

**MEMORANDUM OF AGREEMENT  
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND  
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER  
REGARDING THE RUMSEY BRIDGE REPLACEMENT PROJECT,  
YOLO COUNTY, CALIFORNIA**

**WHEREAS**, the Federal Highway Administration (FHWA), has assigned and California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and

**WHEREAS**, 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, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of “agency official” to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR §800 and is responsible for oversight of Caltrans District 3 (District 3) environmental responsibilities. To provide for effective compliance, day-to-day responsibilities and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and

**WHEREAS**, Caltrans and County of Yolo Public Works Division (County) propose to implement the federally funded project to replace the existing Rumsey Bridge over Cache Creek (Bridge No. 22C0003) with a new bridge and demolish the existing concrete arch bridge (Undertaking) as described in Attachment A; and

**WHEREAS**, the Undertaking's Area of Potential Effects (APE) in Attachment B includes the Area of Direct Impact, maximum proposed right-of-way, temporary and permanent easements, and areas where visual or audible effects could occur outside the maximum required right-of-way; and

**WHEREAS**, Caltrans has determined that the Undertaking will have an adverse effect on the Rumsey Bridge, also known as the Cache Creek Bridge, a property determined to be eligible for inclusion in the National Register of Historic Places (National Register) under Criterion C for its type, period, and method of construction as a rare and significant example of a concrete tied arch bridge in California with concurrence from the State Historic Preservation Officer (SHPO), and therefore is a historic property as defined by 36 CFR §800.16(1)(1); and

**WHEREAS**, Caltrans has consulted with the SHPO pursuant to Stipulations X.C and XI of the Section 106 PA, and where the Section 106 PA so directs, in accordance with 36 CFR 800, the regulation that implements Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. § 306108), as amended, regarding the Undertaking's effects on historic properties, and has

notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to 36 CFR §800.6(a)(1); and

**WHEREAS**, Caltrans has thoroughly considered alternatives to the Undertaking, has determined that the Undertaking's adverse effects cannot be avoided and that implementation of the treatments set forth in Stipulations I, II and III of this Memorandum of Agreement (MOA) will satisfactorily take into account the Undertaking's adverse effects on the historic property; and

**WHEREAS**, Caltrans District 3 (District 3) and the County have a responsibility to fulfill the terms of this MOA and are participating as invited signatories; and

**WHEREAS**, the County, in conjunction with Caltrans, has consulted with the Yocha Dehe Wintun Nation regarding the Undertaking and its potential effects on historic properties; will continue to consult with them and afford them, should they so desire, the opportunity to actively participate in the implementation of the Undertaking itself and this MOA; and

**WHEREAS**, the County, in conjunction with Caltrans, has consulted with the Yolo County Historical Society, Rumsey Improvement Association, Greater Capay Valley Historical Society, Capay Valley Vision, and Capay Valley General Plan Citizens' Advisory Committee on the Undertaking and its potential effects on historic properties; will continue to consult with responsive organizations and afford such organizations, should they so desire, the opportunity to actively participate in the implementation of the Undertaking itself and this MOA; and

**WHEREAS**, Caltrans has invited the Greater Capay Valley Historical Society, Rumsey Improvement Association, and Yolo County Historical Society to sign this MOA as concurring parties; and

**NOW, THEREFORE**, Caltrans and the SHPO agree that upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on the historic property, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

## **STIPULATIONS**

Caltrans shall ensure that the following stipulations are carried out:

### **I. AREA OF POTENTIAL EFFECTS**

- A.** The Undertaking's APE was designed in accordance with Stipulation VIII.A of the Section 106 PA and is depicted in Attachment B of this MOA. The APE was delineated to include all areas where work is proposed, including the Rumsey Bridge over the Cache Creek and any locations where construction activities will take place. The Rumsey Bridge is the sole historic property in the APE.
- B.** If modifications to the Undertaking subsequent to the execution of this MOA necessitate revision of the APE, District 3 will consult with CSO and the SHPO to facilitate mutual

agreement on the subject revisions. If Caltrans, District 3, and the SHPO cannot reach such agreement, then the parties to this PA shall resolve the dispute in accordance with Stipulation V.C below. If Caltrans, District 3, and the SHPO reach mutual agreement on the proposed revisions, then District 3 will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the Section 106 PA no later than thirty (30) days following such agreement. Any additional required identification and evaluation efforts necessitated due to changes to the APE will be undertaken consistent with the requirements of Stipulation VIII.B and VIII.C of the Section 106 PA. Amendment of the APE will not require an amendment to the MOA. The revised APE and supporting documentation shall be incorporated into Attachment B to this MOA.

## II. TREATMENT OF HISTORIC PROPERTIES

District 3 shall ensure that the County has satisfactorily completed the following mitigation measures.

- A. RECORDATION** Prior to the start of any work that could adversely affect any characteristics that qualifies the Rumsey Bridge as a historic property, Caltrans District 3 shall ensure that the County has satisfactorily completed the recordation measures specified in this stipulation. These recordation measures shall be in accordance with the standards of the *Secretary of the Interior's Guidelines for Architectural and Engineering Documentation*. Documentation will meet Historic American Engineering Record (HAER) Level II guidance and must be completed by a qualified professional who meets the Secretary of the Interior's Professional Qualification Standards for History or Architectural History (36 CFR Part 61).
1. The County shall ensure that the Rumsey Bridge will be the subject of recordation by photography following the standards of the HAER. Large format photographs are taken of the bridge that display the bridge in context as well as its character-defining features. Photographs will be processed for archival permanence standards in accordance with HAER photographic specifications. Photographic views will include:
    - a. Contextual views of bridge in its setting
    - b. Elevation views
    - c. Significant engineering and design elements
    - d. Piers and abutments
  2. The County shall make a reasonable and good-faith effort to locate historic construction drawings of the Rumsey Bridge. If these drawings are located, the County shall photographically reproduce plans, elevations, and selected details from these drawings in accordance with HAER photograph specifications. If they are legible in this format, reduced size (8-1/2" by 11") copies of construction drawings may be included as pages of the report cited in Stipulation II.A.3 rather than photographed and included as photographic documentation. The County shall

promptly notify Caltrans if historic construction drawings for the Rumsey Bridge cannot be located. In that event, the requirements of this paragraph shall not apply.

3. The County shall ensure completion of a written historical and descriptive report for the Rumsey Bridge will be completed by a qualified professional who meets the *Secretary of the Interior's Professional Qualification Standards for History or Architectural History* (36 CFR Part 61). This report shall be prepared as described in the *Historic American Engineering Record Guidelines for Historical Reports* (HDP, National Park Service). It shall include a physical description of the bridge, discuss its construction and its significance under applicable National Register criteria, and address the historical context for its construction, purpose, and function.
4. Upon completion of the photographs and accompanying documentation as described in Stipulations II.A.1-3, a copy will be retained by Caltrans District 3 and the County, and copies provided to the Caltrans Library and History Center, Sacramento; the SHPO; and Caltrans CSO. Digital copies and one material copy of each document will be offered to the Yocha Dehe Wintun Nation, Yolo County Historical Society, Rumsey Improvement Association, Greater Capay Valley Historical Society, Esparto High School, Yolo County Archives, and the Northwest Information Center at Sonoma State University. Both electronic and paper copies shall also be distributed to the Office of Historic Preservation.

## **B. INTERPRETATION**

1. The County, in conjunction with District 3, will design, produce, and install a permanent metal plaque on a concrete or boulder mount that provides a brief history of the Rumsey Bridge, its engineering features, and its significance. SHPO and Caltrans shall have 30 days to review and comment on the design and text of the new plaque before it is produced and installed.
2. The County, in conjunction with District 3, shall ensure the preparation and production of a booklet in digital and paper form on the Rumsey Bridge and its use within the broader contextual history of Capay Valley. The booklet shall be paperback not to exceed 10 pages and shall include high quality black and white images of the Rumsey Bridge, historic photographs and/or drawings, as appropriate, text describing the Rumsey Bridge, its design, construction, and use history, property type, significant character-defining features, and its historic significance, as well as historic background of the site, including photographs and descriptions of previous bridge crossings at this location, as appropriate. Data for the booklet will be culled from the HAER report prepared under Stipulation II.A of this MOA and other relevant historical reports or documentary sources. The County shall submit preliminary and final copies to Caltrans District 3 for review and approval prior to making the booklet available to recipients. Following approval by Caltrans District 3, the County shall produce a digital copy and paper copies for distribution to local libraries, as well as

local historical societies, organizations, and museums. One copy shall be submitted to Caltrans Transportation Library and History Center in Sacramento. The County shall maintain the camera-ready master booklet for up to three years and will produce additional copies if there is demand.

### **III. TREATMENT OF HUMAN REMAINS OF NATIVE AMERICAN ORIGIN**

As legally mandated, human remains and related items discovered during the implementation of this MOA and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)-(d). The County Coroner shall be contacted if human remains are discovered. The County Coroner shall have two working days to inspect the remains after receiving notification. During this time, all remains, associated soils, and artifacts shall remain in situ and/or on site, and shall be protected from public viewing. This may include restricting access to the discovery site and the need to hire 24-hour security.

The County Coroner has twenty-four (24) hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then notify a Most Likely Descendant (MLD), who has forty-eight (48) hours to make recommendations to the landowner. The landowner shall contact the California SHPO and the Most Likely Descendent(s) within twenty-four (24) hours of the County Coroner's determination that the remains are Native American in origin. District 3 shall ensure that, to the extent permitted by applicable law and regulation, the view of the Most Likely Descendent(s), as determined by the California NAHC, is taken into consideration when decisions are made about the disposition of native American human remains and associated objects. District 3 shall take appropriate measures to protect the discovery site from disturbance during any negotiations. Information concerning the discovery shall not be disclosed to the public pursuant to the specific exemption set forth in California Government Code Section 6254.5(e).

### **IV. DISCOVERIES AND UNANTICIPATED EFFECTS**

If District 3, in conjunction with the County, determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, the County will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Section 106 PA. District 3 at its discretion may hereunder and pursuant to 36 CFR §800.13(c) assume any discovered property to be eligible for inclusion in the National Register.

### **V. ADMINISTRATIVE PROVISIONS**

#### **A. STANDARDS**

1. **Definitions.** The definitions provided at 36 CFR § 800.16 are applicable throughout this MOA.
2. Parties to this agreement are defined as follows:

- a. **Signatory parties** have the sole authority to execute, amend, or terminate this MOA.
  - b. **Invited signatory parties** have the same rights to terminate or amend this MOA as the other signatories.
  - c. **Concurring parties** signing this MOA do so to acknowledge their agreement to concurrence with the MOA, but have no legal authority under the MOA to terminate or amend this MOA. Concurring with the terms of this MOA does not constitute their agreement with the Undertaking.
3. **Professional Qualifications.** The County, in conjunction with Caltrans, will ensure that only individuals meeting the Secretary of the Interior’s Professional Qualification Standards for Archeology and Historic Preservation (48 FR 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulations I and II in this MOA. However, nothing in this stipulation may be interpreted to preclude the County or any agent or contractor thereof from using the properly supervised services of persons who do not meet the Secretary of the Interior’s Professional Qualification Standards.
  4. **Documentation Standards.** Written documentation of activities prescribed by Stipulations I and II of this MOA shall conform to *Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740), as well as to applicable standards and guidelines established by the SHPO.
  5. **Curation and Curation Standards.** If legal owner(s) of materials resulting from the activities presented by this MOA choose to curate those materials, the County, in conjunction with Caltrans, shall ensure that, to the extent permitted under § 5097.98 and §5097.991 of the California Public Resources Code and the Native American Graves Protection and Repatriation Act (NAGPRA) [25 USC 3001-3013] and its implementing regulations (43 CFR § 10), the materials and records resulting from the activities prescribed by this MOA are curated in accordance with the California Office of Historic Preservation’s “Guidance for the Curation of Archaeological Collections” (i.e., 1993 State Curation Guidelines). Caltrans shall ensure that the views of the consulting parties are taken into consideration prior to decisions being made about the final disposition of archaeological materials resulting from activities prescribed by this MOA.

## **B. CONFIDENTIALITY**

The MOA parties acknowledge that some historic properties covered by this MOA may be subject to the provisions of § 304 of the NHPA and § 6254.10 of the California Government Code (Public Records Act), relating to the disclosure of archaeological site information and, having so acknowledged, will ensure that all actions and documentation prescribed by this MOA are consistent with said sections.

### C. RESOLVING OBJECTIONS

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within fifteen (15) days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than thirty (30) days to resolve the objection. Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.
2. If the objection is resolved during the thirty (30)-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the thirty (30)-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection, with the exception that the ACHP will, within thirty (30) days after receipt of such documentation:
  - a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or
  - b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or
  - c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR § 800.7(c) and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR § 800.7 (c) (4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.
4. Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, Caltrans may proceed to implement its proposed response. The objection shall thereby be resolved.
5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans's responsibility to carry out all actions under this MOA that are not the subjects of the objection shall remain unchanged.
6. At any time during implementation of the measure stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify

Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans. Caltrans shall establish a reasonable time from for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. Within fifteen (15) days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the response to the objecting party. Caltrans' decisions regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.

7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and its parties that have objected pursuant to Stipulations V.C.3 and V.C.4, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.
8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

#### **D. AMENDMENTS**

1. Any signatory party to this MOA may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than thirty (30) days to consider such amendment. The amendment will be effective on the date a copy is signed by all of the original signatories. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation V.F, below.
2. Attachments to this MOA may be amended through consultation as prescribed in Stipulation I or Stipulation V., as appropriate, without amending the MOA proper.

#### **E. ANNUAL REPORTING**

In addition to the documentation and reporting described in Stipulation II, the County shall provide the parties to this agreement an annual update. Such updates shall include any scheduling changes proposed, any problems encountered, failures to adopt proposed mitigation measures, and any disputes and objections received in the County's efforts to carry out the terms of this MOA. The update will be due no later than December 31 of each year, beginning on December 31 of the year this agreement is executed and continuing annually thereafter throughout the duration of this MOA. If MOA parties deem it necessary, a meeting will be scheduled in lieu of an update.

#### **F. TERMINATION**

1. If this MOA is not amended as provided for in Stipulation V.D, or if either signatory proposes termination of this MOA for other reasons, the signatory party proposing



termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least thirty (30) days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR § 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.
3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall ensure the County complies with the requirements of Section 106 PA, or request the comments of the ACHP pursuant to 36 CFR § 800.3–800.6.

#### **G. DURATION OF THE MOA**

The duration of this MOA shall be no more than five (5) years following the date of execution by the SHPO and Caltrans, or upon completion of the Undertaking, whichever comes first. If the terms are not satisfactorily fulfilled at that time, Caltrans shall consult with the signatories and concurring parties to extend it or to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Stipulations III through XI of the Section 106 PA if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

#### **H. EFFECTIVE DATE**

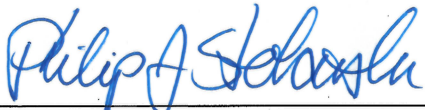
This MOA will take effect on the date that it has been executed by Caltrans and the SHPO.

**EXECUTION** of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR § 800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR § 800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(1) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

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REGARDING THE RUMSEY BRIDGE REPLACEMENT PROJECT,  
YOLO COUNTY, CALIFORNIA**


**SIGNATORY PARTIES:**

**California Department of Transportation**

By:   
Philip J. Stolarski, Chief  
Division of Environmental Analysis

Date: 10/21/19

**California State Historic Preservation Officer**

By:   
Julianne Polanco  
State Historic Preservation Officer

Date: 10/22/19


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**INVITED SIGNATORIES:**

**California Department of Transportation**

By:  Date: 12/4/19  
Amarjeet Benipal, District Director  
District 3, Marysville

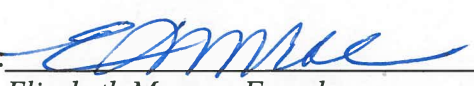
**County of Yolo**

By:  Date: 5 NOV. 2019  
Panos Kokkas, Director of Public Works  
Yolo County Department of Community Services

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**CONCURRING PARTIES:**

**Greater Capay Valley Historical Society**

By:   
*Elizabeth Monroe, Founder*

Date: 11/7/19

**Rumsey Improvement Association**

By:   
*Dru Rivers, President*

Date: 11/20/19

**Yolo County Historical Society**

By:   
*Kathy Harryman, Board President*

Date: 11/19/19

# **ATTACHMENT A**

## **Project Description**

# **Rumsey Bridge Replacement Project, Rumsey, Yolo County, California**

## ***Description of the Undertaking***

### Location

Existing Bridge No. 22C0003 is located on County Road 41 over Cache Creek near the town of Rumsey just 340 feet northeast of State Route (SR) 16 in Yolo County, California. The town of Rumsey is located in the northwest portion of Yolo County and the project area extends from the County Road 41 intersection with SR 16 to approximately 800 feet along County Road 41 to the northwest. Since the project will involve modification of the intersection of County Road 41 with SR 16, advance warning signs for traffic may precede the project approximately 1,500 feet in both directions along the highway.

### Existing Facility Conditions

The original Rumsey Bridge (No. 22C0003) was built in 1930 and was constructed as a two-span reinforced concrete through tied arch. The bridge is supported by reinforced concrete piers and abutments, both supported on pile foundations with an unknown depth. The original two-span structure consists of the main concrete tied arch spans; each span is 108 feet long, for a total bridge length of 216 feet. Due to flood damage, the bridge was rehabilitated and extended in 1949 with two additional 47.5-foot long cast-in-place reinforced concrete T-beam spans on the north end of the bridge. These modifications resulted in the current bridge length of approximately 311 feet. The existing bridge is 24.5 feet wide with 20.5 feet clearance between inside of the concrete rails. The bridge is located along a tangent segment of County Road 41. The roadway is crowned and intersects SR 16 at a skew angle. The roadway is considered off the federal aid system due to a functional classification as a local road by the Caltrans California Road System (CRS) maps.

Based on 2014 estimates, County Road 41 has an average daily traffic of 60 vehicles per day. County Road 41 is used by emergency vehicles, fire protection, and residents. County Road 41 extends northeast from the bridge to Colusa County, where the road becomes Sand Creek Road, which continues over the Coast Range to the Central Valley near Arbuckle. County maintenance of County Road 41 ends approximately 1.3 miles northeast of the bridge, and the road becomes dirt surfaced and is closed and not useable in the winter months. However, over the past few years, the creek has eroded away a portion of CR 41 in this unmaintained section. The bridge is currently the only access between the town of Rumsey and the east side of the creek (i.e., the 63 mile long detour through the towns of Arbuckle and Williams is not available due to the creek erosion). To ensure continued passage through the project area during construction, the original bridge would be kept open.

## Project Purpose and Need

The purpose of the project is to improve public safety by replacing a deficient bridge near the end of its service life. A new bridge able to withstand seismic forces and scour from Creek flows is needed to maintain safe and reliable access across Cache Creek for all classes of vehicles. The proposed bridge will also provide wider lanes and shoulders across the bridge to meet current County standards. The project will also improve safety by installing standard concrete barriers and approach guard railings.

While the Rumsey Bridge was lengthened in 1949 in an effort to reduce scour impacts to the bridge, the longer bridge has continued to experience scour related problems. Caltrans inspection reports classify the bridge as “scour critical” meaning that the bridge is susceptible to scour from the Creek to an extent that it threatens the stability of the structure. The County has prepared a “Scour Plan of Action” to address contingencies in the event the bridge foundation washes out. The southwest abutment was built at the outward bend of Cache Creek where the impinging flow has the potential to undermine the bank and abutment during large storm events. In 1995, a storm caused severe erosion behind this abutment and nearly took out the entire approach roadway, damage that can still be seen.

## Proposed Project Description

The proposed project (formerly Alternative 3) consists of replacing the existing concrete arch bridge over Cache Creek with a new approximately 400-foot long, three-span cast-in-place prestressed concrete box girder bridge with 28 feet of clear width between concrete barriers (**Plate 1**). The proposed bridge would be located along a new upstream alignment. The roadway would also be oriented along a new bearing relative to the original alignment so that the new road would intersect SR 16 at a perpendicular angle. This would improve the intersection geometrics relative to the existing condition, and also allow for the existing bridge to remain open during construction to accommodate traffic. The new proposed roadway approach would be approximately 220 feet long on the southern end of the bridge and approximately 620 feet long on the northern end of the bridge. The proposed paved approach roadway width would be 28 feet to match the proposed bridge width, tapering to match the existing road north of the bridge. The roadway would consist of two 12-foot lanes and two 6-foot shoulders. Each 6-foot shoulder would consist of a 2-foot paved section and a 4-foot graded aggregate base (AB) section. Since the replacement bridge will be constructed on a new upstream alignment, new permanent right of way will be required. Temporary construction easements will also be required during construction in order to provide access for construction equipment and contractor staging areas. The roadway vertical profile may be raised to clear the design hydraulic flow with adequate freeboard. The bridge would be a three-span structure on two concrete seat type abutments founded on either driven or drilled piles. Drilled piles may need to utilize wet construction methods. The pier supports would be founded on large diameter cast-in-drilled-hole or cast-in-

steel-shell concrete piles also using wet construction methods. New concrete bridge barriers with tubular steel rails and upgraded approach guardrails would be installed for traffic safety.

The new bridge abutment locations would be constructed further away from the creek to allow more flow to pass underneath the bridge and greatly reduce potential scour risks at the support. The existing bridge would remain in service during construction which would eliminate the need for a costly temporary bridge.

The pier piles could be drilled or driven between 100 and 120 feet below the existing ground surface. This would represent the maximum depth of ground disturbance during construction. Roadway construction could require imported borrow embankment material in order to raise the roadway approach. Excavation into the creek banks may also be required to remove the existing bridge approach fills and install new rock slope protection. Temporary falsework would be installed across the creek at the location of the new bridge to help support the structure as it is being constructed. Falsework could consist of timber pads and driven timber or steel piles. The falsework and piles would be removed once the bridge is complete. A combination of stream diversion and a temporary trestle may be required in order to install falsework and drill new bridge foundations.

Some construction activities would need to occur within the active channel of the creek, such as construction of temporary falsework and placement of rock slope protection. Non-grouted rock slope protection would be placed along the creek banks in order to protect the new roadway embankment. Rock slope protection could consist of 2-ton rock slope protection (or heavier) with several smaller backing layers and Rock Slope Protection Fabric. Rock slope protection could be installed from the 100-year water surface elevation down to approximately 10 feet below the creek bed and be installed approximately 50 feet up and down stream of the proposed bridge or more. On the south side of the bridge, new slope protection will conform to the existing rock slope protection and rock groins that extend approximately 700 feet upstream. The creek flows could be diverted into pipes or narrowed channels starting upstream of the Rock Slope Protection placement and ending downstream of the Rock Slope Protection placement.

Construction staging could occur southwest of the existing bridge, near SR 16 and County Road 41. A designated area for material or equipment storage would be established in a pullout on the west side of the road south of the bridge. It could encompass approximately 22,000 square feet, or 0.5 acre.





The existing bridge would be demolished and removed from the project after the new bridge is constructed and open to traffic. The project would require some relocation of public utilities. There is an existing overhead utility to the east side of the existing bridge. It may be possible that the overhead utility be kept in place without relocation. Telephone conduit mounted onto the south side of the bridge would need to be relocated to the new bridge. An existing stream gauge, camera, and related equipment may also need to be relocated or replaced and attached to the new bridge.

The type of equipment and number of construction workers would vary based on the specific activity being conducted. Construction equipment is expected to include an excavator, loader, dump truck, grader, vibratory roller compactor, crane, fork lift, pile driving hammer, pile drilling equipment, baker tanks, pumps, concrete trucks, and several work trucks. Approximately 8 to 10 construction workers may work on the project in any given day; however, up to 25 workers may be required during special operations.

Construction activities could take up to 14 months to complete over two construction seasons. In-stream work could begin in late spring and end in early fall, as necessary to satisfy seasonal restrictions for channel work. Construction could include a winter suspension period between seasons.

**ATTACHMENT B**

Area of Potential Effects (APE) Map

