# Cultural Resources Inventory Report for the Big Chico Creek Erosion Repair Project

## City of Chico, Butte County, California


Prepared for:

CITY OF CHICO
INC. 1872

US Army Corps of Engineers ®

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# Cultural Resources Inventory Report for the Big Chico Creek Erosion Repair Project City of Chico, Butte County, California

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

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

# MANAGEMENT SUMMARY

The City of Chico Department of Public Works (City) proposes to address erosion at two bridge crossings over Big Chico Creek, located throughout the City of Chico, in Butte County, California. Severe winter storms in 2023 and 2024 brought heavy rains, strong winds, and thunderstorms that caused flooding, landslides, and mudslides throughout much of California, including Butte County. The heavy rains caused high creek flows that resulted in erosion at multiple sites along Big Chico Creek in the City of Chico. The erosion along the creek banks and scour in the creek bed threatens the structural integrity of two bridges: the Rose Avenue Bridge (12C0325) and the Warner Street Bridge (12C0276).

The Big Chico Creek Erosion Repair Project (Project) will repair structural deficiencies and address bank erosion and scour at the Rose Avenue Bridge and Warner Street Bridge. The Rose Avenue bridge over Big Chico Creek is south of the Rose Avenue and Bidwell Avenue intersection approximately 0.5 miles west of State Route 32. The Warner Street Bridge over Big Chico Creek is on the Chico State University's campus between Legion Avenue and West 1st Street.

As the Project will impact waters of the United States which are under jurisdiction of the United States Army Corps of Engineers (USACE), permitting through Clean Water Act will be required. Jurisdictional areas of the USACE include the Big Chico Creek. As federal permitting will be required through the USACE, these actions constitute undertakings subject to review under Section 106 of the National Historic Preservation Act (NHPA) (16 U.S.C. 470 *et seq*) and outlined at 36 CFR 800. The City is acting as the lead agency under CEQA while USACE is acting as the lead agency under NEPA. Additionally, as the project is anticipated to receive grant funding from the United States Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS) will also act as a cooperating agency under NEPA.

This document was prepared to assist in addressing potential impacts to cultural resources resulting from the proposed undertaking. Efforts to identify cultural resources in the Area of Potential Effects (APE) are detailed in this report and include background archival research, a search of site records and inventory reports on file at the Northeast Information Center (NEIC), of the California Historical Resources Information System (CHRIS) and a pedestrian surface survey. The NEIC records search yielded no cultural resources within the APE and identified twenty-five resources within ¼-mile.

No new indigenous, historic-era, or built environment resources were identified. The only resources within the APE are the two bridges (12C0276 and 12C0325) which have been previously evaluated. The potential for the Project to impact cultural resources which would qualify as either a historical resource under CEQA or a historic property under NHPA, is *low*.

Both bridges were previously evaluated as Category 5 not eligible for listing in the National Register of Historic Places (National Register) and the California Register of Historical Resources (California Register) as part of the Caltrans Historic Bridge Inventory; that determination remains valid. A finding of no historic properties affected is recommended for this undertaking, pursuant to 36 CFR § 800.4(d)(1) and no significant impact to historical resources or Tribal Cultural Resources under CEQA, per Guidelines 15064.5.

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# 1.0 INTRODUCTION

The City of Chico Department of Public Works (City) proposes to address erosion at two sites along Big Chico Creek, located within the City of Chico, in Butte County, California (**Figures 1 and 2**). As the Project will impact waters of the United States which are under jurisdiction of the United States Army Corps of Engineers (USACE), this action constitutes an undertaking pursuant to Section 301(7) of the National Historic Preservation Act (NHPA) (16 U.S.C. 470) as amended. Additionally, permitting through the Clean Water Act will be required. Jurisdictional areas of the USACE include the Big Chico Creek. USACE, as a federal agency, will be responsible for compliance with Section 106 of the NHPA during the permitting process and is the lead agency under NEPA. Additionally, as the project is anticipated to receive grant funding from the United States Department of Agriculture (USDA), the Natural Resources Conservation Service (NRCS) will also act as a cooperating agency under NEPA. The City is acting as the lead agency under the California Environmental Quality Act (CEQA).

Severe winter storms in 2023 and 2024 brought heavy rains, strong winds, and thunderstorms that caused flooding, landslides, and mudslides throughout much of California, including Butte County. The heavy rains caused high creek flows that resulted in erosion at multiple sites along Big Chico Creek in the City of Chico. The erosion along the creek banks and scour in the creek bed threatens the structural integrity of two bridges located at Warner Avenue (12C276) and Rose Avenue (12C0325).

The Project will repair structural deficiencies and address bank erosion at two bridge crossings over Big Chico Creek. The heavy rains caused high creek flows that resulted in erosion at multiple sites along Big Chico Creek in the City of Chico. The erosion along the creek banks affected public infrastructure and recreational facilities. The Rose Avenue bridge is approximately 0.5 miles west of State Route 32, at the intersection of Rose Avenue and Bidwell Avenue, while the Warner Street Bridge is on Chico State University's campus, about 0.25 miles northwest of Bidwell Street and Ivy Street.

## 1.1 Project Description

### 1.1.1 Warner Street Bridge (12C0276)

*Existing Conditions*

The Warner Street Bridge experienced damage during federally declared disasters in winter of 2023. The damage occurred when torrential rainfall in the Big Chico Watershed raised creek levels and exacerbated existing erosion problems on the north bank of the creek. The bridge was constructed in 1938 and modified in 1995. It is a two-span reinforced concrete T-girder bridge on reinforced concrete pier walls and open reinforced concrete diaphragm abutments with monolithic wingwalls that are all founded on spread foundations.

The Caltrans Bridge Inspection Report from October 2022 notes that “The stepped wingwall foundations on the right wingwall at Abutment 3 are exposed and undermined… There is an existing work recommendation to mitigate the scour at the right wingwall of Abutment 3 in accordance with HEC-23 procedures.”

The Report details the changes to the north abutment: “The right side of the Abutment 3 footing is exposed up to 1 foot vertically for approximately 5 feet in length. No undermining was noted when probed with an extension pole. This exposure was not noted in the 2018 and 2020 routine inspection reports, however the 9/14/2017 Hydraulic inspection noted that the footing had

historically been exposed "on occasion". A work request to re-evaluate the scour vulnerability of the spread footing at Abutment 3 was submitted to SM&I's Local Hydraulic branch…"

Caltrans inspects the bridge every other year, typically in October. A review of eleven inspection reports covering a two-decade period revealed that water was present in creek during each of the inspections. The depth of water in the scour hole at Abutment 3 ranged from four to eight feet.

*Permanent Repair*

The City proposes to repair the erosion and address the scour issue on north bank of the creek using rock slope protection (RSP). RSP will reinforce the existing creek bank and protect the northern abutment from undermining and failure. The RSP on the creek banks will be based on the Caltrans' Mounded Toe RSP design as shown in Highway Design Manual Figure 873.3D with a 1.5:1 slope. The RSP will be underlain with a gravel filter.

A total of 90 linear feet of RSP will be installed along the north bank upstream of the bridge, 40 linear feet of RSP along the north bridge abutment, and 50 linear feet of RSP will be placed along the north bank downstream of the bridge.

All ground disturbing activities will take place within the proposed temporary construction areas depicted in the plans. Right-of-way acquisitions, temporary construction easements, and encroachment permits will be needed to accommodate for construction. Construction will be staged so that two traffic lanes on the existing bridge will remain open. During certain stages of construction, lane closures, road closures, and detour routes will be necessary but will be short in duration. Utility relocations are not anticipated.

### 1.1.2 Rose Avenue Bridge (12C0325)

*Existing Conditions*

The Rose Avenue Bridge experienced damage during two federally declared disasters in January and February 2023. The damage in January (#4683DR) occurred when torrential rainfall in the Big Chico Watershed raised creek levels and washed out the roots of trees on the north and south sides of the creek. The trees fell into the creek on the upstream (or east) side of the Bridge, directing the high, fast-moving water towards both banks scouring the banks from the bridge abutments to 35 feet upstream. The scouring caused the loss of approximately 466 cubic yards of soil from both banks. The dimensions of the areas affected by the January 2024 event are 35 feet long, 20 feet wide, and 18 feet deep. Then, storms from January 21 to February 9, 2024, in the watershed caused additional damage and resulted a second federal disaster declaration (#4769DR). Heavy rainfall and stormwater overtopped the road and swelled the waterway under the bridge. As a result, the embankment at the northeast bridge abutment was scoured and slope armoring failed.

The bridge was constructed in 1925. It is a three-span reinforced concrete T-girder bridge on reinforced concrete pier walls and open reinforced concrete diaphragm/wall abutments at are all founded on spread foundations. Approximate 10-feet upstream of the bridge, there is a 21-inch gravity sewer pipe in the bed of the creek. The pipe, constructed in 1929, is encased in concrete. The pipe functions as a check dam or weir where, upstream, creek bed is full of cobble to the height of the concrete encasement.

The Caltrans Bridge Inspection Report from October 2022 notes that there "is a rock pocket on the upstream nose of Pier 3. The pocket is approximately 4-feet long by 6-inches tall by 2-inches deep… Approximately 6-feet of the Pier 2 footing is exposed up to 4-inches vertically on the Span

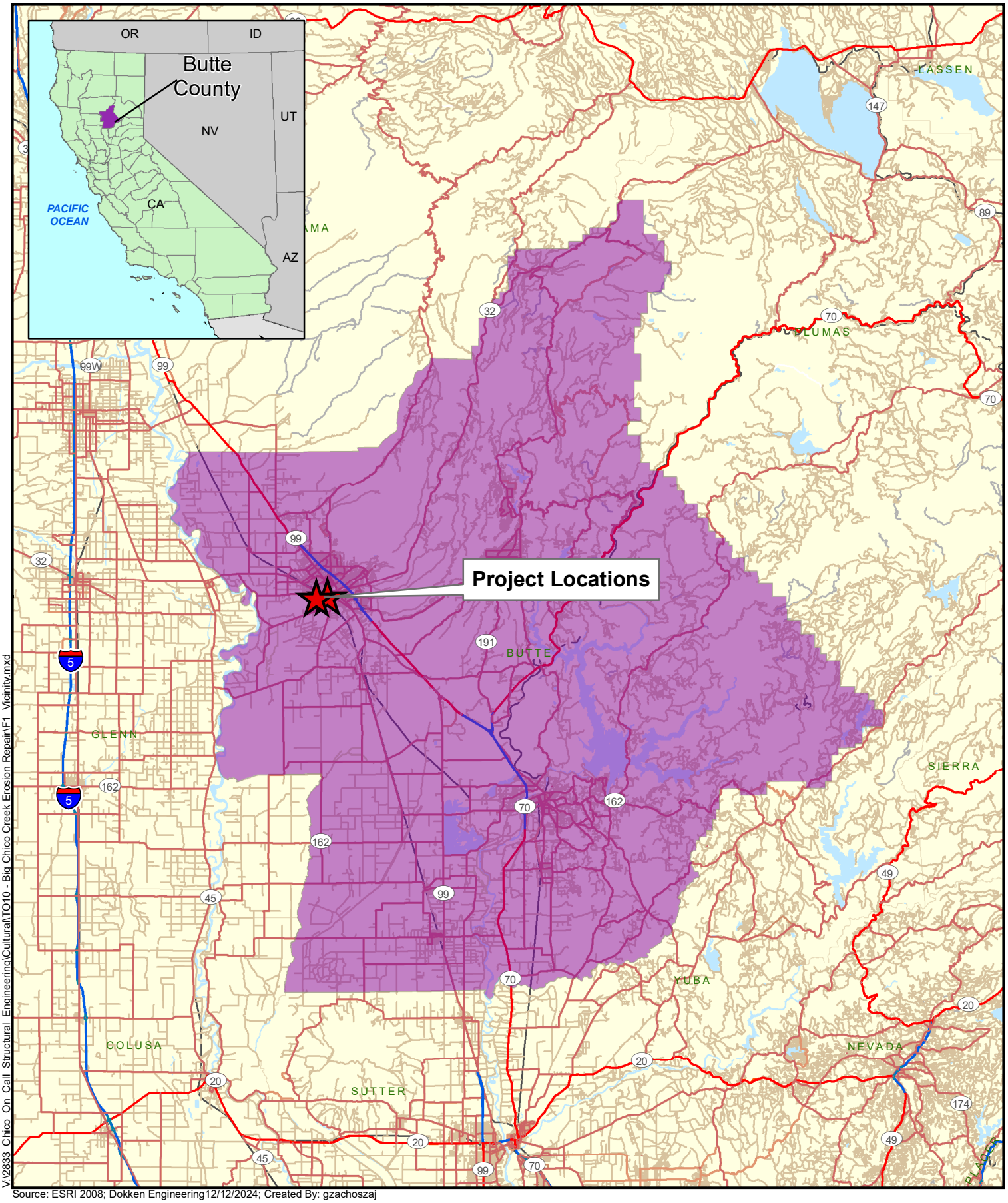
2 side of Pier 2." The concrete encased sewer line "is undermined up to 12 inches vertically along a 10-foot section adjacent to Span 2 but appears to be functioning as intended."

Caltrans inspects the bridge every other year, typically in October. A review of eleven inspection reports covering a two-decade period revealed that the creek was dry during four of the inspections. Water was observed flowing under Span 2, the middle span between Piers 2 and 3 during seven of the inspections although water was not present under Span 3 (the north side of the creek) during four of the seven inspections.

*Permanent Repair*

The City proposes to repair the erosion on both banks and the scour around the piers, north abutment footing, and the sewer pipe using a combination of RSP. RSP will reinforce the existing creek banks and a concrete-encased sewer pipe. The RSP on the creek banks will be based on the Caltrans' Mounded Toe RSP design as shown in Highway Design Manual Figure 873.3D with a 1.5:1 slope. The RSP will be underlain with a gravel filter.

A total of 46 linear feet of RSP will be installed along the north creek bank upstream of the bridge, 20 linear feet of RSP along the base of the north bridge abutment, and 50 linear feet of RSP will be placed along the south creek bank upstream of the bridge. The RSP will extend upstream to protect an existing stream gage. RSP will be placed on the downstream side of the concrete encased sewer pipe to prevent additional scour.

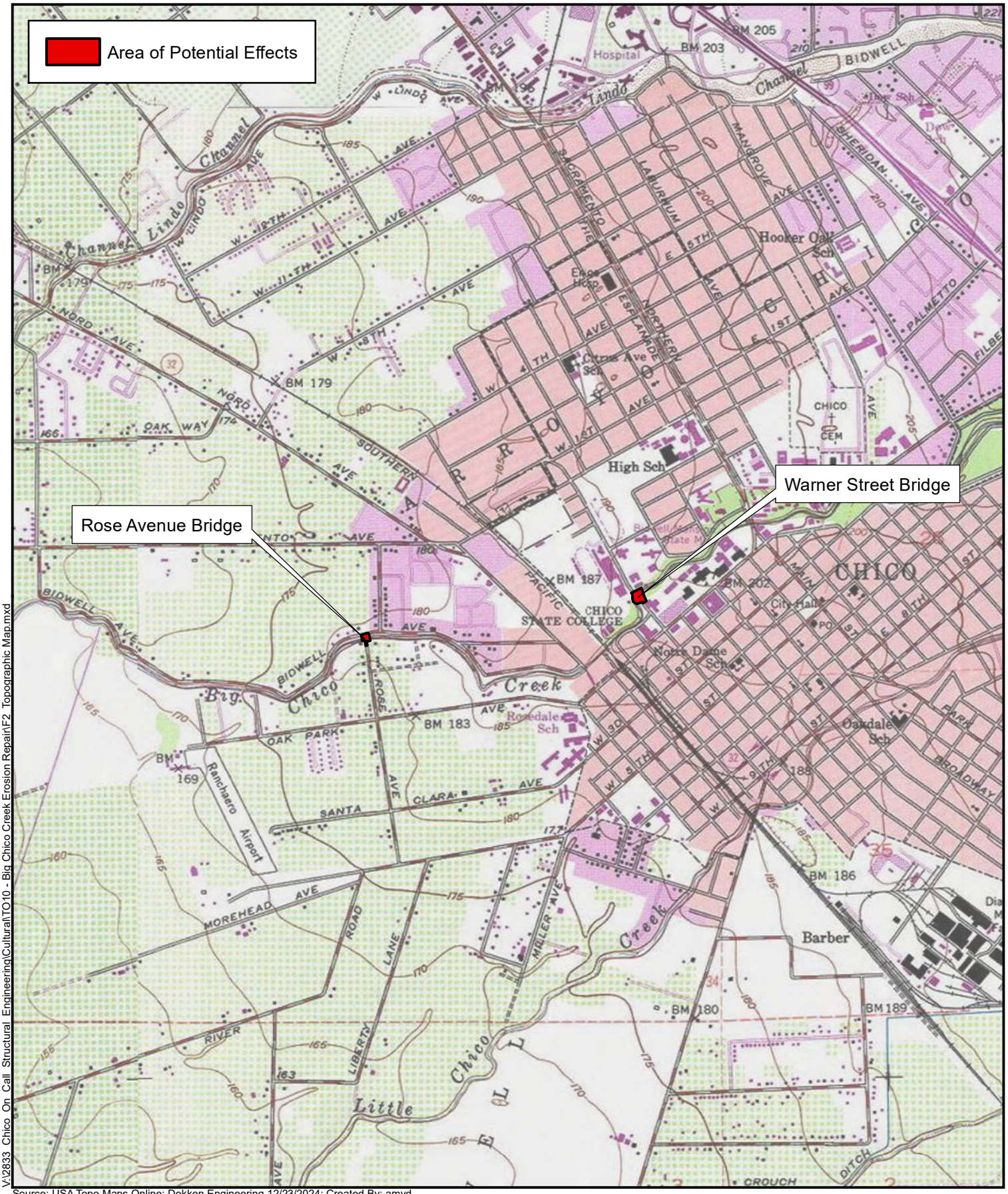



V:\2833_Chico_On_Call_Structural_Engineering\Cultural\TO10 - Big Chico Creek Erosion Repair\F1_Vicinity.mxd

Source: ESRI 2008; Dokken Engineering12/12/2024; Created By: gzachoszaj

0 5 10 15 Miles

**FIGURE 1**
**Project Vicinity**
City of Chico On-Call: Task Order 10
Big Chico Creek Erosion Repair Project
City of Chico, Butte County, California

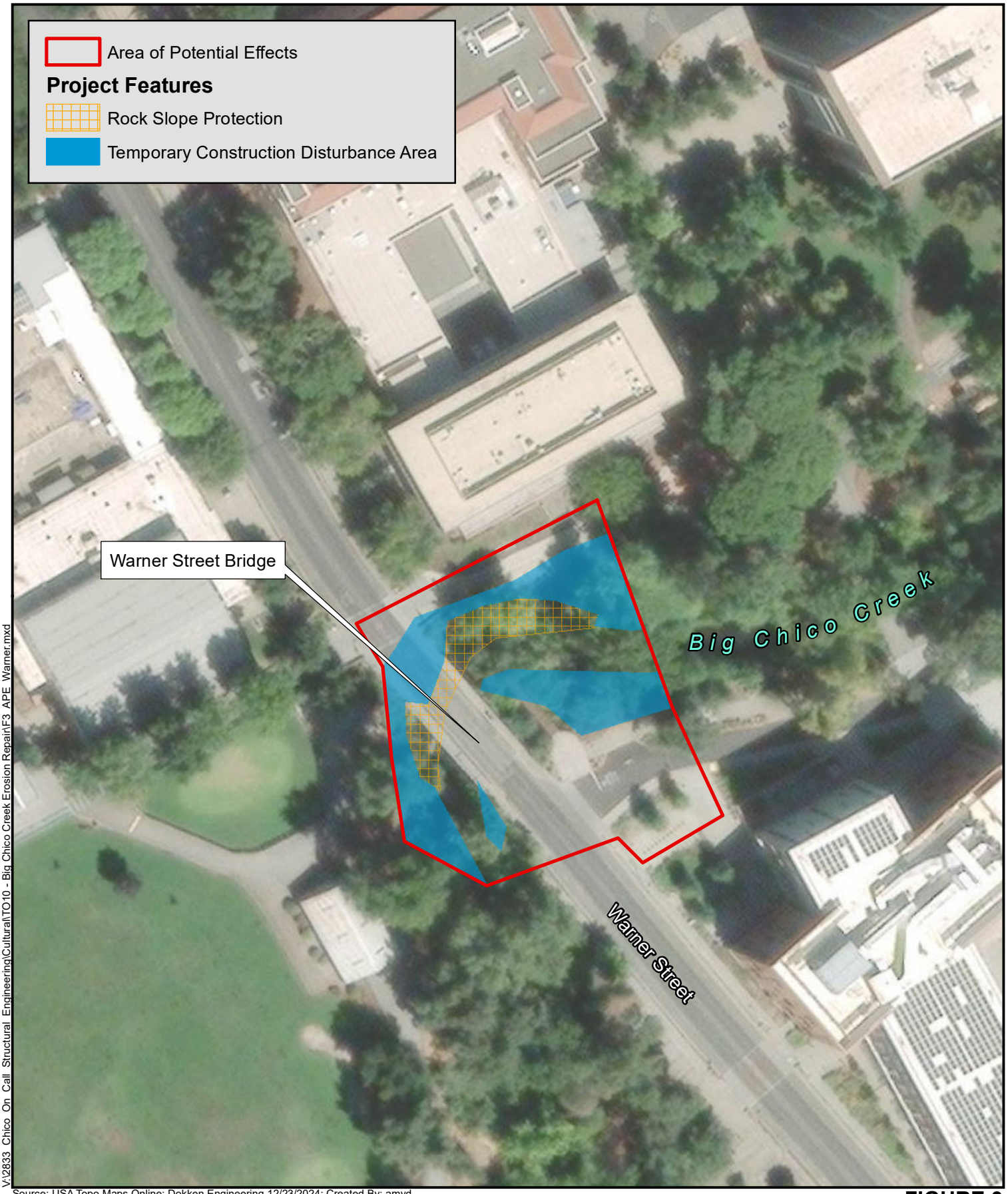



V:\2833_Chico_On_Call_Structural_Engineering\Cultural\TO10 - Big Chico Creek Erosion Repair\F2_Topographic Map.mxd

Source: USA Topo Maps Online; Dokken Engineering 12/23/2024; Created By: amyd

0 0.5 1 Mile

**FIGURE 2**
**Project Location**
USGS 7.5-minute Quads: Chico, CA
Township 22N; Range 1E; 2E
Big Chico Creek Erosion Repair Project
Chico, Butte County, California

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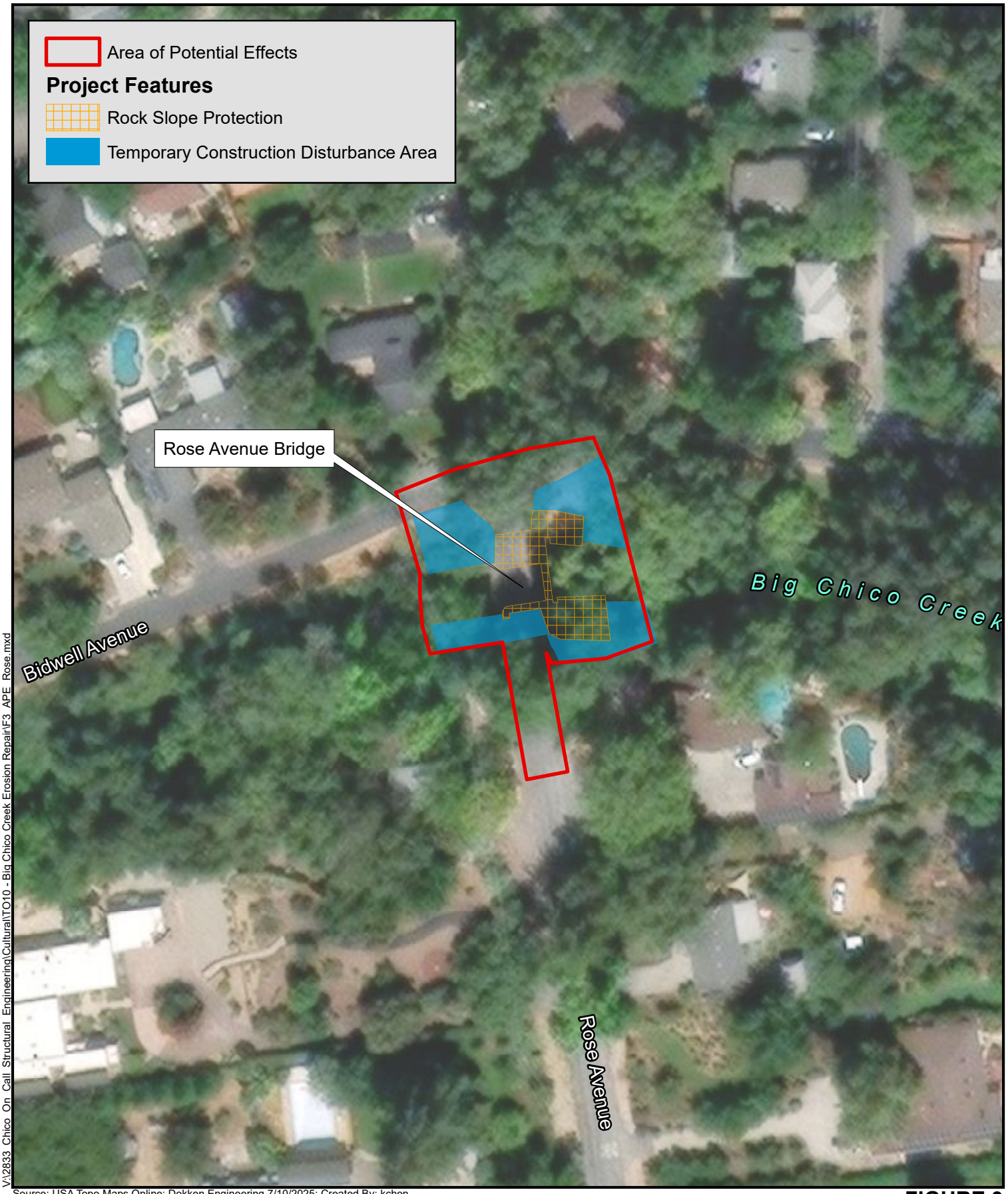
Source: USA Topo Maps Online; Dokken Engineering 12/23/2024; Created By: amyd

0 50 100 150 200 Feet

**FIGURE 3**
**Area of Potential Effects**
**Page 1 of 2**
Big Chico Creek Erosion Repair Project
Chico, Butte County, California




V:\2833 Chico On Call Structural Engineering\Cultural\TO10 - Big Chico Creek Erosion Repair\F3 APE Rose.mxd

Source: USA Topo Maps Online; Dokken Engineering 7/10/2025; Created By: kchen

0 50 100 150 200 Feet

**FIGURE 3**
**Area of Potential Effects**
**Page 2 of 2**
Big Chico Creek Erosion Repair Project
Chico, Butte County, California

## 1.2 Project Location

The Project is located in Butte County with the two proposed repair locations situated along Big Chico Creek in the City of Chico. The Project resides within the Chico, California U.S. Geological Survey 7.5-minute quadrangle. The proposed Warner Street Bridge (12C0276) and Rose Avenue Bridge (12C0325) locations are located within Township 22 North, 1 East in an unsectioned portions of the Rancho Arroyo Chico and the Rancho De Farwell.

### 1.2.1 Description of the Area of Potential Effects

The APE is defined to include all ground disturbing activities required for the installment of RSP along the banks of Big Chico Creek at the two discontiguous repair locations to prevent further erosion of its banks and eventual failure (**Figures 3**). The Warner Street Bridge APE is approximately 0.85 acres, and the Rose Avenue Bridge APE is 0.37 acres for a total APE area of 1.25 acres.

Repairs at the Warner Street Bridge address erosion damage and scour issues along the northern bank of the creek using RSP. A total of 90 linear feet of RSP will be installed along the north bank upstream of the bridge, 40 linear feet of RSP along the north bridge abutment, and 50 linear feet of RSP will be placed along the north bank downstream of the bridge. Surface preparation of the creek banks and channel bottom to install the RSP will involve approximately one to two feet depth of ground disturbance. The construction of an access ramp from the top of the northeast bank down to the creek bed is anticipated. The grading of the access ramp is assumed to disturb the creek bank up to two feet in depth.

The repairs needed at the Rose Avenue Bridge include erosion repair along both banks of Big Chico Creek as well as scour repair around the piers, north abutment footing, and the sewer pipe using RSP. A total of 46 linear feet of RSP will be installed along the north creek bank upstream of the bridge, 20 linear feet of RSP along the base of the north bridge abutment, and 50 linear feet of RSP will be placed along the south creek bank upstream of the bridge. RSP will be placed on the downstream side of the concrete encased sewer pipe to prevent additional scour. The excavation depth at Rose Avenue Bridge will generally be 3-4 feet below the current creek bed, but could be up to approximately 12 feet within the northeast bank of Big Chico Creek. Bank reshaping for approximately 50 feet on both north and south banks of the creek will occur requiring approximately two feet of disturbance. No access ramp is required at this location and work will occur from the bank tops.

## 1.3 Regulatory Context

***Federal Regulatory Context***

The NHPA of 1966 is the primary Federal legislation which outlines the Federal government's responsibility to cultural resources. More specifically, Section 106 of the NHPA and its implementing regulations located at 36 CFR Part 800, outline the Federal government's responsibility in identifying and evaluating cultural resources.

Section 106 of the NHPA requires the Federal government to take into account the effects of an undertaking on cultural resources listed on and eligible for listing on the National Register of Historic Places (National Register) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties. The 36 CFR Part 800 regulations describe the Section 106 process. They outline the steps the Federal agency takes to identifying cultural

resources and the level of effect that the proposed undertaking will have on historic properties. An undertaking is defined as any:

"…Project, activity or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including:

A) Those carried out by or on behalf of the agency.
B) Those carried out with Federal assistance.
C) Those requiring a federal permit, license, or approval; and
D) Those subject to state or local regulation administered pursuant to a delegation or approval by a Federal agency [Section 301(7) 16 U.S.C. 470w(7)]"

It is the initiating of an undertaking that begins the Section 106 process. Once an undertaking is initiated the Federal agency must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action that has the potential to affect historic properties, the Federal agency must 1) identify the APE, 2) determine if historic properties are present within the APE, 3) determine the effect that the undertaking will have on historic properties, and 4) consult with the appropriate State Historic Preservation Officer (SHPO) to seek concurrence on Federal agencies findings. In addition, the Federal agency is required through the Section 106 process to consult with Native American tribes if the undertaking may affect historic properties to which Native American tribes have attached religious and cultural significance. If the undertaking would result in adverse effects to historic properties, these adverse effects must be resolved in consultation with the SHPO, and other parties identified during the Section 106 process before the undertaking can proceed to implementation.

***State Regulatory Context***

The studies for this Project were carried out under the CEQA and Public Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, addended 2019 (5024 MOU) as applicable.

***CEQA Native American Consultation***

Effective January 1, 2015, CEQA was revised to include early consultation between local agencies and California Native American tribes, and to include the consideration of Tribal Cultural Resources (TCRs) in this consultation. Pursuant to AB 52 (PRC 21074[a]), a TCR means either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

i. Included or determined to be eligible for inclusion in the California Register of Historical Resources
ii. Included in a local register of historical resources as defined in PRC Section 5020.1, subdivision (k)

A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC 5024.1., subdivision (c).

PRC 21074(a) further relays that a cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. PRC 21074(a) also states that a historical resource described in PRC 21084.1, a unique archaeological resource as defined in subdivision (g) of PRC 21083.2, or a "nonunique

archaeological resource" as defined in subdivision (h) of PRC 21083.2 may also be a TCR if it conforms with the above criteria.

CEQA requires formal consultation with California Native American Tribes concerning TCRs that may be impacted by a proposed Project when a Negative Declaration, a Mitigated Negative Declaration or an Environmental Impact Report is being prepared for the Project.

# 2.0 NATURAL AND CULTURAL CONTEXT

Ethnographic information, indigenous-era, and historic-era research was conducted and is included for context and to determine what types of cultural resources may be present within the Project vicinity. The natural environment review includes short treatments of the geology, local flora, and local fauna.

## 2.1 Natural Environment Setting

### 2.1.1 Geology

The Project is located in Butte County, California and within the Sacramento Valley Province (Jepson 2024). The average annual high temperature is approximately 75°F (degrees Fahrenheit), and the average annual lows reach approximately 47°F, with up to 27 inches of precipitation annually (U.S. Climate Data 2024).

Geologic mapping by Saucedo and Wagner (1992) indicates the APE falls within Pleistocene-aged Modesto Formation alluvium. Soils at both locations consists of Vina fine sandy loam, sandy substratum (0 to 2 percent slopes) which is comprised of coarse loamy alluvium derived from igneous, metamorphic and sedimentary rock (NRCS 2024).

### 2.1.2 Flora and Fauna

***Flora***

Land cover types within the APE include riparian forest, road, and urban/developed land. Big Chico Creek is the only federal jurisdictional feature (waters of the US) identified within the APE.

The riparian forest habitat within the APE occurs along the slopes and banks of Big Chico Creek. This habitat is characterized by a dominance of riparian tree species such as southern catalpa (*Catalpa bignonioides)*, Fremont cottonwood (*Populus fremontii)*, California sycamore (*Platanus racemosa),* valley oak (*Quercus lobata*), Northern California black walnut (*Juglans hindsii)* and white alder (*Alnus rhombifolia*).

The understory composition within the riparian forest varies along Big Chico Creek within the APE, influenced by the degree of urban development. At the Rose Avenue Bridge, the understory is largely dominated by invasive species, including Himalayan blackberry (*Rubus armeniacus*), English ivy (*Hedera helix*), and common fig (*Ficus carica*). In contrast, the understory near the Warner Street Bridge consists of a mix of California wild grape (*Vitis californica*), dallis grass (*Paspalum dilatatum*), black locust (*Robinia pseudoacacia*), prickly lettuce (*Lactuca serriola*), and Himalayan blackberry.

Urban and developed areas within the APE consist of both paved and unpaved roads, including Rose Avenue/Bidwell Avenue and Warner Street, as well as parking lots and buildings within the staging area. This land cover type features little to no natural vegetation, except for landscaped and ornamental plantings associated with the residential developments near the Rose Avenue Bridge and Chico State University at the Warner Street Bridge location.

***Fauna***

Typical fauna in the Project area includes both prey and predatory species. Birds include the acorn woodpecker (*melanerpes formicivorus*), oak titmouse (*baeolophus inornatus*), and Anna's hummingbird (c*alypte anna*). Fish observed at both locations include bluegill (*lepomis macrochirus*), mosquitofish (*gambusia affinis*), and steelhead salmon (*oncorhynchus mykiss irideus pop. 11*).

### 2.1.3 Waterways

Big Chico Creek is a perennial freshwater creek that flows from east to west through the City of Chico. Its flow is primarily governed by natural hydrological processes, with some human intervention for purposes such as recreation, habitat protection, and local water use. Big Chico Creek flows below Rose Avenue and Warner Street, eventually converging with the Sacramento River about 5 miles downstream of the furthest western extent of the APE. Originating from the junction of the Sierra Nevada and Cascade Mountain ranges, Big Chico Creek maintains a consistent flow year-round. Its riverbed is composed of pebbles, cobbles, and small boulders.

The riverbed beneath the Rose Avenue and Warner Street bridges is predominantly shaded by the surrounding riparian forest, with incised channel banks shaped by erosion resulting from urban development and heavy creek flows.

## 2.2 Cultural Setting

### 2.2.1 Indigenous History Context

The following sections are excerpted from the 2017 Archaeological Survey Report for the East Rio Bonito Road Replacement Projects, Butte County, California (Marks 2017).

The earliest traces of the occupants of the Central Valley belong to the Early Man period. This period is characterized by large spear points used to kill big game including mammoths and giant bison, large mammals which existed at the end of the last Ice Age approximately 10,000 years ago (Johnson 1967). Population was low and consisted of small mobile bands of people who left few traces of their passage through the Central Valley (Fredrickson 1973).

Prehistoric human populations in Butte County and within the Sacramento Valley have evolved considerably since archaeologists first proposed a sequence of cultural change in the region in the 1930s. Although research has established that prehistoric groups inhabited parts of California prior to 6,000 years ago, the Windmiller Pattern (roughly 3,000 BC – 500 BC) is the earliest recognized cultural pattern for the Sacramento Valley, which is the portion of the California Central Valley that lies to the north of the San Joaquin-Sacramento Delta (Fredrickson 1973). Archaeological deposits from this period contain a variety of flaked and ground stone artifacts, baked clay, and shell artifacts, suggesting that populations from this period exploited a diverse resource base (Heizer 1949; Ragir 1972).

The Berkeley Pattern (roughly 500 BC – AD 500) suggests a shift in subsistence practices and technology. Mortar and pestle use increase indicated the types of technological changes during this time. The switch to mortar and pestle indicates the acorn became a diet staple (Ragir 1972). The addition of acorns, which were more time-consuming to process, implies greater diet breadth than that observed during Windmiller times (Ragir 1972).

Material remnants from the Augustine Pattern (roughly AD 500- AD 1880) indicate an intensification of resource exploitation, increased sedentism (i.e., a transition from nomadic to permanent, year-round settlement), territoriality, and social complexity (Fredrickson 1973). Technological innovations, such as the bow and arrow, occurred during this period (Fredrickson 1973). Artifacts from this period include flaked and ground stone artifacts, shell beads and pendants, and bone tools (Johnson 1976). Bedrock milling features also are present, either in association with permanent settlements or as a component of smaller task-oriented locations (Johnson 1976).

### 2.2.2 Ethnographic Context

Prior to the arrival of Euroamericans in the region, California was inhabited by groups of Native Americans speaking more than 100 different languages and occupying a variety of ecological settings. Kroeber (1925, 1936), and others, recognized the uniqueness of California Native Americans and classified them as belonging to the California culture area. The APE resides near the center of Konkow territory (Riddell 1978).

Konkow, referred as the Northwestern Maidu, are members of the Maiduan Family of the Penutian language stock. Konkow was spoken in a number of different dialects along the lower reaches of the Feather River Canyon up to Richbar, the surrounding hills, and throughout the Sacramento Valley (Riddell 1978).

*Settlement*s

Settlement patterns of the Konkow are “village communities” (Kroeber 1925) and an individual village community was autonomous and consisted of several, smaller, villages. The center village often displayed the largest *kúm* (a semisubterranean earth-covered lodge) which was used as a ceremonial assembly chamber (Riddell 1978). The center village most likely was the home of the “most authoritative man of the village community” (Kroeber 1925) and used the *kúm* as his primary residence. This “high authority” man was more of an advisor than appointed or inherited leader, smaller surrounding villages were self-sufficient and were not bound by strict laws (Riddell 1978).

The surrounding villages contained approximately seven houses, and each home was estimated to house roughly 5 people and combined most likely did not exceed an estimated 200 inhabitants (Riddell 1978). In the winters, the Konkow primarily resided within deep canyons and along the Feather, Yuba, or American rivers and in the summer months men often went into the mountains for hunting where dried deer meat was brought back to the villages for winter months (Riddell 1978).

*Subsistence*

An annual food gathering cycle of the Konkow consisted of processed acorn meat, grass seeds (like wild rye), roots, and fish. In the summers, the Konkow went into the mountains to hunt deer and other fauna which was then brought back to the village to dry for consumption in the winter months. In the spring, grasses and seeds were collected in local valleys by both woman and children. In the winter, the Konkow primarily stayed within their village and ate food from their stores. Other sources of food include yellow jacket larvae, angleworms, locusts, grasshoppers, crickets, eels, salmon. In Konkow culture, the first caught salmon of the season was a common cause for celebration and ceremony. The shaman would prepare the fish, and each man would consume a piece once it was cooked (Riddell 1978). This often triggered an emphasis on fishing as a food source.

*Clothing and Adornment*

Animal hides were used to make clothing, accessories (such as headbands and belts), and sinew for tools (Riddell 1978). Different than the Maidu, Konkow men were mostly naked in the summers and women wore apron skirts (Riddell 1978). For colder climate, robes made of deer or mountain lion skin was draped over the shoulders for warmth when necessary. Hair was commonly worn shorter than the Maidu and men were known to even pluck their beard and mustache hairs. Women commonly pierced their ears and men often pierced their septum and often adorned them with woodpecker feathers and scalps. These accessories were commonly made of shell, bone, feathers, and wood (Dixon 1905).

*Technology*
Konkow tools for hunting include knives, spears, and bows and arrows (Riddell 1978). Hard black basalt was harvested and used primarily for making knives and spears which was fastened to a handle or wooden staff then secured with pitch or sinew (Riddell 1978). Obsidian was obtained primarily from trade with neighboring communities and used mostly for arrow heads (Riddell 1978).

Basketry was used as an art and a necessity in storying and collecting food. The Konkow used a simple twining, and designs were worked in with multiple colors from redbud, willow, and pine root dyed black with charcoal (Dixon 1905). The Konkow employed a diagonal twining for burden baskets and weave in designs using different colored materials.

Tule leaves were commonly used to make mats, seats, beds, skirts, rafts, roofing, and doors (Kroeber 1925). These leaves could also be turned into twine and used to make baskets and bags.

### 2.2.3 Post-Colonial Context
The following sections are excerpted from the 2018 Valley's Edge Development Project Archaeological Inventory Survey (Jensen 2018).

Early Spanish expeditions arrived in the Great Central Valley of California from Bay Area missions as early as 1804. By the mid-1820's, literally hundreds of fur trappers were annually traversing the Valley on behalf of the Hudson's Bay Company (Maloney 1945), some with devastating consequences for the local Maidu and other valley populations (Cook 1955). By the late 1830's and early 1840's, several small permanent European American settlements had emerged in the Valley and adjacent foothill lands, including ranchos in what are now Shasta, Tehama and Butte Counties. One of these was eventually, of course, acquired by Chico's founder, General John Bidwell.

Bidwell arrived in California in 1841 as a member of the first band of Americans to cross the Sierra Nevada for the purpose of settlement (McGie 1983:33). In the spring of 1843, a party of settlers headed north for Oregon from Sutter's Fort, which included John Bidwell, Peter Lassen and James Bruheim. On this trip, Bidwell was clearly impressed by the beauty of the region around Chico, and on his return from Oregon, Bidwell mapped the rivers and streams and the lay of the land at Chico. This map later formed the basis of several of the grants made by Micheltorena, the Mexican Governor of California.

The Rancho Arroyo Chico Grant of November 7, 1844, had been made by Micheltorena on behalf of the Mexican government to William Dickey. Dickey settled on the north side of Big Chico Creek and later sold the ranch to John Bidwell. Bidwell managed this land grant of approximately 22,200 acres, including lands now Bidwell Park, for many years from his home at Arroyo del Chico. As early as 1847 he maintained experimental orchards and fields alongside extensive farming operations (McGie 1983: 35), some of which bordered Lindo Channel and other natural surface water sources in the area, including lands along Chico Creek.

Critical to Chico's growth and economic success was the arrival of the California and Oregon Railroad in 1870, which facilitated rapid transit of goods and services to points throughout the State. Of additional importance to the region was the 1887 establishment of the Northern Branch of the State Normal School. The school's purpose was to train teachers in the art of education and prepare them to administer the State school system. In 1921, the school's name was officially

changed to Chico State Teacher's School, and later became California State University, Chico (University), located adjacent to the APE.

# 3.0 INVENTORY METHODS AND RESULTS

In order to determine the necessary level of historic property identification efforts for the proposed undertaking and to better understand the types of cultural resources likely to be encountered in the APE during subsequent survey, a variety of resources were consulted. Sources included a records search via the California Historical Resource Information System (CHRIS) at the Northeast Information Center (NEIC) in Chico, and literature and historical map review.

## 3.1 Records Search

A record search request was submitted to the NEIC (File # NE24-394) on July 16, 2024. The search was conducted by Kyle Piercy, NEIC Senior Research Associate, and results were provided on August 7, 2024. The search examined the National Register, the California Register of Historical Resources (California Register), the Directory of Properties in the Historic Property Data File, the *California Historic Landmarks* (1996), and the *California Inventory of Historic Resources* (1976). Additional research efforts conducted outside the NEIC included review of historic USGS topographic and aerial maps, and other pertinent historic data specific to Butte County. The NEIC records search results are located in **Appendix B** of this document.

### 3.1.1 Previous Survey Coverage

The record search submitted to the NEIC included two additional locations of repair at Hooker Oak Park which are no longer included in the scope of this Project. As a result, the NEIC identified one previous survey (NEIC-668) which included the entirety of the Warner Street Bridge APE location boundary, while 17 additional reports conducted within the ¼-mile search boundary. One previous survey (NEIC-9749) was conducted within the Rose Avenue Bridge APE location boundary, resulting in approximately 25 percent survey coverage, while an additional 7 reports within the ¼-mile search boundary. Including supplemental documents, a total of 35 previous reports were conducted within both record search boundaries (**Table 1**). Results of the full NEIC record search can be found in **Appendix B**.

**Table 1. Previous Cultural Resource Investigations within a ¼-mile of the APE Locations**

| REPORT ID (NEIC-#) | DATE | AUTHOR | TITLE | LOCATION |
|---|---|---|---|---|
| 827 | 1987 | Rick Minor, Jackson Underwood, Rebecca Apple, Stephen Dow Beckham, and Clyde Woods | Technical Report: Cultural Resources Survey for the US Sprint Fiber Optic Cable Project - Oroville, California to Eugene, Oregon | Warner Street Bridge |
| 827a | 1987 | M. Steven Shackley, Rick Minor, Rebecca Apple, Stephen Dow Beckham, Tudy Vaughan, Clyde M. Woods, and Jan E. Wooley | US Sprint Fiber Optic Cable Project, Oroville, California to Eugene, Oregon: Addendum #1 to the Technical Report | Warner Street Bridge |
| 827b | 1987 | Tudy Vaughan | US Sprint Fiber Optic Cable Project Oroville, California to Eugene, Oregon: Addendum #4 to the Technical Report, Cultural Resources Survey of the Proposed Regeneration Stations and Point of Presence Sites from Oroville to Eugene | Warner Street Bridge |

**Table 1. Previous Cultural Resource Investigations within a ¼-mile of the APE Locations**

| REPORT ID (NEIC-#) | DATE | AUTHOR | TITLE | LOCATION |
|---|---|---|---|---|
| 827c | 1987 | M. Steven Shackley | Testing Report: US Sprint Fiber Optic Cable Project - Oroville, California to Eugene, Oregon/ Archaeological Testing of Four Sites in California: CA-BUT-5, THE-1468, SHA- 1684, SIS-332/ Addendum #2 to the Technical Report | Warner Street Bridge |
| 827d | 1987 | Tirzo Gonzalez | US Sprint Fiber Optic Cable Project Oroville, California to Eugene, Oregon: Addendum #5 to the Technical Report, Cultural Resources Construction Monitoring Program in California | Warner Street Bridge |
| 4658 | 2000 | Wendy J. Nelson, Maureen Carpenter, and Kimberley L. Holanda | Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project: Segment WPO4: Sacramento to Redding | Warner Street Bridge |
| 5721 | 2003 | Gregory G. White | CSU, Chico, TII Project: Cultural Resources Found in Trench Located in the Quad Between Glenn Hall, Trinity Hall, and the Merriam Library Building | Warner Street Bridge |
| 6685 | 2004 | Peaks & Associates | Cultural Resource Assessment of the California State University, Chico Master Plan 2004 Area, Butte County, CA | Warner Street Bridge |
| 7234 | 1980 | James P. Manning | Archaeological Reconnaissance of the Jack Norton Property, Ray Holt Property, Robbins King et. al. Property and the Neighborhood Church Expansion Property, Butte County, California | Rose Avenue Bridge |
| 7362 | 2006 | Cindy Arrington and Bryon Bass | Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project, State of California | Warner Street Bridge |
| 7491 | 2000 | Lisa Westwood and Russell Bevill | Archaeological Survey Report for the Chico Urban Area Nitrate Compliance Plan Environmental Impact Report Project, Chico, California | Both locations |
| 7841 | 1981 | James P. Manning | Archaeological Reconnaissance of two properties located within Butte County: Ronald R. Logan - AP#41-08-27, Durkin and Drew - AP#43-29-15 | Rose Avenue Bridge |
| 7859 | 1981 | James P. Manning | Archaeological Reconnaissance of three properties located within Butte County: Shastan Company, Inc. - AP#43-29-13, Theodore Rodigues - AP#55-37-62, Keith Babcock, et al. - AP#64-62-08 | Rose Avenue Bridge |
| 7939 | 2007 | Jeff Reid and Josh Peabody | Cultural Resource Survey for the Wildcat Activity Center | Warner Street Bridge |
| 7944 | 2007 | Jeff Reid and Josh Peabody | Cultural Resource Survey for the University Housing and Food Services Phase I Project | Warner Street Bridge |

**Table 1. Previous Cultural Resource Investigations within a ¼-mile of the APE Locations**

| REPORT ID (NEIC-#) | DATE | AUTHOR | TITLE | LOCATION |
|---|---|---|---|---|
| 8107 | 1979 | James P. Manning | Archaeological Reconnaissance of the 75 Acre Big Chico Creek Estates Development Project, Chico, Butte County, California | Rose Avenue Bridge |
| 8108 | 1979 | James P. Manning | Archaeological Reconnaissance of the proposed storms drain pipe route within the Sacramento Avenue Assessment District. | Both Warner Street and Rose Avenue |
| 9465 | 2008 | Jeff Reid | Cultural Resources Survey for the CSU, Chico Track Restroom Improvement Project, Butte County, California | Warner Street Bridge |
| 9749 | 2007 | Tiffany Tuttle | A Cultural Resource Study of the Proposed Big Chico Creek/Bidwell Avenue Restoration Project, City of Chico, Butte County, California | Rose Avenue Bridge |
| 9749a | 2008 | Lori Harrington | An Addendum to: The Big Chico Creek/Bidwell Avenue Restoration Project Cultural Resource Study | Rose Avenue Bridge |
| 9800 | 2008 | Jeff Reid | Cultural Resources Survey for the CSU, Chico Alumni Glenn Rehabilitation Project, Chico, California | Warner Street Bridge |
| 9827 | 2008 | Lorna Bilat | Cultural Resources Study of the Bidwell Project, AT&T Mobility Site N. CA-C014, 212 Cherry Street, Chico, Butte County, California 95928 | Warner Street Bridge |
| 9917 | 2008 | Cheryl Brookshear | Architectural Evaluation of the University Center Building, CSU, Chico | Warner Street Bridge |
| 10893 | 2010 | Lori Harrington | An Archaeological Evaluation of 1st and 2nd Street Couplet Project Butte County, Chico, California. | Warner Street Bridge |
| 12670 | 2014 | Carrie D. Wills and Kathleen A. Crawford | Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate SC06536A (Downtown Chico), 212 Cherry Street, Chico, Butte County, California. | Warner Street Bridge |
| 12675 | 2013 | Carrie Willis and Kathleen Crawford | Cultural Resource Records Search and Site Visit Results for T-Mobile West, LLC Candidate SC06536A (Downtown Chico), 212 Cherry Street, Chico, Butte County, California. | Warner Street Bridge |
| 12858 | 2015 | Carolyn Losee | Cultural Resources Investigation for AT&T Mobility CVL00240 "Bidwell" 212 Cherry Street, Chico, Butte County, California | Warner Street Bridge |
| 12970 | 2014 | R. Scott Baxter and Katherine Anderson | CSU Chico - Bridge Replacement/Restoration Project, Cultural Resources Survey Report | Warner Street Bridge |
| 13773 | 2016 | Chris Baker | Historic Assessment: 27650/Chico Downtown PCS, 212 Cherry Street, Chico, Butte County, California | Warner Street Bridge |

**Table 1. Previous Cultural Resource Investigations within a ¼-mile of the APE Locations**

| REPORT ID (NEIC-#) | DATE | AUTHOR | TITLE | LOCATION |
|---|---|---|---|---|
| 14365 | 2012 | Peaks & Associates | Cultural Resources within the Normal Avenue Parking Structure (Parking Structure 2) Project Area, Chico, California | Warner Street Bridge |
| 14423 | 2014 | Melinda Peak | The North Campus Utility and ADA Improvements Project, California State University, Chico | Warner Street Bridge |
| 14425 | 2016 | Melinda Peak | Cultural Resources Evaluation of the Center Plant Expansion Project, California State University, Chico | Warner Street Bridge |
| 15172 | 2021 | Connor Buitenhuys and Sonia M. Miller | Historic Property Survey Report For the Proposed BUT 32 Chico Rehabilitation Project along State Route 32 in Butte County, California | Warner Street Bridge |
| 15172a | 2021 | Connor Buitenhuys | Archaeological Survey Report For the Proposed BUT 32 Chico Rehabilitation Project Along State Route 32 Within Butte County, California | Warner Street Bridge |
| 15172b | 2021 | Sonia M. Miller | Historical Resources Evaluation Report For the But-32 Chico Rehab Project Butte County, California. 03-But-32, PM 5.0-10.2 | Warner Street Bridge |
| 15172c | 2021 | Connor Buitenhuys | Finding of Effect For the Proposed BUT 32 Chico Rehabilitation Project Along State Route 32 Within Butte County, California | Warner Street Bridge |
| 15172d | 2021 | Connor Buitenhuys | Post-Review Discovery Plan For the BUT 32 Chico Rehabilitation Project along State Route 32 in Butte County, California | Warner Street Bridge |

### 3.1.2 Previously Recorded Cultural Resources

The NEIC reported no previously recorded resources within either APE. A total of 25 resources were reported within the ¼-mile search radius (**Table 2**). The results of the NEIC record search can be found in **Appendix B**.

**Table 2. Previously recorded cultural resources within a ¼-mile of the APE Locations**

| Primary | Trinomial | Resource Description | Indigenous or Historic |
|---|---|---|---|
| P-04-000226 | CA-BUT-226 | A habitation site with four pit structures, one earthen platform, and one possible additional pit structure. | Indigenous |
| P-04-000295 | CA-BUT-295/H | A village site that had been previously disturbed (1849-1868) by the arrival of John Bidwell and his wife. | Multicomponent |
| P-04-002886 | | A concentration of several historic-era artifacts. | Historic |
| P-04-002936 | | A historic refuse pile dating to the late 1800s. | Historic |
| P-04-003001 | CA-BUT-3001H | The building for the Chico Gas and Water Works former Manufactured Gas Plant. | Historic |

**Table 2. Previously recorded cultural resources within a ¼-mile of the APE Locations**

| Primary | Trinomial | Resource Description | Indigenous or Historic |
|---|---|---|---|
| P-04-003136 | | A building on the campus of CSU, Chico, which was constructed in 1956. | Historic |
| P-04-003137 | | 126 foot high elevated water tank and tower that was reportedly built in the 1950s. | Historic |
| P-04-003932 | | A large, single-story warehouse with an estimated construction date of 1900. | Historic |
| P-04-003933 | | The former Diamond Match Company warehouse. | Historic |
| P-04-003968 | | A historic single-story residential home. | Historic |
| P-04-003973 | | A single-story "Italianate" residence. | Historic |
| P-04-003982 | | The South of Campus Historic District is part of the neighborhood established by General John Bidwell. | Historic |
| P-04-004020 | | A two-story post-Victorian clapboard sided residence. | Historic |
| P-04-004021 | | A two-story post-Victorian residence. | Historic |
| P-04-004022 | | A one and one-half story house with an "eccentric multi-gabled" look. | Historic |
| P-04-004038 | | A historic residence. | Historic |
| P-04-004049 | | President's residence: a two-story historic residential building. | Historic |
| P-04-004065 | | Trinity Hall: a two-story faculty office building | Historic |
| P-04-004066 | | Glenn Kendall Hall: a two-story structure with a third story rotunda only. | Historic |
| P-04-004071 | | A historic Craftsman Bungalow style residence. | Historic |
| P-04-004158 | | The Gus Manolis Bridge over Big Chico Creek on CSU Chico Campus. | Historic |
| P-04-004636 | | A Ranch-style single-story residence built in 1951. | Historic |
| P-04-004642 | | A Ranch-style single-story residence built in 1950. | Historic |
| P-04-004646 | | A Minimal-Traditional-style single-story residence. | Historic |
| P-04-004647 | | A Ranch-style single story residence built in 1947. | Historic |

### 3.1.3 Additional Sources Consulted

A review of historic aerial photography, historic USGS topographic maps, and General Land Office (GLO) maps for both repair locations was conducted.

The 1866 and 1967 GLO Plat maps for Township 22 North, Range 1 East contains no relevant information regarding either of the proposed repair locations; however the "Road from Shasta to Marysville" travels in a northwest/southeast alignment at this date which is approximately where State Route 99 resides today. The 1867 GLO map provides more details southeast of the two locations, but no additional information is provided regarding the discontiguous APE locations.

For the Warner Street Bridge location, the earliest topographic map available from 1912 indicates that neither the bridge nor Ivy Street were constructed yet. By 1950, Ivy Street is in its current alignment and the bridge is shown crossing over Big Chico Creek. By 1953, the University had begun expanding towards the APE and the APE vicinity is largely labeled as part of the University's campus. Subsequent maps dating to 1955, 1965, 1968, 1971 show little change to

the APE. By 1978, additional buildings associated with the University are shown on the northern side of Big Chico Creek. Aerial imagery of Warner Street Bridge dating to 1947 confirms this assessment.

The earliest topographic map available for the Rose Avenue Bridge location dates to 1912 and indicates that Rose Avenue had not yet been constructed. It depicts small residences along the north bank of Big Chico Creek. Early aerial imagery of the APE depicts the bridge, constructed in 1938, with no development immediately surrounding it. Later, in 1947, agricultural plots are shown scattered within the Project vicinity and appear to contain various orchards. By 1984, these ranches consisted of large parcels of land which later become a residential neighborhood with plots of land no larger than an acre. Over the next few decades further expansion of the neighborhood appears northwest of the APE to what is seen today.

## 3.2 Native American Consultation

A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on July 16, 2024. On July 22, 2024, the results returned as *negative*. The results of the SLF request are located in **Appendix C**.

Under Section 106 of the NHPA, USACE is responsible for conducting consultation with federally recognized Native American tribes that may have sensitive resources or areas within the APE Project. USACE will be responsible for all outreach and consultation.

## 3.3 Field Inventory Methods

On August 23, 2024, archaeologist Gabrielle Zachoszaj, B.A., conducted a ground surface inventory of the APE. Linear pedestrian transects no more than 5 meters apart were used within the discontiguous APE to inspect the visible ground surface with the exception of paved surfaces. All cut banks, burrow holes, and other exposed sub-surface areas were visually inspected for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits.

## 3.4 Field Inventory Results

No indigenous or historic-era archaeological resources were identified during the August 23, 2024, pedestrian survey; however, both bridges within the APE are over 50 years old. These bridges have been previously determined as Category 5 not eligible bridges as part of the Caltrans Historic Bridge Inventory, as concurred upon by the SHPO (**Appendix D**), which remains valid. No other resources were identified during the pedestrian survey.

Surface visibility throughout the APE varied by location. The Warner Street Bridge location consisted of dense vegetation; however, sections of Big Chico Creek were exposed, especially the sections where erosion damage has occurred, resulting in 0-60 percent visibility along the banks of the creek. The banks of Big Chico Creek at Rose Avenue Bridge were largely obscured along the southeast, southwest, and northwest by dense vegetation which largely obscured the erosion damage near the southeast abutment of the bridge resulting in 0-10 percent visibility. The remainder of the APE consisted of paved surfaces.

### 3.4.1 Buried Archaeological Resource Potential

To determine the surface and buried site potential within the APE, a review of geological landforms, soils, previously recorded sites, and modern development were reviewed. The Project vicinity would have been a targeted location of indigenous peoples' activity along Big Chico Creek.

While geological mapping indicated that Pleistocene age formations make up the APE vicinity, geoarchaeological investigations by Meyer and Rosenthal (2008) suggest that younger Holocene age deposits may be present. From this assessment and the known previously recorded resources adjacent to Warner Bridge, the overall vicinity may have *high* surface and buried resource sensitivity; however, modern disturbances at both bridges have significantly impacted this potential.

The Warner Bridge location has been disturbed by construction of the original bridge, two adjacent pedestrian bridges in approximately the early 1990s, as well as adjacent construction related to the University. At Rose Avenue Bridge, the immediate and surrounding area was disturbed by construction of the original bridge, decades of agricultural activities, and more recently by residential development. Furthermore, Project activities will occur primarily within previously disturbed bank and channel areas of the creek and adjacent construction staging will occur on paved surfaces. For these reasons, the potential for the Project to impact intact cultural resource deposits in the APE is *low*.

# 4.0 RECOMMENDATIONS AND CONCLUSIONS

The proposed Project involves the installation of RSP along the banks of Big Chico Creek at two locations, Warner Street Bridge and Rose Avenue Bridge. To identify historic properties and historical resources that might be affected by the undertaking, a review of records on file at the NEIC, archival research, a review of historic aerial photos and topographic maps, and a ground surface inventory were conducted. The buried archaeological site potential was assessed through landform analysis, geologic maps, and visual inspection of exposed subsurface soils within the APE during pedestrian survey.

As a result of these efforts, two resources are present within the APE: the Warren Street Bridge (12C0276) and the Rose Avenue Bridge (12C0325). These resources were previously evaluated for National Register and California Register eligibility by Caltrans as part of the Historic Bridge Inventory and were found to be Category 5 not eligible bridges. This finding remains valid as no additional information has been identified which challenges this previous SHPO concurred upon finding. A finding of no historic properties affected pursuant to 36 CFR § 800.4(d)(1) is recommended. A finding of no significant effect to historical resources or Tribal Cultural Resources, per CEQA Guidelines 15064.5, is also recommended for the Project.

As the USACE will conduct their own Native American consultation as part of their Section 106 of the NHPA responsibilities, should additional information which identifies the presence of indigenous cultural resources within the discontiguous APE be discovered, this report will be updated with the results of those efforts. This report will also be updated with any additional or modified avoidance/minimization/mitigation measures as a result of Native American consultation.

While no indigenous or historic-era resources are noted within the APE, and the potential of encountering intact cultural resources is *low*, the following practices should be implemented in case cultural material is encountered:

**CR-1:** If non-human bones, pottery fragments, or other potential cultural resources are unearthed during construction, the Contractor shall immediately cease work within 25 feet of the resources and notify City of Chico Public Works Engineering at (530) 879-6900. The supervising contractor shall be responsible for reporting any such findings to the Engineer. No work may occur within the 25-foot buffer until a qualified archaeologist has conducted onsite meetings with the Contractor and determined mitigation measures.

**CR-2:** If human remains are unearthed during construction, the Contractor shall immediately cease work within 100 feet of the remains and notify City of Chico Public Works Engineering at (530) 879-6900, pursuant to Health and Safety Code 7050.5. The supervising contractor shall be responsible for reporting any such findings to the Engineer. No work may occur within the 100-foot buffer until the City has made the necessary findings as to the origins and dispositions of the remains pursuant to the Public Resources Code 5097.98.

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# APPENDIX A:
# FIELD INVENTORY PHOTOGRAPHS

**Warner Street Bridge location:**


**Photograph 1.** Overview of north bank of Big Chico Creek along the east side of the pedestrian bridge adjacent to 12C-0276. View facing north.


**Photograph 2.** Close-up of erosional damage along the north bank of Big Chico Creek. View facing north/northeast.

**Photograph 3.** Overview of the north bank of Big Chico Creek and along the western edge of Bridge 12C-0276. View facing northwest.

**Photograph 4.** View of the north bank of Big Chico Creek west of Bridge 12C-0276. View facing north/northeast.


**Photograph 5.** Overview of dense vegetation throughout the Creek. View facing north.

**Rose Avenue Bridge location:**


**Photograph 6.** Overview of the Rose Avenue Bridge location. View facing southwest.


**Photograph 7.** Overview of significant erosional damage somewhat obscured by dense vegetation near the southeast corner of the bridge. View facing east.


**Photograph 8.** Overview of the Bridge and the location of the proposed concrete ultra block (white arrow). View facing west.

**Photograph 9.** Overview of the northeast bank of Big Chico Creek. View facing northeast.


**Photograph 10.** Overview of the northern bank where erosion damage is occurring (white arrow). View facing northwest.

# APPENDIX B:
# NEIC RECORDS SEARCH RESULTS
# (Not for Public Disclosure)

# APPENDIX B:
# NEIC RECORDS SEARCH RESULTS
# (Not for Public Disclosure)

# NATIVE AMERICAN HERITAGE COMMISSION



**NAHC HEADQUARTERS**
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710

July 22, 2024

Gabrielle Zachoszaj
Dokken Engineering

***Via Email to:*** ***gzachoszaj@dokkenengineering.com***

**Re: City of Chico On-Call: Big Chico Creek Erosion Repairs (2833) Project, Butte County**

Dear Ms. Zachosza:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF 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.

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

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cameron.vela@nahc.ca.gov.

Sincerely,

Cameron Vela

Cameron Vela
*Cultural Resources Analyst*

Attachment

# APPENDIX D:
# Caltrans Bridge Inventories

# Structure Maintenance & Investigations


## Historical Significance - Local Agency Bridges

## District 03

### Butte County

| Bridge Number | Bridge Name | Location | Historical Significance | Year Built | Year Wid/Ext |
|---|---|---|---|---|---|
| 12C0222 | SUTTER-BUTTE CANAL | 0.5 MI E/O LARKIN RD | 5. Bridge not eligible for NRHP | 1920 | |
| 12C0223 | WYMAN RAVINE | 0.2 MI E OF SH70 | 5. Bridge not eligible for NRHP | 1935 | |
| 12C0224 | WILSON CREEK | 0.4 MI E DUNSTONE DR | 5. Bridge not eligible for NRHP | 1950 | 2017 |
| 12C0225 | WILSON CREEK | 1.8 MI W BANGOR HWY | 5. Bridge not eligible for NRHP | 1961 | |
| 12C0226 | WILSON CREEK | 1.0 MI W OF BANGOR HWY | 5. Bridge not eligible for NRHP | 1961 | 2017 |
| 12C0228 | THERMALITO POWER CANAL | 0.8 MI NW NELSON AVE | 5. Bridge not eligible for NRHP | 1965 | |
| 12C0229 | FEATHER RIVER OUTLET | 1 MI E/O HAMILTON RD | 5. Bridge not eligible for NRHP | 1966 | |
| 12C0230 | EDGAR SLOUGH | JUST S NELSON RD | 5. Bridge not eligible for NRHP | 1965 | |
| 12C0231 | KUSEL ROAD OH | 1.1 MI E SH 70 | 5. Bridge not eligible for NRHP | 1962 | |
| 12C0232 | RICHVALE WEST DRAIN | 0.1 KM N OF RICHVALE HWY | 5. Bridge not eligible for NRHP | 1996 | |
| 12C0235 | WESTERN CANAL | 1 MI N OF NELSON RD | 5. Bridge not eligible for NRHP | 1960 | |
| 12C0236 | LITTLE CHICO CREEK | AT ORANGE ST | 5. Bridge not eligible for NRHP | 1940 | 1951 |
| 12C0237 | SYCAMORE CREEK | 0.2 MI N LASSEN AVE | 5. Bridge not eligible for NRHP | 1956 | 1992 |
| 12C0239 | LAGOON CREEK | 1 MI E GLENN/BUTTE CO LI | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0240 | HOGBACK DRAIN | 0.5 MI W RIVER RD | 5. Bridge not eligible for NRHP | 1980 | |
| 12C0241 | ANGEL SLOUGH | 0.1 MI E OF RIVER RD | 5. Bridge not eligible for NRHP | 1985 | |
| 12C0242 | LITTLE CHICO CREEK | 1 MI EAST OF RIVER ROAD | 5. Bridge not eligible for NRHP | 1949 | |
| 12C0243 | DURHAM MUTUAL DITCH | 0.5 MI E OF ESQUON RD | 5. Bridge not eligible for NRHP | 1972 | |
| 12C0245 | HAYES CANYON | 0.8 MI E OF S.R. 99 | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0246 | WEST BRANCH LITTLE DRY CREEK | 1.5 MI E OF SH 99 | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0247 | BERRY CANYON | 3.1 MI EAST OF SR 99 | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0248 | CLEAR CREEK | 4.1 MI E OF S.R. 99 | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0249 | HORSETHIEF CANYON | 1 MI W WHEELOCK ROAD | 5. Bridge not eligible for NRHP | 1971 | |
| 12C0250 | DRY CREEK | JUST E WHEELOCK RD | 5. Bridge not eligible for NRHP | 1973 | |
| 12C0251 | SUTTER-BUTTE CANAL | 0.9 MI E/O RTE 99 | 5. Bridge not eligible for NRHP | 1956 | |
| 12C0252 | MAIN DRAINAGE CANAL | 3.91 MI N/E FROM SH 99 | 5. Bridge not eligible for NRHP | 1938 | |
| 12C0255 | MIDWAY ROAD OH | 1.2MI NO DAYTON-DURHAM HY | 5. Bridge not eligible for NRHP | 1975 | |
| 12C0258 | THERMALITO CANAL | 0.4 MI NE TBLE MTN BL | 5. Bridge not eligible for NRHP | 1966 | |
| 12C0260 | THERMALITO FOREBAY | 2.1 MI W/O ST HWY 70 | 5. Bridge not eligible for NRHP | 1968 | |
| 12C0261 | CHEROKEE ROAD OH | 1 MI NE TBLE MTN BL | 5. Bridge not eligible for NRHP | 1963 | |
| 12C0263 | M & T CANAL | 0.62 MI E OF RIVER ROAD | 4. Historical Significance not determined | 1979 | |
| 12C0264 | NORTH FORK HONCUT CREEK | JUST N OF AVACADO ROAD | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0265 | WILSON CREEK | 5 MI E/O ST HWY 70 | 5. Bridge not eligible for NRHP | 1950 | |
| 12C0267 | GOLD RUN CREEK | 1.9 MI S E SHIPPEE RD | 5. Bridge not eligible for NRHP | 1955 | |
| 12C0268 | DRY CREEK | 0.15 MI N SHIPPEE RD | 5. Bridge not eligible for NRHP | 1930 | 1952 |
| 12C0269 | DRY CREEK OVERFLOW | 0.2 MI N/W SHIPPEE RD | 5. Bridge not eligible for NRHP | 1922 | 1931 |
| 12C0270 | DRY CREEK OVERFLOW | 0.25 MI N/W SHIPPEE RD | 5. Bridge not eligible for NRHP | 1955 | |
| 12C0271 | WYANDOTTE CREEK | 1.5 MI E/O ST HWY 70 | 5. Bridge not eligible for NRHP | 1937 | 1976 |
| 12C0272 | PLEASANT VALLEY DITCH | 1.3 MI EAST OF ST ROUT 99 | 5. Bridge not eligible for NRHP | 1962 | |
| 12C0273 | LINDO CHANNEL | BTWN E 10TH & COHASSET | 5. Bridge not eligible for NRHP | 1963 | |
| 12C0274 | LINDO CHANNEL | AT E. LINDO AVENUE | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0275 | LINDO CHANNEL | BTW EAST AVE & HOOKER OAK | 5. Bridge not eligible for NRHP | 1968 | 2009 |
| 12C0276 | BIG CHICO CREEK | BTW 1ST ST & LEGION AVE | 5. Bridge not eligible for NRHP | 1938 | 1995 |

# Structure Maintenance & Investigations


## Historical Significance - Local Agency Bridges

## District 03

### Butte County

| Bridge Number | Bridge Name | Location | Historical Significance | Year Built | Year Wid/Ext |
|---|---|---|---|---|---|
| 12C0323 | SANDY GULCH | JUST W OF GRAPE WAY | 5. Bridge not eligible for NRHP | 1967 | |
| 12C0324 | SANDY GULCH | 0.5 MI W GLENWOOD AVE | 5. Bridge not eligible for NRHP | 1906 | 1936 |
| 12C0325 | BIG CHICO CREEK | AT BIDWELL AVENUE | 5. Bridge not eligible for NRHP | 1925 | |
| 12C0326 | BRANCH PINE CREEK | 5 MI W OF S.R 99 | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0327 | LITTLE CHICO CREEK | 0.5 MI S CHICO RIVER RD | 5. Bridge not eligible for NRHP | 1939 | |
| 12C0328 | LITTLE CHICO CREEK | 0.4 MI SE/O MILLER AVE | 5. Bridge not eligible for NRHP | 1917 | |
| 12C0329 | ASH CREEK OVERFLOW | 1.3 MI W MIDWAY RD | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0330 | HANLON SLOUGH | 2.60 MI N OF NELSON RD | 5. Bridge not eligible for NRHP | 1937 | |
| 12C0332 | ROCKY HONCUT CREEK | 2.6 MI E BANGOR HWY | 5. Bridge not eligible for NRHP | 1925 | |
| 12C0334 | LITTLE CHICO CREEK | 0.1 MI N CHICO AVE | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0335 | LITTLE CHICO CREEK | AT W 9TH ST | 5. Bridge not eligible for NRHP | 1980 | |
| 12C0336 | LITTLE CHICO CREEK | 0.1 MI N OF 10TH ST | 5. Bridge not eligible for NRHP | 1916 | |
| 12C0337 | LITTLE CHICO CREEK | S OF 9TH ST | 5. Bridge not eligible for NRHP | 1920 | 1930 |
| 12C0338 | LITTLE CHICO CREEK | 0.1 MI N OF 12TH ST | 5. Bridge not eligible for NRHP | 1950 | |
| 12C0339 | RUDY CREEK | 0.3 MI E OF 18TH ST | 5. Bridge not eligible for NRHP | 1994 | |
| 12C0340 | DUDLEY CREEK | 0.9 MI W TABLE MTN BLVD | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0342 | SOUTH BRANCH WYMAN RAVINE | JUST SOUTH MT IDA RD | 5. Bridge not eligible for NRHP | 1926 | 1973 |
| 12C0343 | WYMAN RAVINE | 0.9 MI S LAS PLUMAS AVE | 5. Bridge not eligible for NRHP | 1972 | |
| 12C0344 | BRANCH WYMAN RAVINE | 1 MI S LAS PLUMAS AVE | 5. Bridge not eligible for NRHP | 1940 | |
| 12C0347 | LITTLE DRY CREEK | 1.2 MI E AGUAS FRIAS RD | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0348 | LITTLE DRY CREEK | 2.55 MI W OF COLONY RD | 5. Bridge not eligible for NRHP | 1928 | |
| 12C0349 | LITTLE DRY CREEK | 1.8 MI W COLONY RD | 5. Bridge not eligible for NRHP | 1930 | 1940 |
| 12C0352 | DURHAM MUTUAL DITCH | 0.7 MI W OROVILLECHICO HY | 5. Bridge not eligible for NRHP | 1949 | |
| 12C0353 | EAST BRANCH DURHAM MUTUAL DITCH | 0.35 MI W OROVLE CHICO HY | 5. Bridge not eligible for NRHP | 1920 | |
| 12C0354 | NANCE CANYON | 0.5 MI E OROVLE CHICO HWY | 5. Bridge not eligible for NRHP | 1920 | 1931 |
| 12C0357 | WYMAN RAVINE | BTWN GENE LN & WYMAN AVE | 5. Bridge not eligible for NRHP | 1970 | |
| 12C0358 | WYMAN RAVINE | 0.4 MI E OF SH 70 | 5. Bridge not eligible for NRHP | 1989 | |
| 12C0360 | WILSON CREEK | N OF LA PORTE RD | 5. Bridge not eligible for NRHP | 1970 | 2015 |
| 12C0361 | EAST BRANCH WYANDOTTE CREEK | 0.4 MI W PALERMO-HONCUT | 5. Bridge not eligible for NRHP | 1920 | |
| 12C0362 | DRAINAGE DITCH | 0.5 MI W OF PALERMO-HONC | 5. Bridge not eligible for NRHP | 1920 | |
| 12C0363 | LITTLE CHICO CREEK | BTWN DAYTON RD & 9TH ST | 5. Bridge not eligible for NRHP | 1982 | |
| 12C0364 | CONCOW CREEK | 0.8 MI W OF CONCOW RD | 5. Bridge not eligible for NRHP | 1920 | |
| 12C0365 | HODDAP CREEK | 2.7 MI W CONCOW RD | 5. Bridge not eligible for NRHP | 1927 | |
| 12C0366 | COTTONWOOD CREEK | 2.8 MI E/O RTE 99 | 5. Bridge not eligible for NRHP | 1930 | |
| 12C0367 | WESTERN CANAL | 0.6 MI E/O MIDWAY RD | 5. Bridge not eligible for NRHP | 1940 | |
| 12C0370 | THERMALITO BAY CONNECTION | 0.25 MI N OF SR 162 | 5. Bridge not eligible for NRHP | 1966 | |
| 12C0371 | BIGGS EXTENSION CANAL | 1.4 MI E/O RICETON HWY | 5. Bridge not eligible for NRHP | 1940 | |
| 12C0374 | BRANCH SUTTER-BUTTE CANAL | 0.2 MI N/O SOUTH AVE | 5. Bridge not eligible for NRHP | 1938 | |
| 12C0375 | NO NAME DRAIN | 0.2 MI E/O RAILROAD AVE | 5. Bridge not eligible for NRHP | 1936 | |
| 12C0377 | HAMILTON SLOUGH | 0.2 MI S/O B ST IN BIGGS | 5. Bridge not eligible for NRHP | 1938 | |
| 12C0378 | LIVE OAK SLOUGH | 0.2 MI W/O LARKIN RD | 5. Bridge not eligible for NRHP | 1950 | |
| 12C0379 | LATERAL "A" | 0.5 MI E/O WICKMAN RD | 5. Bridge not eligible for NRHP | 1998 | |
| 12C0380 | CHEROKEE CANAL | 0.4 MI E/O WICKMAN RD | 5. Bridge not eligible for NRHP | 1959 | |