat, cultivated by a Mormon colony led by Samuel Brannan around 1846. Before the arrival of the railroad, much of Stanislaus County was grazed by large herds of cattle, hogs, horses, and sheep. Cattlemen prospered during the Gold Rush by supplying beef to miners. Following the Gold Rush, farmers began to till the fertile river bottom lands and cultivate crops, signaling a significant shift in land use. Prosperous cattlemen suffered a series of natural disasters beginning with thousands of cattle drowning in the catastrophic floods of 1861-1862, followed immediately by two years of severe drought killing over 550,000 head of cattle statewide (Cleland 1951:126-132). Cattle prices plunged and ranches burdened

with heavy debts accrued during flush times were broken up and sold. The passage of “fence laws” required cattle ranchers to enclose their once-open range lands to prevent cattle from trampling and eating crops; this was the final blow to the vitality of the ranching economy.

Stanislaus County saw its fair share of mining activities during the Gold Rush. The southern end of the Mother Lode was located just east of the Stanislaus County line. Many miners who failed to strike it rich turned to agriculture, particularly raising livestock and dry-farming grain (Vaught 2003:449).

Beginning in the 1860s, wheat became the main crop in the county due to ideal growing conditions, efficient cultivation methods, and a high demand for cereal grains in domestic and international markets (Cleland 1951:126-135; Hundley 2001:89-90; Rawls and Orsi 1999:233-241; Stoll 1998:26-27). The county experienced its first economic boom during the 1860s and 1870s after multiple large scale grain (mainly wheat) harvests. County population mirrored this dramatic rise in agricultural development, growing from 2,245 people in 1860 to 6,499 in 1870 (Branch 1881:67). When supply soon outpaced local demand, surplus wheat was sacked for export via railroad to ports on San Francisco Bay; Great Britain was an important destination for this surplus, as the nation incentivized wheat exports by relaxing tariffs on foodstuffs from California. By 1868, San Francisco was exporting a third of the nation’s wheat crop; within 10 years, more than 2.5 million acres were under cultivation (Williams 1997:47-49). Other grains were also exported, such as oats, barley, corn, and peanuts.

Large-scale grain exports from Stanislaus County were only feasible after railroads extended into the region beginning in the early 1870s. The railroads provided farmers the opportunity to reach new markets and increase crop production. The success of these farmers came to the attention of investors, who began purchasing large tracts of land throughout central California. At this time, Stanislaus County became known for its “bonanza” wheat farms; these farms consisted of huge tracts of land capable of cultivating thousands of tons of grain crops and were usually owned by out-of-town entrepreneurs or agricultural capitalists. Between Merced and Stockton, over 600 square miles comprised exclusively bonanza wheat farms including the Carter and Whitmore’s wheat farms in Ceres (Street 2004:184-185, 267). In the 1870s, threshers powered by straw-burning engines simplified and economized the wheat harvesting process (Tinkham 1921:57).

The wheat boom ended in the late 1880s due to production competition from growers in Europe, Asia, South America, and Australia, many using techniques developed in California. Having overextended themselves by borrowing and speculating heavily in harvest yields, California growers watched helplessly as many were foreclosed in bankruptcy (Vaught 2007:203-205). Compounding the problem was the onset of a worldwide economic depression in 1893 sparked by a collapse in railroad financing and widespread bank failures (Orsi 2005:216-217). The lingering economic depression and global overproduction led to a price collapse of over 50 percent. The division of large grain farms into smaller tracts in the 1880s was facilitated by the collapse in wheat

farming, the agitation for irrigation development, and by the conversion of large tracts of land from wheat to orchard and vineyard production (Orsi 2005:219).

Irrigation eased the transition from a large-scale monocrop economy to a more sustainable, diversified cultivation of orchard crops, grapes, melons, and other water-intensive products. The dairy industry also benefitted as the region shifted away from wheat (Caltrans 2000:38-48). By 1910, California imported most of its wheat from the Midwest (Vaught 2007:215).

6.0 FIELD METHODS

LSA Archaeologist Mariko Falke surveyed all accessible portions of the Archaeological APE on February 2, 2016. A river island within the Tuolumne River located in the Archaeological APE on the east side of the bridge was not surveyed; the island was inaccessible due to high water and dense overgrown vegetation. The pedestrian survey of the APE included intensive survey (straight transects spaced no more than 15 meters apart) of portions of APNs 080035009, 080035004, 080041005, 080009001, 080011001, and 080035008. During the field survey, ground visibility was limited by developed surfaces and vegetation; visibility in APNs 080041005 and 080011001 was approximately 30 percent, while visibility in APNs 080009001, 080035004, 080035008 and 080035009 was approximately 70 percent. The observed soil composition within the Archaeological APE consisted primarily of moderately moist 10 YR 6/4 light yellowish brown sandy loam, except near Hickman Road, bridge footings, and along the lower reaches of the Tuolumne River, where the soil was predominately riverwash and/or fill material, including river cobbles and mixed gravel.

The area where the Southern Pacific Railroad (P-50-000001/CA-STA-350H) was formerly aligned was carefully inspected for any indication of the former railroad (e.g., bridge remains, rails, ties, track foundation/grade). The area of the former alignment has been altered significantly, including the development of a road and concrete drainage on the south side of the Tuolumne River and construction of a buried pipeline on the north side of the Tuolumne River, and the survey did not identify any evidence of the railroad. Urban development within the Archaeological APE has likely disturbed any intact surface archaeological remains of the abandoned Southern Pacific Railroad that may have been present.

During the survey, Ms. Falke identified P-50-002111, the 1914 bridge remains, as being just outside of the APE. Ms. Falke also identified P-50-002112, nonnative vegetation at River Park, during the survey. Photographs and notes were taken, and the site inspected for any disturbances.

7.0 STUDY FINDINGS AND CONCLUSIONS

This study identified one previously recorded archaeological resource (P-50-002112), one previously unrecorded segment of the SPRR Oakdale to Merced branch (P-50-000001), and one previously unrecorded resource in the Archaeological APE (Appendix F). Additionally, one archaeological resource identified by the CCIC records search as being located within the project area (P-50-002111, remains of a 1914 bridge) was determined to be outside the Archaeological APE as a result of the survey.

- P-50-002112 (Appendix 1: Figure 3, MR #3): this resource was previously described as isolated, nonnative vegetation which was assumed to be associated with an early 1900s residence. However, an examination of historic aerials and parcel data found that the existing vegetation was planted sometime between 1967 and 1998. The historic aerials also revealed the portion of the parcel in the ADI contained no structures or vegetation in 1967. As such, the existing vegetation could not be associated with either the 1914 residence or the secondary residence established on the parcel sometime between 1916 and 1942 as referenced in the 2013 site record. Additional disturbances to the location include subsequent residential development during the 1980s and alteration of the land when it became a city park in 2005. No further consideration of this resource is necessary.
- P-50-000001/CA-STA-350H (Appendix 1: Figure 3, MR #2): this resource is a previously unrecorded segment of the Southern Pacific Railroad Oakdale to Merced Branch. Based on historic topographic maps, the railroad existed just west and parallel to the current alignment of Hickman Road within the APE. Currently, no grade is present within the ADI or APE and the area exhibits none of the original features of the railroad. This segment is currently within public right-of-way and appears to function as an access road to the Tuolumne River. As such, this segment is exempt from evaluation under Section 106 PA Attachment 4, Type 1: a railroad grade converted to other uses.
- LSA-HRB-1 (Appendix 1: Figure 3, MR #4): this resource consists of a previously unrecorded, isolated concrete pad foundation. It was identified within the APE during the field survey. The approximate measurements of the gravel concrete slab are 10 feet x 6 feet x 2 feet above surface. Ferrous metal rebar protrudes from the top of the concrete pad, while ferrous metal latches are bolted and secured with square nuts on the sides, near corners of the slab. LSA-HRB-1 is located east of Hickman Road and south of Tuolumne River, approximately 75 feet south of the riverbank. This foundation appears to be 45 years or older, based on the concrete's gravel composition along with presence of ferrous metal and square nuts. The daughter of the property owner, Amanda, stated that the foundation pad was left from a rock/gravel quarry operation. However, additional archival research found no evidence to support that claim (Wilson 2016). Although this resource is located

within the APE, it is outside of the ADI and therefore will not be affected by project actions.

No other archaeological resources were identified as a result of the background research or field survey.

USGS soil survey maps identified soils within the Archaeological APE which are variably sensitive for buried archaeological deposits. On either side of the Tuolumne River within the APE, soils consist of riverwash and terrace escarpments, both moderately sensitive for buried archaeological deposits. Portions of the project area are situated on Grangeville and Hanford soils, which are found adjacent to the terrace escarpments north and south of the Tuolumne River and which have a high sensitivity for encountering buried archaeological deposits. The highly developed areas within Waterford are situated on Madera soils which have low to very low sensitivity. The southern portion of the APE also contains gravel pits, which is a historic-era artificial soil series that has low sensitivity. All in all, the Archaeological APE contains a limited number of areas of high sensitivity based on soil types. Additional disturbances revealed as a result of the field survey and historic aerial and map review indicate that these areas as well as the Archaeological APE in general, have been directly altered by agriculture, residential, industrial, and the City of Waterford. As such, the probability of encountering intact significant archaeological deposits within the Archaeological APE is considered low. No further archaeological investigation is recommended.

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.

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APPENDIX A

Maps

Figure 1: Study Vicinity Map

Figure 2: Study Location Map

Figure 3: Area of Potential Effects Map

Figure 4: Survey Coverage Area Map

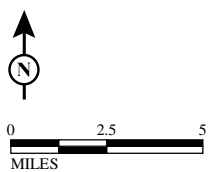


LSA

FIGURE 1

LEGEND

★ Project Location



SOURCE: ESRI Imagery (4/2008)

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*Hickman Road over Tuolumne River Bridge
Replacement Project, Waterford and Hickman,
Stanislaus County, California,
Federal Project No. BRLO-5938 (199)
LSA Project No. DHG1401
Study Vicinity Map*

APPENDIX B

Native American Heritage Commission Consultation

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



December 30, 2015

Katie Vallaire
LSA Associates, Inc.

Via E-mail: Katie.vallaire@lsa-assoc.com
Number of Pages: 2

RE: Hickman Road over Tuolumne River Bridge Replacement (LSA #DHG1401), Stanislaus County

Dear Ms. Vallaire,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. 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 or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez
Associate Environmental Planner

**Native American Contact List
Stanislaus County
December 30, 2015**

North Valley Yokuts Tribe
Katherine Erolinda Perez, Chairperson
P.O. Box 717 Ohlone/Costanoan
Linden , CA 95236 Northern Valley Yokuts
canutes@verizon.net Bay Miwok
(209) 887-3415

Southern Sierra Miwuk Nation
Lois Martin, Chairperson
P.O. Box 186 Miwok
Mariposa , CA 95338 Pauite
(209) 742-6867 Office Northern Valley Yokut

Southern Sierra Miwuk Nation
Les James, Spiritual Leader
P.O. Box 1200 Miwok
Mariposa , CA 95338 Pauite
(209) 966-3690 Northern Valley Yokut

This list is current only as of the date of this document.

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

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Hickman Road over Tuolumne River Bridge Replacement (LSA #DHG1401), Stanislaus County. .

From: Katie Vallaire
To: ["nahc@nahc.ca.gov"](mailto:nahc@nahc.ca.gov)
Cc: [Mariko Falke](#)
Subject: Hickman Road over Tuolumne River Bridge Replacement, Stanislaus County, California (LSA Project #DHG1401)
Date: Thursday, December 17, 2015 2:43:00 PM
Attachments: [DHG1401_NAHC request.pdf](#)

Dear Ms. Gomez:

Stanislaus County proposes the Hickman Road over Tuolumne River Bridge Replacement, Stanislaus County, California (Project). LSA Associates, Inc. is conducting a study to determine if the project might affect cultural resources. The Area of Potential Effects (APE) is located within Township 3 South, Range 11 East, within portions of sections 27, 28, 33, and 34, Mount Diablo Base Line and Meridian, as depicted on the accompanying portion of the USGS *Waterford, Calif.*, 7.5' topographic map.

LSA is requesting a review the Sacred Lands File for any Native American cultural resources that may be within or adjacent to the Project area. We also request a list of Native American individuals and organizations that may have knowledge of cultural resources in the APE. Please see attached for the request documentation.

If you have any questions, please do not hesitate to contact me via phone, fax, or email.

Thank you,

Katie Vallaire, M.A., RPA
Senior Cultural Resources Manager
LSA Associates, Inc.
4200 Rocklin Road, Suite 11B
Rocklin, CA 95677
916 630-4600 tel
916 630-4603 fax

December 17, 2015

Cynthia Gomez
Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 955691
(916) 373-3710
(916) 373-5471 – Fax
nahc@nahc.ca.gov

Subject: Hickman Road over Tuolumne River Bridge Replacement, Stanislaus County,
California (LSA Project #DHG1401)

Dear Ms. Gomez:

Stanislaus County proposes the Hickman Road over Tuolumne River Bridge Replacement, Stanislaus County, California (Project). LSA Associates, Inc. is conducting a study to determine if the project might affect cultural resources. The Area of Potential Effects (APE) is located within Township 3 South, Range 11 East, within portions of sections 27, 28, 33, and 34, Mount Diablo Base Line and Meridian, as depicted on the accompanying portion of the USGS *Waterford, Calif., 7.5'* topographic map.

LSA is requesting a review the Sacred Lands File for any Native American cultural resources that may be within or adjacent to the Project area. We also request a list of Native American individuals and organizations that may have knowledge of cultural resources in the APE.

If you have any questions, please contact me at the address and phone number above, or via e-mail at katie.vallaire@lsa-assoc.com. I look forward to hearing from you. Thank you.

Sincerely,

LSA ASSOCIATES, INC.



Katie Vallaire, M.A., RPA
Senior Cultural Resources Manager

Attachments:

Figure 1: Regional Location

Figure 2: Project Area

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: Hickman Road over Tuolumne River Bridge Replacement (LSA #DHG1401)

County: Stanislaus

USGS Quadrangle

Name: Waterford Calif.

Township: 3S Range: 11E Section(s): 27, 28, 33, 34

Company/Firm/Agency:

LSA Associates, Inc.

Contact Person: Katie Vallaire

Street Address: 4200 Rocklin Road STE 11B

City: Rocklin Zip: 95677

Phone: (916) 430-4600 Extension:

Fax: (916) 630-4603

Email: katie.vallaire@lsa-assoc.com

Project Description:

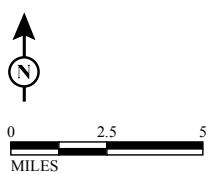
Stanislaus County Department of Public Works proposes to replace the existing bridge on Hickman Road over Tuolumne River (Bridge No. 38C-0004) located 0.15 mile south of State Route 132 near the town of Waterford in northern Stanislaus County. The general setting is urban with recreational, commercial retail, and public facility uses. The bridge currently carries vehicular traffic over Tuolumne River. LSA Associates, Inc. is conducting a study to determine if the project might affect cultural resources.

☒ Project Location Map is attached



LSA

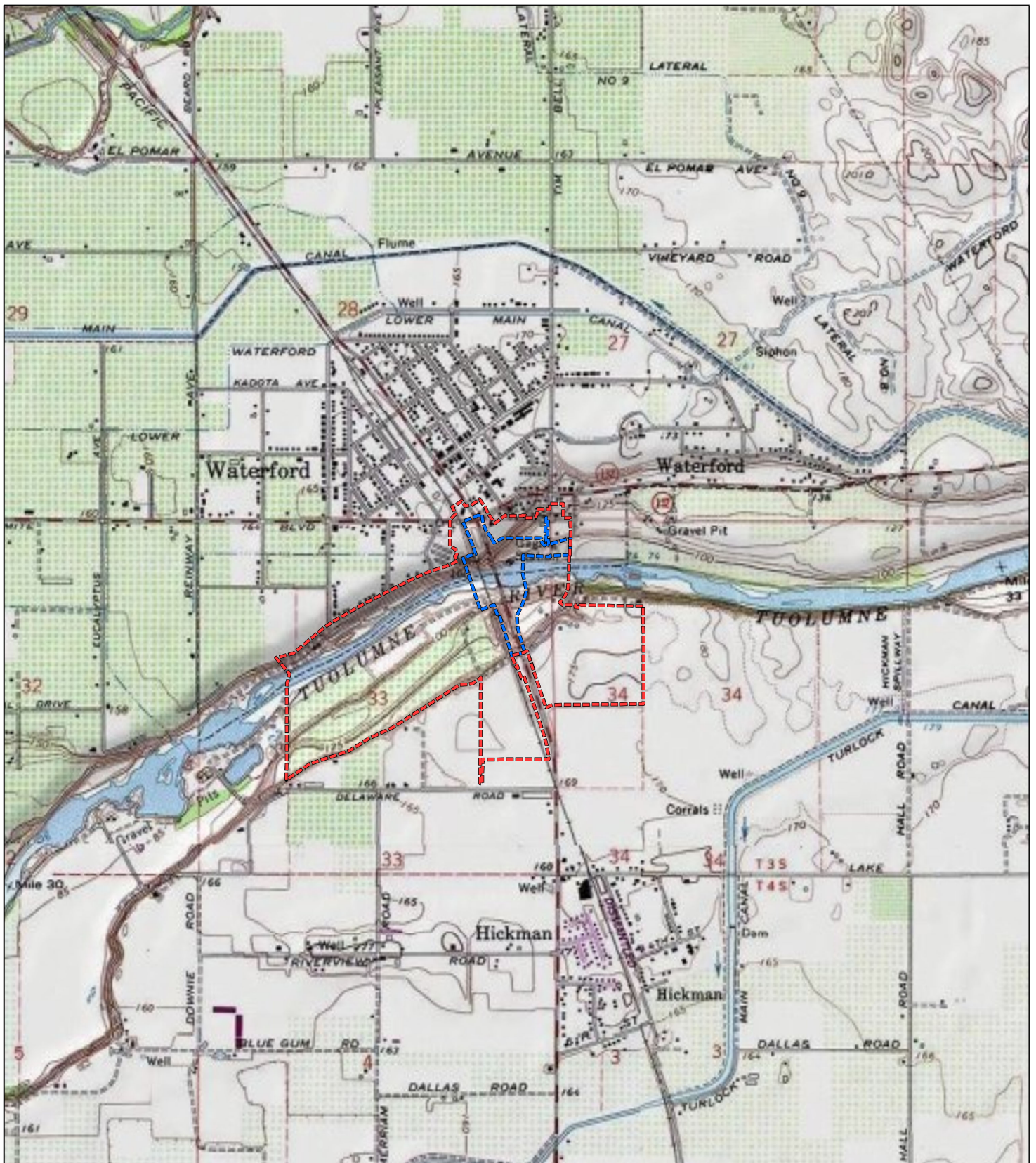
FIGURE 1



LEGEND
★ Project Location

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Regional Location



LSA

LEGEND

- Architectural Area of Potential Effects
- Archaeological Area of Potential Effects

FIGURE 2

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Project Area Map

SOURCE: Basemap - USGS Topo; Mapping - LSA Associates, Inc. (2015)

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APPENDIX C

Native American Consultation

(Only one copy of the formal notification letter is provided as an example representing all letters sent to the respective representatives.)

December 31, 2015

Southern Sierra Miwuk Nation
Les James, Spiritual Leader
P.O. Box 1200
Mariposa, CA 95338
(209) 966-3690

Subject: Hickman Road over Tuolumne River Bridge Replacement, near Waterford, Stanislaus County, California (LSA Project # DHG 1401)

Dear Mr. James:

The Stanislaus County Department of Public Works proposes the Hickman Road over Tuolumne River Bridge Replacement, in Stanislaus County, California. LSA Associates, Inc. is conducting a study to determine if the project might affect cultural resources. The project area is located within Township 3 South, Range 11 East, in Sections 27, 28, 33, and 34 of the Mount Diablo Base Line and Meridian, as depicted on the accompanying portion of the USGS *Waterford, Calif. 7.5'* topographic map (Figures 1-2).

A search of the Sacred Land files by the Native American Heritage Commission (NAHC) has been conducted; the search did not identify cultural resources within or in the immediate vicinity of the project boundary. In addition, a records search was conducted at the Northwest Information Center of the California Historical Resources Information System, Sonoma State University, identified no archaeological resources with the project area.

The NAHC has identified you as a Native American representative that may be traditionally or culturally affiliated with the project area. We are requesting any information that you may have regarding any traditional cultural properties, values, or tribal cultural resources within the project area so that this information can be incorporated into the planning phase of the project. If you have any comments or concerns regarding Native American issues related to the overall project, please contact me, expressing your concerns at your earliest convenience.

Your comments and concerns are important to us and we look forward to hearing from you. I can be contacted via email at mariko.falke@lsa-assoc.com or by phone at 916-630-4600.

Sincerely,



Mariko Falke, B.A.
Cultural Resources Analyst

LSA Associates, Inc.
4200 Rocklin Road, Suite 11B
Rocklin, CA 95677
p. 916-630-4600 / f. 916-630-4603

Attachments:

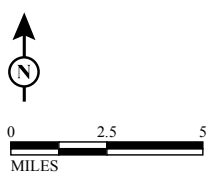
Figure 1: Project Location and Vicinity

Figure 2: Project Area



LSA

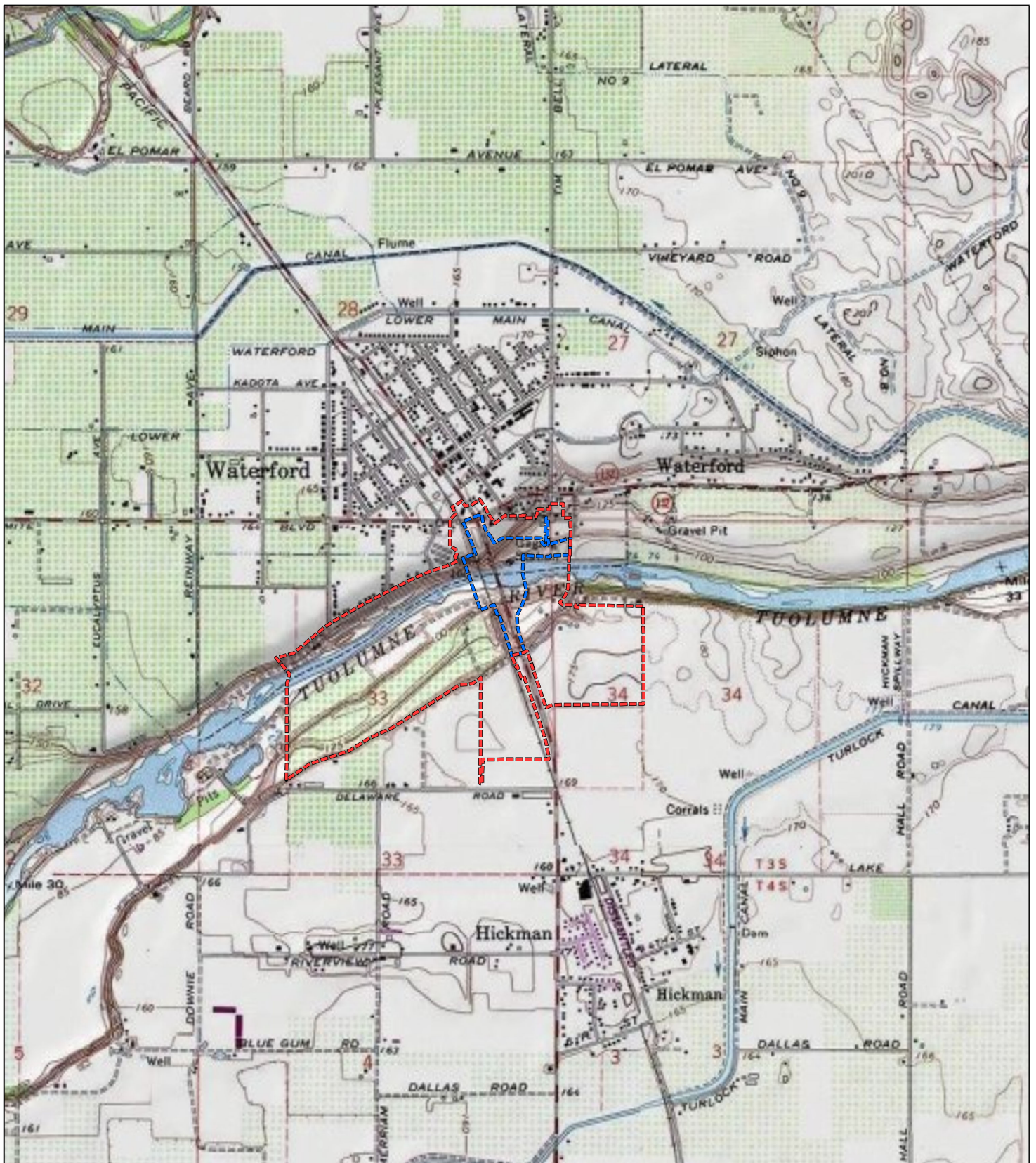
FIGURE 1



LEGEND
★ Project Location

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Regional Location



LSA

LEGEND

- Architectural Area of Potential Effects
- Archaeological Area of Potential Effects



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FEET

SOURCE: Basemap - USGS Topo; Mapping - LSA Associates, Inc. (2015)

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FIGURE 2

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Project Area Map

APPENDIX D

Historical Society Consultation

December 31, 2015

Waterford Historical Society
P.O. Box 762
Waterford, CA 95386

Subject: Hickman Road over Tuolumne River Bridge Replacement, near Waterford,
Stanislaus County, California (LSA Project # DHG1401)

Dear Waterford Historical Society:

The Stanislaus County Department of Public Works proposes the Hickman Road over Tuolumne River Bridge Replacement, near Waterford, Stanislaus County, California. The Project will replace the Category 5 *Hickman Road over Tuolumne River Bridge* #38C0004. LSA Associates, Inc. is conducting a study to determine if the project might affect cultural resources. The project area is located within Township 3 South, Range 11 East, in Sections 27, 28, 33, and 34 of the Mount Diablo Base Line and Meridian, as depicted on the accompanying portion of the USGS *Waterford, Calif. 7.5'* topographic map (Figures 1-2).

Please notify us if your organization has any information or concerns about historical sites in the project area. This is not a request for research; it is solely a request for public input for any concerns that the historical society may have. If you have any questions, please contact me at your earliest convenience. We look forward to hearing from you.

Sincerely,



Mariko Falke, B.A.
Cultural Resources Analyst
LSA Associates, Inc.
4200 Rocklin Road, Suite 11B
Rocklin, CA 95677
p. 916-630-4600 / f. 916-630-4603

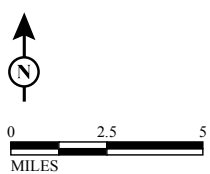
Attachments:

Figure 1: Project Location and Vicinity
Figure 2: Project Area



LSA

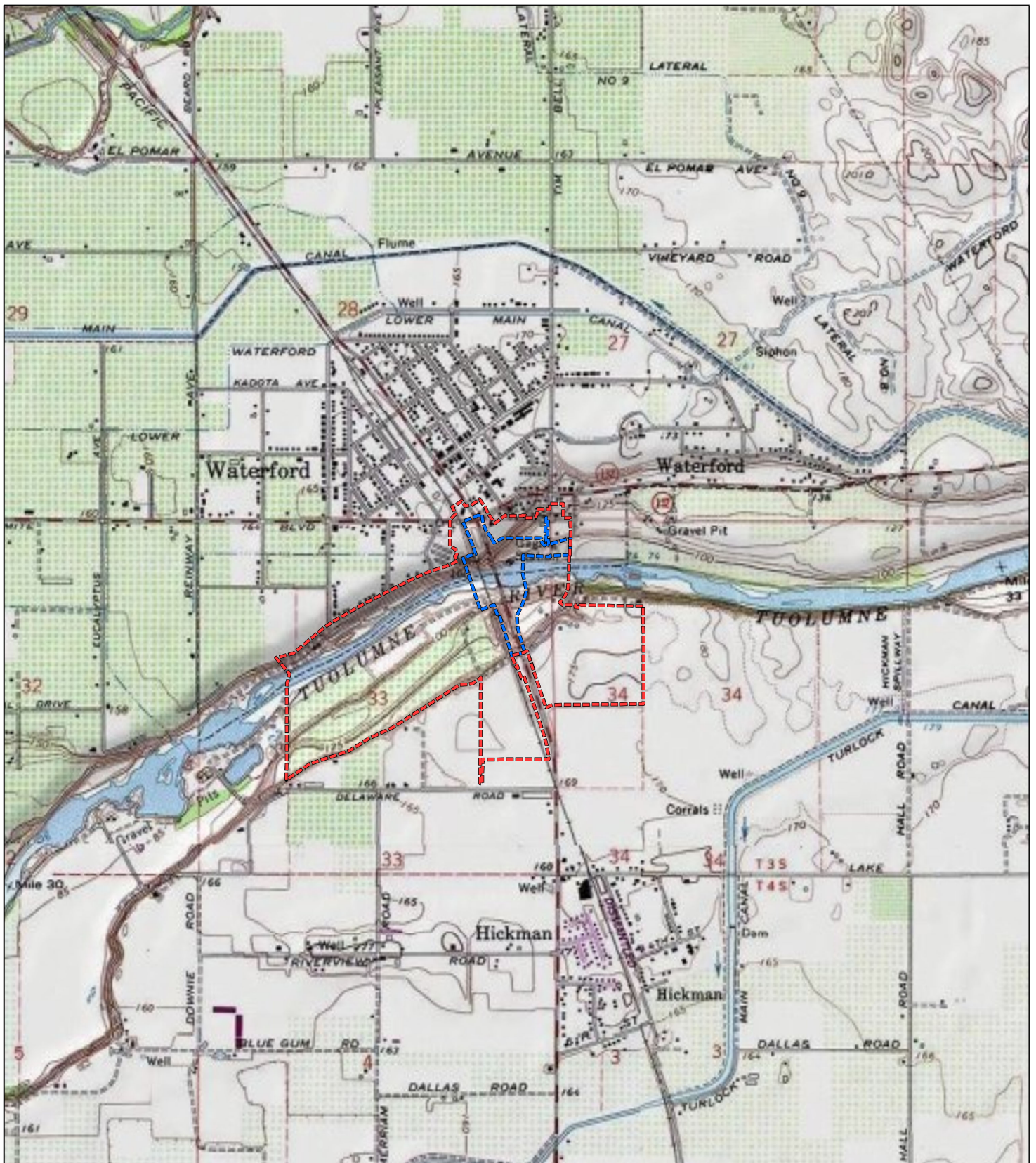
FIGURE 1



LEGEND
★ Project Location

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Regional Location



LSA

LEGEND

- Architectural Area of Potential Effects
- Archaeological Area of Potential Effects

FIGURE 2

*Hickman Road over Tuolumne River Bridge Replacement Project,
Stanislaus County, California, BRLO-5938 (199)*

Project Area Map

SOURCE: Basemap - USGS Topo; Mapping - LSA Associates, Inc. (2015)

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APPENDIX E

Surveyor's Professional Qualifications

**EXPERTISE**

Archaeological Survey and Testing

Cultural Resources
Construction Monitoring

California History and Prehistory

Geographic Information System (GIS)

EDUCATION

ESRI Udemy Online,
Certificate of Completion in
Going Places with Spatial
Analysis, 2015

California State University,
Sacramento B.A.,
Anthropology, Biology
Minor, 2013

**PROFESSIONAL
AFFILIATIONS**

Society for California
Archaeology

Society of American
Archaeology

PROFESSIONAL RESPONSIBILITIES

Ms. Falke has five years of experience in cultural resources management including research, fieldwork, data collection, artifact analysis, and museum curation. Ms. Falke meets the Secretary of Interior's *Professional Qualifications Standards* in History. She spent four years working in archaeological curation and artifact analysis at CSU, Sacramento's Archaeological Curation Facility and the prestigious American Museum of Natural History's North American Archaeology Laboratory. Her experience includes Native American consultation and coordination; conducting background and archival research, as well as in-field analysis for projects throughout California; assisting with project proposals; and preparing CEQA/NEPA documents. Within the last year, Ms. Falke has also gained basic GIS graphic design experience.

LSA PROJECT EXPERIENCE**California High-Speed Rail: Bakersfield F Street Station Alignment (BFSSA)****Kern County, California**

Ms. Falke co-authored the Seventh Supplemental Archaeological Survey Report as well as assisted with the Geographic Information System (GIS) maps for the cultural resources study by creating digital representations of archaeological sensitivity within the proposed Area of Potential Effects.

**Little Dry Creek Bridges Replacement on Millerton Road Project
Fresno County, California**

The County of Fresno, in coordination with Caltrans and in partnership with the Federal Highway Administration, proposed four bridge replacements on Millerton Road under the Federal Highway Bridge Program. Ms. Falke prepared the ASR as well as conducted Extended Phase I (XPI) testing for the project. In preparation for the ASR, she conducted background and archival research as well as spoke with local landowners regarding the local history. She also prepared GIS exhibits depicting site boundaries and testing locations in relation to the project's APE.

**Grant Line Road Corridor Project in Tracy and Banta
San Joaquin County, California**

The San Joaquin County Department of Public Works proposes the Grant Line Road Corridor Project to improve roadway operations. Ms. Falke delineated the Archaeological Study Area via GIS as well as conducted the field survey for the Project. She also prepared a DPR record for a prehistoric isolate identified during the survey.

**PROFESSIONAL
EXPERIENCE**

Cultural Resources Analyst
LSA, Rocklin, CA
August 2015- Present

Field and Lab Cultural
Resources Specialist II
Pacific Legacy, Inc., El
Dorado Hills, CA
June 2014-August 2015

Cultural Resources
Specialist
Sub-Contractor for Thad
Van Bueren, Westport, CA
March 2015

Cultural Resources
Technician
Aspen Environmental
Group, Sacramento, CA
April 2014-March 2015

Lab Technician
California State University,
Sacramento Archaeological
Curation Facility,
Sacramento, CA
August 2011- June 2013

**Dowd Road over Markham Ravine Bridge Replacement Project
Placer County, California**

The Placer County Department of Public Works, in coordination with the California Department of Transportation and in partnership with the Federal Highway Administration, proposed the replacement of the Dowd Road Bridge over Markham Ravine due to structural deficiency. Ms. Falke conducted background and archival research, field survey for preparation of the Supplemental ASR.

**4660 Sierra College Boulevard Project
Placer County, California**

Thomas Properties proposed to construct a new retail space that will include general commercial buildings, a car wash, and several fast food restaurants with parking areas southwest of the intersection of Sierra College Boulevard and Interstate 80 in Rocklin, Placer County, California. Ms. Falke conducted background and archival research, a records search, and Native American consultation in preparation of the proposed project. She directed pedestrian survey of the area and documented a 1958 homestead according to OHP standards. The homestead was found not eligible under NRHP or CRHR.

OTHER PROJECT EXPERIENCE**Willits Bypass Project
Mendocino County, CA**

The California Department of Transportation and the Federal Highway Administration proposed construction of a new segment of Route 101 to bypass the City of Willits, in Mendocino County, California. Ms. Falke was an archaeological field technician for two years and conducted archaeological construction monitoring as well as Phase I identification, Phase II testing, Phase III recovery for a number of sites within the Willits Valley.

**Albion River Bridge Improvements
Mendocino County, CA**

The California Department of Transportation proposed improvement of the existing bridge and construction of a new bridge over Albion River. Ms. Falke conducted Phase II archaeological excavations on the prehistoric component, near Route 1.

**Highway 1 Seaside Creek Storm Damage Repair Project
Mendocino County, CA**

The California Department of Transportation proposed realignment of State Route 1, near Westport, Mendocino County, California. Ms. Falke conducted Phase III data recovery and cataloged the CA-MEN-1818/H collection as part of the Project's mitigation measures.

**Recycled Water Project in the City of Ukiah
Mendocino County, California**

The City of Ukiah, CA proposed to install new pipeline as part of a water conservation plan. Ms. Falke conducted pedestrian survey and co-authored the Archaeological Survey Report as well as produced site record updates for the Northwestern Pacific Railroad.

**Indian Creek County Park Rehabilitation Project, in Philo,
Mendocino County, CA**

The City of Philo proposed rehabilitation of the recreational campground. Ms. Falke conducted archaeological survey and identified a prehistoric medicinal mortar and pestle which was later repatriated to the local Pomo tribe. She updated the site record as well as co-authored the Archaeological Survey Report for the project.

**Senate Bill 4 Analysis of Oil and Gas Well Stimulation Treatments
in California**

This California Department of Conservation Project consisted of a programmatic EIR for all the counties in California that contain active oil and natural gas wells and project-level case studies of three active oil fields in order to produce recommendations for regulations of Oil and Gas Well Stimulation. Ms. Falke co-authored the project-level cultural resources inventory for the Sespe and Inglewood fields as well as co-authored the cultural resources section of the programmatic EIR and produced the administrative record for the reports.