

---

DRAFT ENVIRONMENTAL ASSESSMENT

*2010 WATERSMART: WATER AND ENERGY EFFICIENCY GRANT FOR THE  
FRESNO IRRIGATION DISTRICT BRIGGS LATERAL CANAL IMPROVEMENT  
PROJECT*

**Appendix B**  
**Cultural Resources Report**

---

October 2011



**A CULTURAL RESOURCES SURVEY FOR THE  
FRESNO IRRIGATION DISTRICT'S  
BRIGGS CANAL IMPROVEMENT PROJECT,  
MALAGA, FRESNO COUNTY, CALIFORNIA**

Prepared by:

Jon L. Brady, M.A. and C. Kristina Roper, M.A., RPA  
Sierra Valley Cultural Planning  
41845 Sierra Drive  
Three Rivers, CA 93271  
(559) 561-3816

With contributions by:

William B. Secrest, Jr., M.S.

Submitted to:

Emily Magill Bowen  
Provost & Pritchard Consulting Group  
130 N. Garden Street  
Visalia, CA 93291  
(559) 636-1166 x 509

21 June 2011 (revised 16 August 2011)

USGS Topographic Quadrangle: Malaga, Calif., 7.5' (1978/1981)

Area: <1 acre / <0.4 hectares

(Keywords: *Briggs Canal Company, Malaga Extension No. 431, Fresno County, Township 15S, Range 21E*)

# TABLE OF CONTENTS

	<i>Page</i>
<b>MANAGEMENT SUMMARY .....</b>	<b>2</b>
<b>1.0 INTRODUCTION.....</b>	<b>3</b>
1.1 PROJECT DESCRIPTION .....	3
1.2 REGULATORY FRAMEWORK.....	4
<b>2.0 SETTING.....</b>	<b>5</b>
2.1 NATURAL ENVIRONMENT .....	5
2.2 PREHISTORIC PERIOD SUMMARY .....	7
2.3 ETHNOGRAPHIC SUMMARY .....	11
2.4 HISTORIC PERIOD SUMMARY .....	12
2.4.1 Development of Fresno.....	12
2.4.2 Early Water Conveyance Systems.....	13
2.4.3 The Briggs Ditch (Canal).....	18
2.4.4 The Malaga Canal .....	21
<b>3.0 RESEARCH METHODS.....</b>	<b>22</b>
3.1 RECORD SEARCH RESULTS.....	22
3.2 NATIVE AMERICAN CONSULTATION.....	23
3.3 HISTORICAL RESEARCH .....	23
3.4 ARCHITECTURAL FIELD METHODS .....	23
3.5 ARCHAEOLOGICAL FIELD METHODS .....	23
<b>4.0 RESULTS AND FINDINGS .....</b>	<b>23</b>
4.1 ARCHITECTURAL EVALUATION.....	23
4.1.1 The Briggs Canal.....	23
4.1.2 The Malaga Canal.....	27
4.2 SUMMARY .....	28
<b>REFERENCES CITED.....</b>	<b>30</b>
<b>PROFESSIONAL QUALIFICATIONS.....</b>	<b>33</b>
<b>ATTACHMENT A: CULTURAL RESOURCES RECORDS SEARCH, .....</b>	<b>34</b>
<b>ATTACHMENT B: DPR-523 RECORDS .....</b>	<b>40</b>

## MANAGEMENT SUMMARY

Between May 29 and June 15, 2011, an intensive cultural resources survey, including both archaeological and historic architectural resource survey, was performed of the <1-acre (<0.4-hectare) Fresno Irrigation District's (FID) Briggs Canal Improvement Project area, located north of the City of Fowler, Fresno County, California (see Figures 1, 2a and 2b). The FID proposes to improve components of the Briggs Canal and the Malaga Canal. The Bureau of Reclamation, which serves as the federal lead agency for the undertaking, requires a cultural resources inventory and recommendations on resource determinations and findings for compliance with the Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations at 36 Code of Federal Regulation (CFR) Part 800. The present study was performed to identify any significant cultural resources (historic properties) that may be present within the FID's Briggs Canal project area, and thus anticipates provisions set forth in both state and federal historic preservation law. Provisions and implementing guidelines of the California Environmental Quality Act (CEQA), as amended March 18, 2010, state that identification and evaluation of historical resources is required for any action that may result in a potential adverse effect on the significance of such resources, which include archaeological resources. Identification of historic properties is also required pursuant to provisions and implementing regulations of Section 106 of the NHPA as cited above.

Portions of the Briggs Canal within the Fresno Irrigation District and the Malaga Canal in the Consolidated Irrigation District are located within the project's non-contiguous Area of Potential Effects (APE). Those portions of the aforementioned canals were identified, recorded, and evaluated for this report (refer to Appendix B). These historic-era sections of the canals do not appear to be eligible for listing in the National Register of Historic Places (NRHP) under Criterion A-D; they do not appear to meet the Section 106 definition of a "historic property" (36 CFR 800.16[1]); and these properties were evaluated for the California Register of Historical Resources (CR) and do not appear to meet any of eligibility criteria. If the larger systems were to be evaluated and determined to be part of historic districts, those sections evaluated for this report would not be contributors to those historic districts. The Briggs Canal and the Malaga Canal are not historic resources for the purposes of CEQA.

No historic properties (properties eligible for listing in the NRHP or the CR) were identified as a result of surface inspection of the project APE; thus, it is unlikely that proposed improvements to the Briggs Canal and the Malaga Canal will have an effect on significant archaeological, historical, or other cultural resources. No further cultural resources investigation is therefore recommended. In the unlikely event that buried archaeological deposits are encountered during development-related activities, work in the immediate vicinity of the discovery must cease until the finds have been evaluated by a qualified archaeologist. Should human remains be encountered during development, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

## **1.0 INTRODUCTION**

This report presents the findings of a cultural resources survey of the <1-acre (<0.4-hectare) Fresno Irrigation District's (FID) Briggs Canal Improvement project area, located ~1.5 miles north of the City of Fowler, Fresno County, California within Township (T) 15 South (S), Range (R) 21 East (E), Sections 3, 4 and 5, Mt. Diablo Base and Meridian (MDB&M); see Figures 1, 2a and 2b.

The FID proposes to improve components of the Briggs Canal and the Malaga Canal. The project will provide improved operational control, water management and capacity for conveyance of FID's existing surface water supplies to its existing recharge facilities. The Bureau of Reclamation, which serves as the federal lead agency for the undertaking, requires a cultural resources inventory and recommendations on resource determinations and findings for compliance with the Section 106 of the NHPA and implementing regulations at 36 CFR Part 800. The present study was performed to identify any historic properties that may be present within the FID's Briggs Canal project APE, and thus anticipates provisions set forth in both state and federal historic preservation law. Provisions and implementing guidelines of CEQA, as amended March 18, 2010, state that identification and evaluation of historical resources is required for any action that may result in a potential adverse effect on the significance of such resources, which include archaeological resources. Identification of historic properties is also required pursuant to provisions and implementing regulations of Section 106 of the NHPA. No previous cultural resources have been recorded within or in the immediate vicinity of the project APE.

The authors (Brady and Roper) and one assistant conducted an intensive cultural resources survey of the project APE between May 29 and June 15, 2011. Survey was completed for both archaeological and historical architectural resources. No significant cultural resources (historic properties) were identified as a result of surface inspection of the project APE.

A brief description of the natural and cultural setting of the project APE follows this introduction. Survey methods and findings are presented in subsequent sections.

### **1.1 Project Description**

The project APE includes six proposed improvement elements located within a non-contiguous area along portions of the Briggs and Malaga canals. The project APE is limited to the individual improvement elements described below with a 10-foot buffer on either/all sides of the canal and associated water control structures (see Figure 2). Proposed improvements to the Briggs and Malaga canals include the following:

- Installation of new concrete lining along an approximately 1,400-foot section of the Briggs Canal near Jefferson Pond. The relining of the canal will extend from Cornell Pond to the existing culvert pipeline at Jefferson Pond, and may include the reconstruction of the existing check structure at Jefferson Pond (Improvement 1 – see Figure 2a).
- Construction of Jefferson Pond turnout. Estimated excavation for the turnout would be an area of approximately 15' x 15' x 8' deep. Trenching for the 18" pipeline would be about 3' wide assuming an 18" wide trench for the pipeline, and some shoring at a total

depth of 4.5'. Construction is likely to be completed with an excavator or backhoe, compaction wheel and compaction whacker (Improvement 2 – see Figure 2a)

- Malaga Canal Improvements. A new automated canal control gate will be installed in a section of the Malaga Canal which routes into the Briggs Canal. A concrete irrigation box structure will be constructed to house the gate. Electrical power will be required at the site. Water level sensors and SCADA control will be included. The electrically actuated control gate will regulate the flowrate of water downstream that goes to the Briggs Canal. A new concrete irrigation box will be constructed upstream to improve diversion into the Malaga Pond (Improvement 3 – see Figure 2a).
- The existing Briggs South Branch Headgate will be relocated upstream of an existing long-crested weir on Fowler Avenue south of American Avenue, by installing approximately 600' of parallel 24-36" diameter PVC or concrete pipeline along the canal ditch bank. Construction will require a trench depth of approximately 10' wide depending on soil conditions. Construction is likely to occur with an excavator or backhoe, compaction wheel and compaction whacker. Connections to the existing facilities would require minor concrete and grouting work. A small concrete turnout would be required where the pipeline connects upstream of the check weir so that the pipeline could be shut off if desired. For the turnout, a small area of about 15'x15'x 6'deep will need to be excavated using similar equipment as that required for the pipeline (Improvement 4 – see Figure 2a).
- Replacement of the existing electrically actuated control gate at the existing concrete water control box structure referred to as the Cunha Box. The upgrade will include a control gate with an electric actuator, water level sensors, and SCADA equipment to monitor and control water level in the Briggs pipeline. Electrical power is already at the site for the existing gates (Improvement 5 – see Figure 2a).
- Replacement of the existing electrically actuated control gate at the existing concrete water control box structure referred to as the Sunnyside Box. The upgrade will include a control gate with an electric actuator, water level sensors, and SCADA equipment to monitor and control water level in the Briggs pipeline. Electrical power is already at the site for the existing gates (Improvement 6 – see Figure 2a).

## **1.2 Regulatory Framework**

The significance of cultural resources is evaluated under the criteria for inclusion in the NRHP authorized under the NHPA of 1966, as amended. The criteria defined in 36 CFR 60.4 are as follows:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- a. that are associated with events that have made a significance contribution to the broad patterns of our history; or
- b. that are associated with the lives of persons significant in our past; or
- c. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that

- represent a significant and distinguishable entity whose components may lack individuals distinction; or
- d. that have yielded, or may be likely to yield, information important to prehistory or history.

Sites listed or eligible for listing on the NRHP are considered to be "historic properties." Sites younger than 50 years, unless of exceptional importance, are not eligible for listing in the NRHP.

CEQA requires consideration of project impacts on archaeological or historical sites deemed to be "historical resources." Under CEQA, a substantial adverse change in the significant qualities of a historical resource is considered a significant effect on the environment. For the purposes of CEQA, a "historical resource" is a resource listed in, or determined to be eligible for listing in, the CR (Title 14 CCR §15064.5(a)(1)-(3)). Historical resources may include, but are not limited to, "any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC §5020.1(j)).

The eligibility criteria for the CR are the definitive criteria for assessing the significance of historical resources for the purposes of CEQA (Office of Historic Preservation n.d.). Generally, a resource is considered "historically significant" if it meets one or more of the following criteria for listing on the CR:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

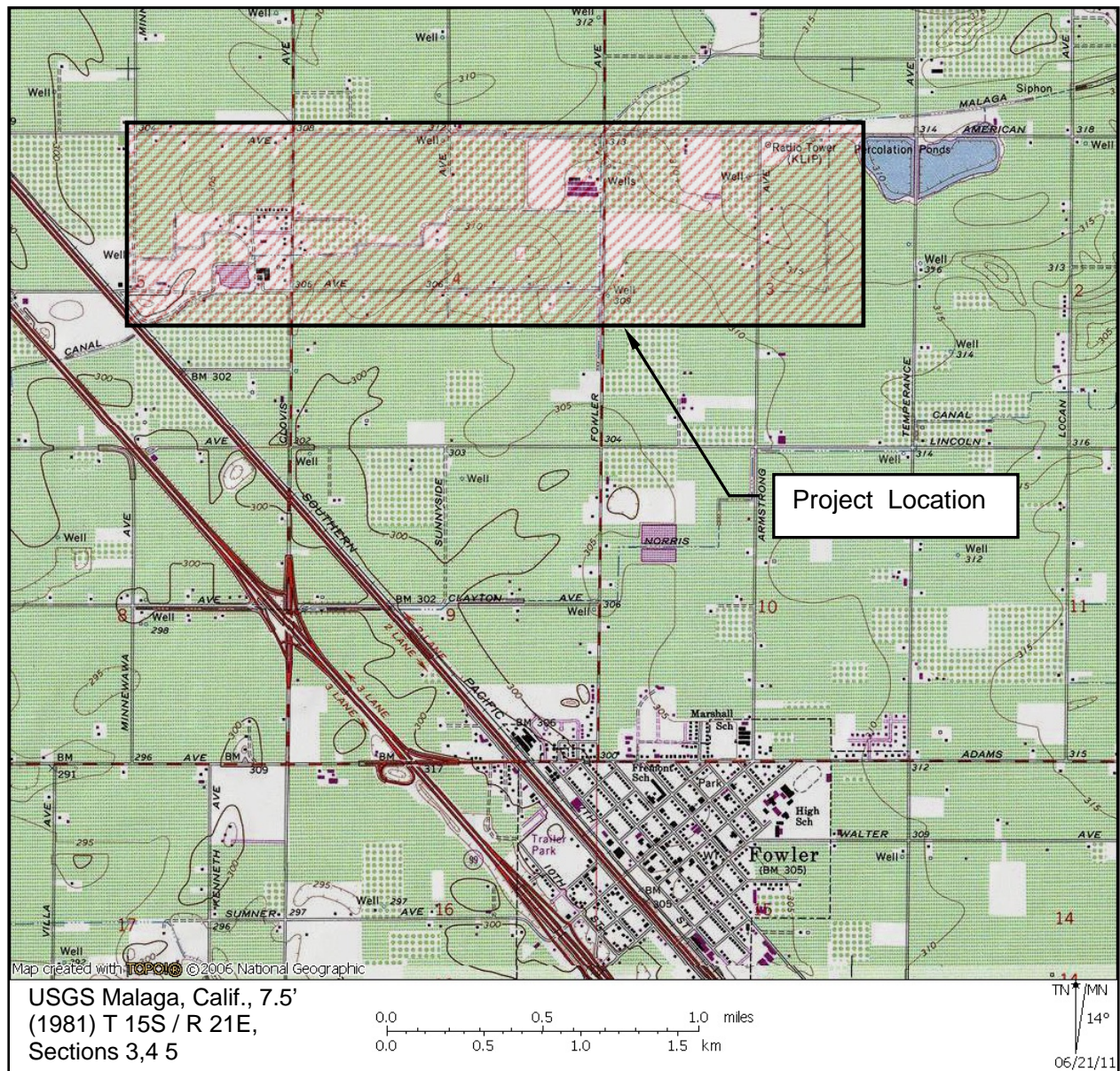
## **2.0 SETTING**

The non-contiguous project APE is located approximately 1.5 miles north of the Fowler city limits in central Fresno County. The study area is bounded on the west by Golden State Boulevard and the Southern Pacific RR, on the north by American Avenue, on the east by Malaga Pond, and on the south by Jefferson Avenue. Land use within the project APE is primarily agricultural. The study area is planted in grape vines and various tree orchards. Overviews of the project APE are included in Figures 3a-d.

### **2.1 Natural Environment**

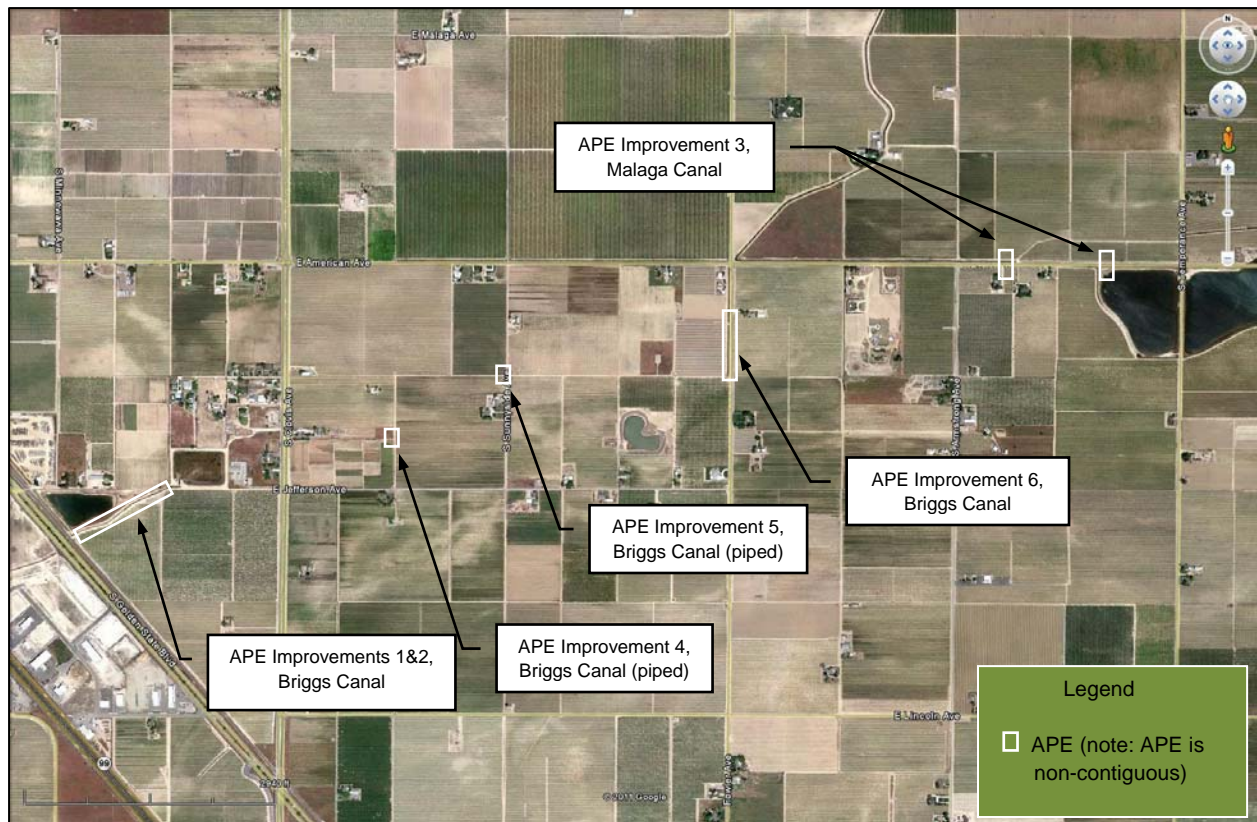
The project APE is located in a rural agricultural area north of the City of Fowler in central Fresno County. Elevation ranges from 300-315 ft (91-96 m) above mean sea level. Soils within the project area include tan sandy silt. Present vegetation is dominated by agricultural vineyards and various tree crops including orange, various stone fruit, and pomegranate. Non-native trees, shrubs and grasses occur adjacent planted areas and surrounding rural residences and agricultural and irrigation related facilities and structures.





**Figure 1.** Generalized Location of the FID Briggs Canal Improvement Project Study Area, near Fowler, Fresno County, California.



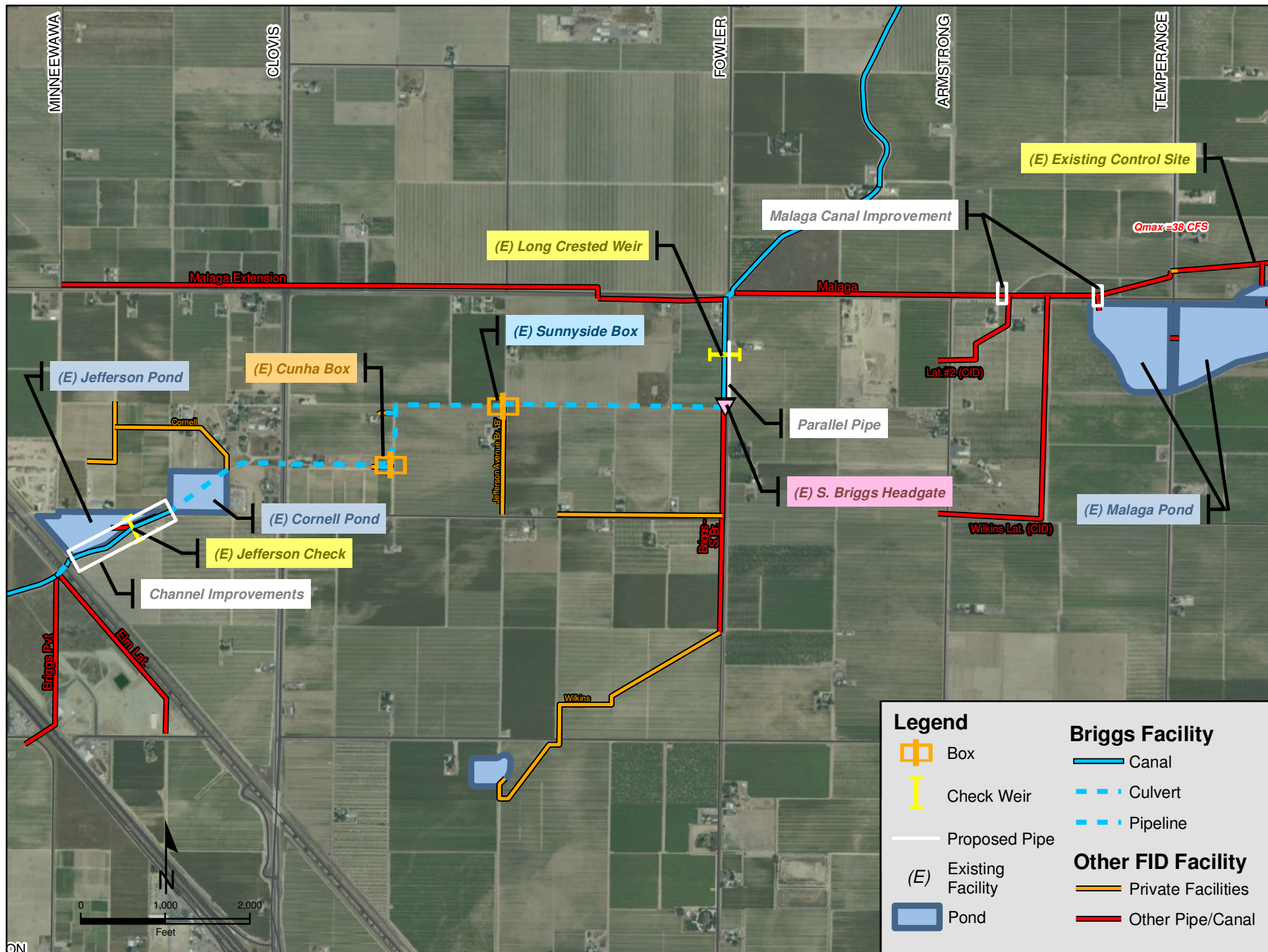


**Figure 2a. Area of Potential Effect (APE).**

Before EuroAmerican intrusion and settlement in the region, much of the San Joaquin Valley was extensive grassland covered with spring-flowering herbs. Stands of trees -- sycamore, cottonwoods, and willows -- lined the major rivers as well as tributary stream courses. Groves of valley oaks occurred in well-watered localities with rich soil. Rivers yielded fish, mussels, and pond turtles; migratory waterfowl nested in the dense tules along the river. Tule elk, sometimes referred to by early Spanish explorers as wild horses, found ample forage. Smaller mammals and birds, including jackrabbits, ground squirrels, and quail were abundant.

## 2.2 Prehistoric Period Summary

The San Joaquin Valley and adjacent Sierra Nevada foothills and Coast Range have a long and complex cultural history with distinct regional patterns that extend back more than 11,000 years (McGuire 1995). The first generally agreed-upon evidence for the presence of prehistoric peoples in the region is represented by the distinctive fluted spear points, termed Clovis points, found on the margins of extinct lakes in the San Joaquin Valley. The Clovis points are found on the same surface with the bones of extinct animals such as mammoths, sloths, and camels. Based on evidence from elsewhere, the ancient hunters who used these spear points existed during a narrow time range of 10,900 BP to 11,200 BP.



4/19/2011 \\pineflat\dwg\_dgn\Clients\Fresno ID - 1038\MP - Masterplanning\Briggs7\malaga\_canal\_improvements.mxd

Figure 2b. Location of Components of the FID's Briggs Canal Improvement Project.





**Figure 3a.** Looking east/northeast along Briggs Canal toward Jefferson Check Weir in area of proposed turnout.



**Figure 3b.** Looking southwest toward Cunha Box.



**Figure 3c.** Looking west toward the Sunnyside Box.



**Figure 3d.** Looking west along that portion of Malaga Canal that was piped after 1979 (north side of East American Avenue); Malaga Pond at left (south side of road).

The next cultural period represented, the Western Pluvial Lakes tradition, thought by most to be after the Clovis period, is another widespread material complex that is characterized by stemmed spear points. This poorly defined early cultural tradition is regionally known from a small number of sites in the Central Coast Range, San Joaquin Valley lake margins, and Sierra Nevada foothills. The cultural tradition is dated to between 8,000 and 10,000 years ago and its practitioners may be the precursors to the subsequent cultural pattern.

About 8,000 years ago, many California cultures shifted the main focus of their subsistence strategies from hunting to seed gathering, as evidenced by the increase in food-grinding implements found in archeological sites dating to this period. This cultural pattern is best known for southern California, where it has been termed the Milling Stone Horizon (Wallace 1954, 1978a), but recent studies suggest that the horizon may be more widespread than originally described and is found throughout the region. Radiocarbon dates associated with this period vary between 8,000 and 2,000 BP, although most cluster in the 6,000 to 4,000 BP range (Basgall and True 1985).

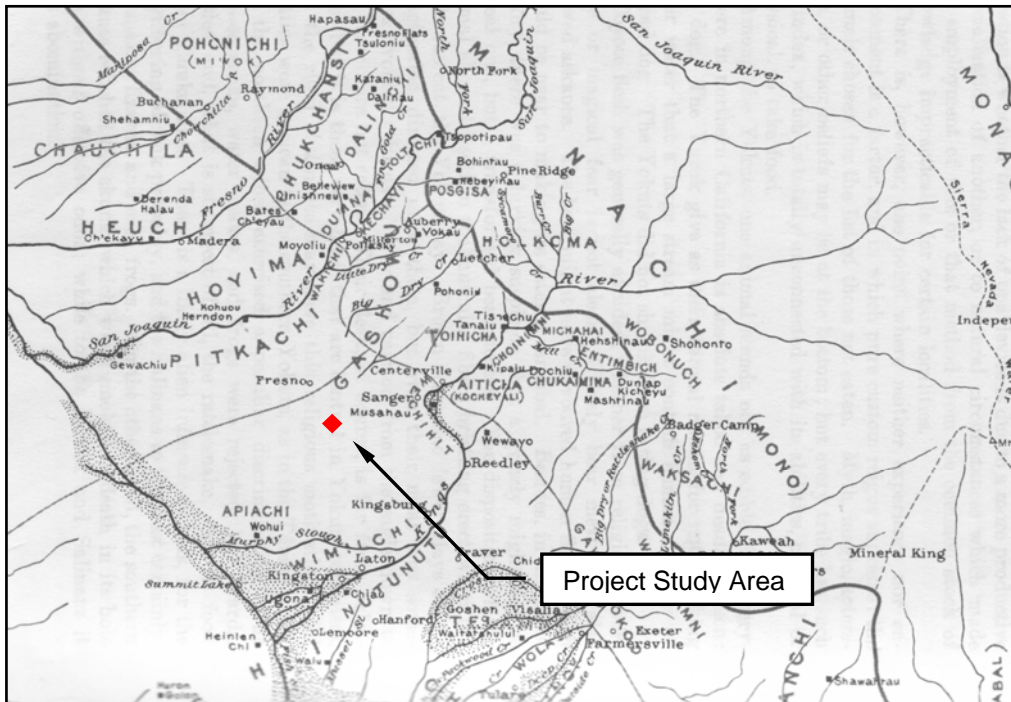
Cultural patterns as reflected in the archeological record, particularly specialized subsistence practices became codified within the last 3,000 years. The archeological record becomes more complex, as specialized adaptations to locally available resources were developed and populations expanded. Many sites dating to this time period contain mortars and pestles and/or are associated with bedrock mortars, implying the intense exploitation of the acorn. The range of subsistence resources utilized and exchange systems expanded significantly from the previous period. In the Central Valley, archaeological evidence of social stratification and craft specialization is indicated by well-made artifacts such as charmstones and beads, often found as mortuary items. Ethnographic lifeways serve as good analogs for this period.

### **2.3 Ethnographic Summary**

Prior to EuroAmerican settlement, most of the San Joaquin Valley and the bordering foothills of the Sierra Nevada and Coast Range were inhabited by speakers of Yokutsan languages. The southern San Joaquin Valley, from the lower Kings River to the Tehachapi Mountains, formed the nucleus of the Southern Valley Yokuts homeland (Wallace 1978:448). Population densities were highest in this area, with as many as 10+ people per square mile living along a narrow strip bordering the San Joaquin and its tributaries (Baumhoff 1963: map 7). The present project area falls between the territories of several Native groups. To the east near Sanger and Reedley were the *Wechihit*; to the southwest on Cole (Cold) and Murphy sloughs were the Wimilchi. Kroeber (1925:484) notes the *Apiachi* (Latta's *Apiche* [1999:163]) as living north of Murphy Slough west of present-day Selma. The *Apiachi* were closely related to the more widely distributed *Tache* who occupied the northern and western shores of Tulare Lake. The *Apiachi* village of *Wohue* was situated on the north bank of Murphy Slough about seven miles above its junction with Sanjón de San José (Fresno Slough; see Figure 4).

Numerous accounts of Valley Yokuts lifeways offer details of pre-European land use in the San Joaquin Valley. The reader is referred to Gayton (1948), Kroeber (1925), Latta (1977) and Wallace (1978) for additional information on pre-contact Yokuts subsistence and culture.





**Figure 4.** Northern Valley Yokuts Village Locations (from Kroeber 1925: Plate 47).

## 2.4 Historic Period Summary

The eastern San Joaquin Valley was visited in the early 1800s by Spanish expeditions exploring the interior in search of potential mission sites. The Jose Joaquin Moraga and Juan Bautista Anza expeditions of 1776 may have passed through the region, followed by subsequent expeditions in 1805 and later (Cook 1955, 1962). On January 6, 1805 Captain Gabriel Moraga crossed the Kings River<sup>1</sup> and named it *El Río de los Santos Reyes* (River of the Holy Kings) while passing through the area to the southeast in 1805 (Cook 1962; Kings River and Conservation District and Kings River Water Association 2003:4).

### 2.4.1 Development of Fresno

In 1856, Fresno County was formed from portions of Mariposa, Merced and Tulare counties, with the town of Millerton designated as the first seat of government. By 1874, the seat had moved to the more centrally located City of Fresno, located near the recently-completed Central Pacific Railroad tracks (Brady 1985:6; Carter n.d.: 5).

The city of Fresno was founded under the conditions discussed below. The Central Pacific Railroad (hereinafter, Central Pacific), having completed the western segment of the Transcontinental Railroad, decided to connect the northern part of the state with Los Angeles (Eaton 1965: ix). The railroad line would traverse Fresno County with its principal stop being located at Sycamore (now Herndon) on the San Joaquin River. Construction crews commenced work on the rail line on December 31, 1869. During an inspection tour, several officials of the Central Pacific including its director, Leland Stanford, visited the 2,000 acre ranch

<sup>1</sup> The Kings River has been the primary source of irrigation water for Fresno County since 1872



of A. J. Easterby (Clough and Secrest 1984:121). Upon seeing the fields of “gently-waving green grain,” Stanford exclaimed “Wonderful! Here we must build the town” (Eaton 1965). The new site was located in the “Sinks of the Dry Creek,” the lowest spot between the San Joaquin and the Kings rivers (Clough and Secrest 1984:121; Eaton 1965).

Shortly after Leland Stanford’s visit to Easterby’s ranch, the Contract and Finance Company (a real estate subsidiary of Central Pacific) purchased 4,480 acres of land from the German Syndicate of which Easterby was a member. This group of German-born residents of San Francisco had previously purchased 80,000 acres from William S. Chapman (Eaton 1965: ix; Clough and Secrest 1984:121).

By the spring of 1873 track had been laid as far as the new town site of Fresno. At the end of April 1873 Fresno had side tracks and a turning table. Over the course of the next month the town site was surveyed by Edward H. Mix. It was divided into “302- by 400-foot blocks, with 25- by 150-foot lots and twenty-foot alleys” (Eaton 1965; Clough and Secrest 1984:121). The cost of individual lots was dependent upon location – lots ranged from \$60 to \$250. Within two years the city boasted of having “four general stores, two fruit stores, one drugstore, three hotels, two restaurants, six saloons, two law offices, two physicians, one tinsmith, one saddleshop, two butcher shops, three blacksmiths, one tailor, the *Expositor*, and twenty-five private residences” (Clough and Secrest 1984:122).

As the community grew in stature and with an ever increasing population, calls for a change in the county seat from Millerton to Fresno were being made. Eventually, a petition was submitted to the Fresno County Board of Supervisors calling for a special election to address this issue. On March 23, 1874 the special election was held and resulted in Fresno being designated the new county seat.

Aside from the railroad, the colony system and agriculture made the community of Fresno the leading agricultural center of the San Joaquin Valley. In developing the colony system, land speculators purchased large tracts of land, divided them into 20-acre lots, and in many cases built roads, canals, and lined streets and canals with decorative trees and plantings. Promoters advertised these colonies as self-contained units with ample water to grow crops and raise a family. These successful promotions contributed to the growth of Fresno County, and ultimately, the City of Fresno.

#### *2.4.2 Early Water Conveyance Systems*

Prior to the 1870s grain farming, also known as “dry farming,” dominated the plains of Fresno County between the San Joaquin and Kings River. Generally, “dry farming” was undertaken by large land holders. Grain farmers relied solely on spring rains to grow their wheat. Unfortunately, the decade of the 1860 was marked by one drought after another. According to one source (Vandor 1919:170) in 1862 the San Joaquin Valley basin extending from Sacramento to Visalia was under two feet of water as a result of flooding. In 1863 and 1864, the valley experienced severe drought seasons. By the latter 1860s, some individuals were seeking alternatives to provide water for crops. Irrigation appeared to be the most logical course of action.

The earliest attempts at irrigation generally occurred along major drainages such as the Kings River. The first ditches to be constructed along the Kings River were actually created to bring water to the small community of Centerville between 1863 and 1866, but these ditches were destroyed by flooding during the winter of 1866-67 (KRCD and KRW 2003:5). According to

another source, two of the earliest settlers to use Kings water to irrigate their crops were Anderson Akers and S.S. Hyde, who in 1866, "...had a four-foot wide and two-foot deep ditch taking water from the river [Kings River] below William Hazelton's farm to theirs on the west side of the river...." (Vandor 1919:181). Their farm was located about four miles north Centerville, established in the late 1850s. Two years later, Akers and Hyde sold their water rights to the Centerville Canal and Irrigation Company.<sup>2</sup> In 1869 J.B. Sweem made it known that he intended to construct "Sweem's Ditch" to provide water power for his grist mill located about four miles north of the settlement of Centerville (Vandor 1919:181). Water was taken from the Kings River just below the Centerville Ditch. During this same period, large land holders, such as Easterby, on the plains near the present-day community of Fresno began to see irrigation as a way to make their land more valuable.

Water was the key to the success of the colony system. Thus, during the 1870s property owners east of present-day Fresno attempted to expand the earliest canals. The most ambitious undertaking was that of Easterby who eventually used Kings River water to irrigate 2,000 acres of his lands in Sections 5 and 6 of T 14S, R 21E, which was bounded by present-day Chestnut Avenue, Kings Canyon Road, Clovis Avenue, and Belmont Avenue. Easterby hired Moses Church to supervise the construction of a canal to bring water to his land (Willison 1980:65-83).

In order to accomplish this task, Church, Easterby, and Robert Edmiston, an engineer, incorporated the Fresno Canal and Irrigation Company (FCIC) on February 16, 1871 (Thickens 1946:21). Church intended to widen and lengthen the Centerville Ditch until it reached the natural channel of Fancher Creek. Although Fancher Creek was a natural conduit, it was extended in various stages during the late 1870s, 1880s, and decades later, to serve irrigated colonies to the south and west of the Easterby property (Weitze 1992: Vol 3).

The Fancher Creek Canal, also known as the Fresno Canal in the late 1800s, was completed in 1874. The canal began at the terminus of the Centerville Canal/Ditch (later renamed the Fresno Canal by Church) near the "...center of Section 31, T 13S, R 23E, and running thence in a southwesterly direction 9.09 miles more or less to the terminus of said canal near the south line of the northeast quarter of Section 17, T 14S, R 22E" (Willison 1980:270).

It was from Fancher Creek Canal, a bulk conveyance system, that several smaller ditches/canals drew water from. One of the earliest was the Eisen Ditch, also constructed in the early 1870s, which irrigated considerable acreage for both Easterby and F. T. Eisen. A review of historic maps suggests that Eisen Ditch along with numerous laterals extending from it carried a substantial flow (Mikesell 1991:5). The head of the ditch is located on the west side of Fancher Creek Canal in the southwest one-quarter of Section 35 of T 13S, R 21E. From here it carried water in a southwesterly direction to a point where it intersected Temperance and Belmont avenues (Belmont was originally known as Centerville and Fresno Road). The ditch continued on the south side of Belmont Avenue to its intersection with Fowler Avenue. The ditch turned southwest across Easterby land. Today, that section of the ditch on the south side of Belmont between Temperance and Fowler avenues is piped underground. A second ditch

---

<sup>2</sup> The company was incorporated on August 9, 1868. It provided most of the irrigation water to farmers in the immediate vicinity of Centerville through a 24-foot wide and four-foot deep ditch known as the Centerville Ditch.

drawing water from Fancher Creek Canal is the Briggs Ditch (later identified as the Briggs Canal<sup>3</sup>; see Figures 5-6). Portions of the Briggs Ditch are located within the project APE.

A second water conveyance system that flows into the project APE is the Malaga Canal (previously known as the Malaga Extension Ditch and prior to 1900 the Cleveland Ditch), which is located within the Consolidated Irrigation District. It draws water from the Fowler Switch Canal that was constructed between 1883 and 1886 in an effort to bring Kings River water to the farmers between Fowler and Selma. The Fowler Switch Canal Company was formed in 1883 by a number of farmers in the Fowler area that wanted water to irrigate their crops. Thus, these farmers formed a corporation and stock with a face value of \$450,000.00. The capital was divided into 1,500 shares and of that 300 shares were purchased. In the first two years of construction almost \$110,000.00 had been expended on construction of the canal alone.

According to one source (Mead 1901:290), the Fowler Switch drew water from the Kings River just below the Fresno Canal. Mead describes the route of the canal as follows:

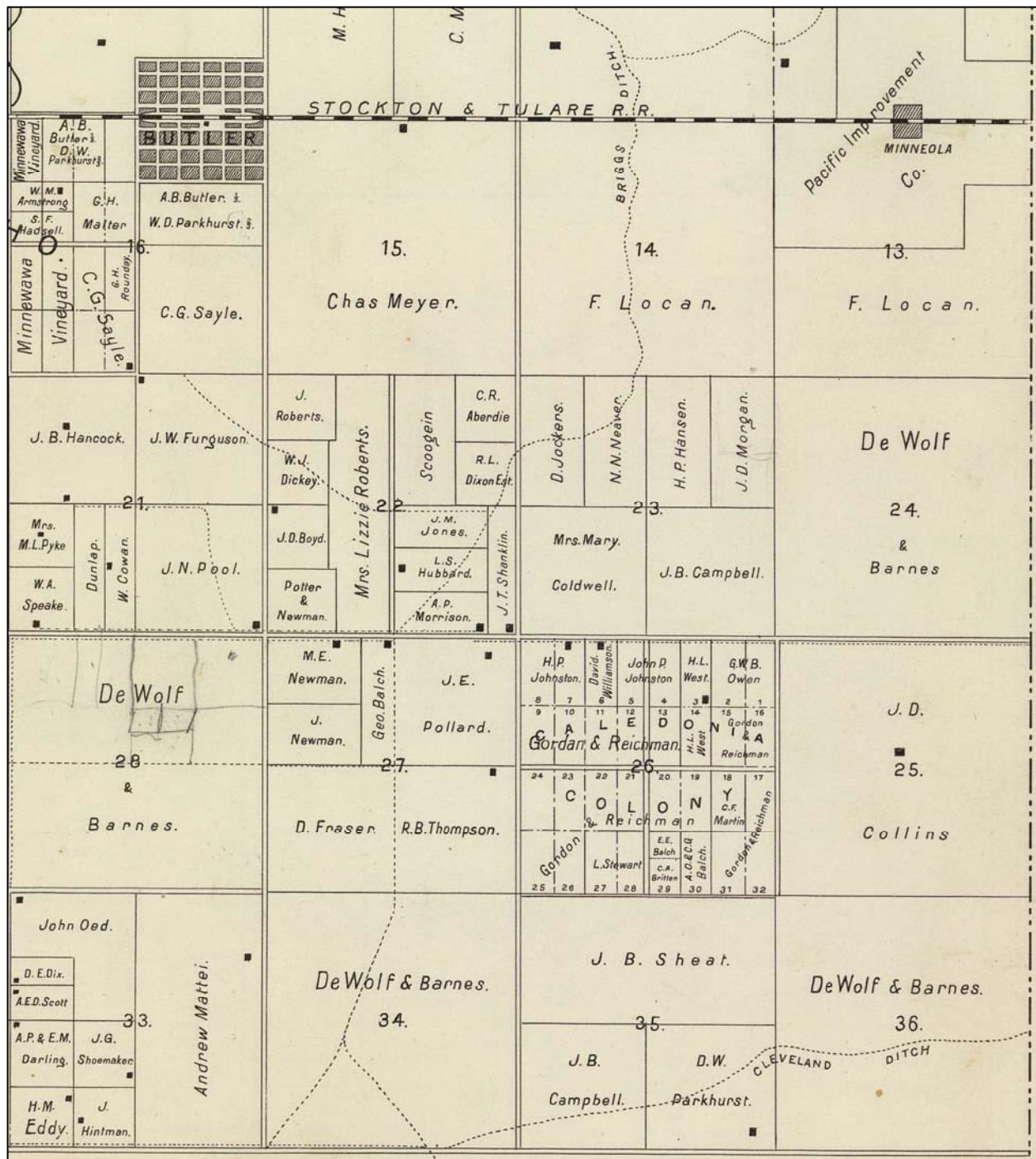
*...Its course is southwesterly for 1.5 miles in Centerville Bottoms, thence westerly for 2 miles across the second bottoms to near the channel of Lone Tree Creek, thence southwesterly 10 miles and southerly 5 miles to a point about midway between Fowler and Selma, thence southwesterly 5 miles, thence northwesterly into the district southward into the district southward from the Washington Colony. The canal is said to have been built to carry 1,500 cubic feet per second. Its bed width is about 45 feet, its depth variable. The gradient is very irregular, being that of the natural surface of the ground in its upper sections, where quite firm hardpan formation is relied upon to check excessive erosion of the canal bed. Near the lower end of the canal it was given a fall of 1.92 feet per mile.*

In 1902, the Fowler Switch Canal Company along with several other canal companies was consolidated into a larger company known as the Consolidated Canal Company. The Consolidated Canal Company now controlled not only the Fowler Switch Canal, but the Centerville and Kings Canals, and "...a majority of the Emigrant Canal..." (Vandor 1919:185; Walker 1941:99). Four years later the Fresno Canal Company purchased the Consolidated Canal Company, but continued to operate it under its own name. The Fresno Canal Company and the Consolidated Canal Company now controlled half of the water rights to Kings River water.

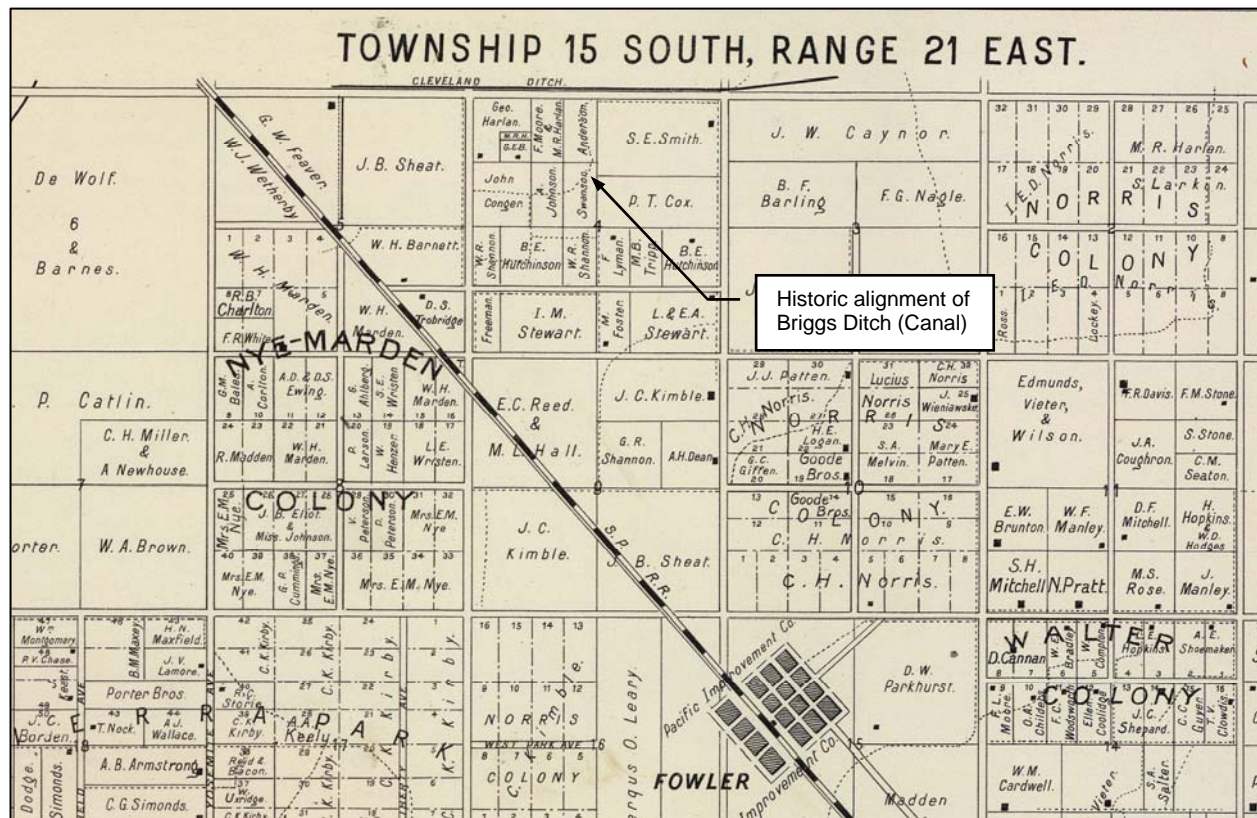
During the 1890 all of the canal companies were experiencing financial failures and too make matters worse their clients were suffering mortgage and crop failures. Walker (1941:99) noted the following:

---

<sup>3</sup> Throughout the document the Briggs Canal is interchangeably referred to as the Briggs Ditch.



**Figure 5.** View of northern portion of Briggs Canal and Cleveland (now Malaga) Canal in T 14S, R 21E, north of the Project APE (Thompson, 1891:45).



*...Under these conditions, the investors finally welcomed an opportunity to cooperate in the formation of irrigation districts, making municipal corporations to carry on the business of owning water rights and maintaining distribution systems. The systems that included the original Church ditch and those northward, were formed into the Fresno Irrigation District in 1923; the Fowler Switch, the Centerville and Kingsburg and the Kings River Canal and Irrigation Company, now became the Consolidated Irrigation District [CID]....*

A portion of the Malaga Canal located in CID is within the project APE.





**Figure 7. View south toward concrete lined portion of Briggs Canal south of East Church Avenue (June 17, 2011)**

#### *2.4.3 The Briggs Ditch (Canal)*

Currently, the Briggs Canal is approximately 11.5 miles long. Of that, 8.25 miles is earth lined, while another 1.79 miles is piped underground, and 1.59 miles is concrete lined. The canal measures between 22 and 25 feet wide at the top and approximately 7 feet at the bottom<sup>4</sup> and 4 feet deep (see Figure 7) between the headwaters of the canal and its intersection at East American and South Fowler avenues. A portion of the canal between East Belmont and East Kings Canyon road is piped as the result of a new housing tract and approximately 0.36 miles of the canal is lined with concrete between East Church and East Jensen avenues, east of South Temperance Avenue. The size of the canal is reduced considerably south of East American Avenue and west of South Fowler Avenue. Over a distance of 0.23 miles the size of the earthen ditch is reduced from about 22 feet across to 16 feet at the top. The width of the bottom of the canal was estimated to be approximately 5 feet. This section of the canal is lined with rubble on the interior walls. The next approximately 1.22 miles of canal are piped underground.

That segment of the canal extending between Cornell Pond and South Golden State Boulevard (a portion of the original alignment of State Route 99) is 12 feet wide and has a V-shaped bottom (see Figure 8). Between the Jefferson Check and South Golden State Boulevard the width of the canal is reduced to 9 feet across the top and approximately 2 feet

---

<sup>4</sup> Measurement of the bottom of the canal are only estimated because it was filled to capacity.



across the bottom of this “V” shaped section. This 1,400 foot section of canal is lined with concrete. The embankments are about 4 feet about original ground.

The last 0.99 miles of the canal is located south and west of South Golden State Boulevard. It is concrete lined with dimensions of 9 feet across the top of the embankments and approximately 2 feet across at the bottom of the “V” shaped section.



**Figure 8. View north from east side of smaller segment of Briggs Canal south of Cornell Pond (June 17, 2011)**

The earlier history of the Briggs Ditch can be determined through topographical and textual references. It appears to have been created sometime between 1882 and 1889, as irrigation appropriations and canals were made to service the agricultural colonies northeast of present-day Fresno. Initially, water delivery for those ventures—notably the Enterprise, Eggers, Nevada and Temperance colonies—was provided by the Kings River and Fresno Canal Company (Mead 1900: 286-289, Thompson 1891: 60, 70).

As those colonies filled up with settlers, the area to their immediate southeast (principally in Township 14 South, Range 21 East) was taken up by several large-scale agricultural enterprises. Most notable among these were the experimental orchards and nursery of Frederick and George Christian Roeding (Clough and Secrest 1984: 339-340) and the citrus and olive groves of Frank Locan (Clough and Secrest 1984: 337, 340). An inspection of an 1885 map of a portion of Fresno County (Kearney) suggests the Briggs Ditch's original alignment within the first three miles followed a course due south through Sections 10, 15 and 22, T 14S, R 21E. However, it appears the alignment was altered in 1890 resulting in a new

alignment that took a more southeasterly direction through property owned by F. Locan in Section 11, T 14S, R 21E, and then more southerly through Section 14, T 14S, R 21E. The source of its name is unknown, though it is possible that it derives from G.G. Briggs, an early colony developer in the Malaga area (Clough and Secrest 1984: 158, 184). Mr. Briggs, prior to coming to Fresno County, was a resident of Yolo County where he was widely known as a vineyardist and fruitman. He also purchased land in the Washington Colony in 1882 and within a short period of time improved a holding of 1000 acres (Vandor 1919:Vol. 1, p. 263).

This later alignment is noted in the earliest known property atlas of Fresno County (Thompson 1891: 70) which shows the Briggs Ditch threading through the Roeding and Locan properties. Since the Roeding and Locan developments postdated that of the colonies, it seems reasonable to suspect that the ditch was realigned to service land of F. Locan, along with several other large farm properties in the neighborhood. This is further substantiated by an agreement reached between F. Locan and the Briggs Canal Company in 1889. According to Briggs Canal documents on file at the FID office located in Fresno, California, F. Locan, owner of Section's 11 and 14, T 14S, R 21E, sold right-of-way for a canal to the Briggs Canal Company. The document was filed with the Fresno Recorder's Office on December 27, 1889 at the request of Barzilla E. Hutchinson on behalf of the Briggs Canal Company. This document suggests that construction of that portion of the canal through Locan property did not occur until 1890; the Thompson's Atlas of Fresno County (1891:70, 83) shows the current alignment of Briggs Ditch (Figures 5 and 6).

In terms of overall dimensions, Thompson shows the Briggs Ditch's headgate within the Roeding estate, in Section 3, T 14S, R 21E, branching off from Fancher Creek (1891: 70), and terminating near the northeast corner of Section 8, T 15S, R 21E, perhaps in the vicinity of the Nye-Marden Colony (1891: 83). It seems likely that the ditch was explicitly designed to service this agricultural subdivision, the creation of Fowler-area farmers Mrs. E.M. Nye (Thickens 1942: 68) and William E. Marden (Guinn 1905: 627). Marden did not reside in the district until 1885, and Thompson shows it by 1891, so the colony must have been created during the intervening years, and not long after the Roeding-Locan interests got underway.

Major administrative and physical changes came to the Briggs Ditch just before the turn of the century. In 1894, the FCIC was succeeded by the Fresno Canal and Land Corporation (FCL), a syndicate of British investors (Willison 1980: 107), and near the same time, the ditch's headgate was relocated. Mead's map of circa 1899 (between pp. 260-261) shows the headgate to the northeast of its original site, approximately in the center of Section 35, T 13S, R 21E. This map also illustrates the ditch terminating south of the Nye-Marden Colony, then extending into an east-west canal located northwest of Fowler.

William Harvey's 1907 Atlas of Fresno County (45, 58), while drawn incorrectly, does suggest the headgate relocation recorded in Mead's map. It also documents a considerable influx of additional property owners along the Briggs Ditch's main path, including the subdivision of the Roeding's easternmost property into the California Colony. Thus, it seems likely that the headgate relocation was made to assist with increased water demand from the ditch. According to this map, the terminus is located approximately on the eastern edge of the Nye-Marden Colony (Harvey 1907: 58). W.C. Guard's 1913 Atlas of Fresno County, apparently an adaptation of Harvey's Atlas of Fresno County, shows no significant changes in the Briggs Ditch watercourse (45, 58).

In 1920, desire for more local control of Fresno County's irrigation apparatus concluded in the sale of the FCL's assets to the newly-formed Fresno Irrigation District (FID; Willison 1980: 107, 116). The financial transaction was desired for two reasons: 1) Fresno County farmers wanted more local control, due, in part, to FCL's more record of maintenance of the irrigation system since this would reduce profits for the British investors; and 2) as early as 1896 the owners of the FCL had expressed a desire to increase the "...annual charge of 62.5 cents per acre when the Water Rights expired in 1921" (Willison 1980:107). A petition signed by 788 landowners within the area controlled by the FCL was presented to the Fresno County Board of Supervisors. The Board of Supervisors approved the petition and set in motion the formation of the FID. The FID purchased the holdings of the FCL for \$1,750,000.00 in late 1920 (Willison 1980:111-138). One of the water conveyance systems that were included as a part of the sale was that of the Briggs Canal.

The grant deed of FCL properties to the FID specifies the Briggs Ditch's precise dimensions:

*Beginning at the head thereof in the south bank of Fancher Creek Canal, near the center of Section 35, township 13 south, range 22 east, M.D.B.&M., running thence in a general southerly and southwesterly direction 11 miles more or less, to a point on the south boundary of the Fresno Irrigation District, near the northwest corner of section 8, township 15 south, range 21 east (Willison 1980: 273).*

According to this description, the terminus reached a point immediately west of present-day Highway 99, near the southeast corner of Peach and Lincoln avenues. A much-later map of the FID system (Willison 1980: between pp. 144-145) shows a further, one-mile westerly extension of the Briggs Ditch beyond that point, connecting with the Oleander Canal near the intersection of Chestnut and Clayton avenues.

While much of the available evidence is sketchy, it appears that the Briggs Ditch has been modified and re-routed multiple times in its approximately 130-year history. Much of this system revision and upgrading was necessary to accommodate, first, a large increase in the farming population during the earlier part of the twentieth century, and second, another burst of post-World War II and later agricultural expansion around the ditch's southern extremities, west of Fowler. However, the same could be said for all water conveyance systems across the San Joaquin Valley. As veterans returned home after WWII, jobs were scarce and many returned home and turned to farming, thus the need for irrigation water became evermore demanding. During the 1960s, more working families sought to escape hustle and bustle of urban life. Many families moved to smaller communities where it was not uncommon to purchase five or ten acres of land and become a weekend farmer. Many families found it necessary to farm as a means of supplementing their primary sources of income.

#### *2.4.4 The Malaga Canal*

The Malaga Canal is located within and maintained by the CID. Kings River water is delivered to farm land between Malaga and Fowler (Mead 1901:290). The canal, extending approximately five miles (Vandor 1919), draws water from the Fowler Switch Canal in Section 31, T 14S, R 22E moving in a southwesterly direction for a distance of 2 miles where the canal takes a westerly direction on the north side of East American Avenue to a point at the northeast corner of South Fowler Avenue and East American Avenue. This is the terminal point for the

Malaga Canal and it is also the point at which the Malaga Canal<sup>5</sup> intersects the Briggs Canal. This section of the earth lined canal measures 16 feet across the top, while it is 7 feet across the bottom of the “V” shaped ditch.

Historically, it appears that the Malaga Canal was originally known as the Cleveland Ditch and appears to have been constructed prior to the completion of the Briggs Canal. According to Mead (1901:Plate XXIV) there was a name change before 1900 when the Cleveland Ditch became known as the Malaga Extension Ditch. The ditch extended on the north side of present-day East American Avenue from the western boundary of the southwest one-quarter of Section 31, T 14S, R 22. to the southeastern corner of the northeast one-quarter of Section 36, T 14S, R 21E (Thompson 1891:70). Although there are no references to physical dimensions or physical characteristics of the original ditch, the physical dimensions of that section of the earth line canal east of Temperance Avenue may shed some light on this. Here the canal is “U” shaped, measuring 21 feet across the top of canal and approximately 7 feet across the bottom.<sup>6</sup> That portion of the Malaga Canal between South Fowler and South Temperance avenues has been substantially altered in both size and shape compared to that portion east of East Temperance Avenue (refer to Figure 10 below).

### **3.0 RESEARCH METHODS**

#### **3.1 Record Search Results**

Prior to field inspection, a record search was conducted by C. Kristina Roper at the Southern San Joaquin Valley Information Center of the California Historical Resources Information System to identify areas previously surveyed and identify known cultural resources present within or in close proximity to the project area (Attachment A). The records search included review of the National Register of Historic Places, the California Register of Historical Resources, the *California Inventory of Historic Resources*, the *California Historical Landmarks*, and the *California Points of Historic Interest* listing, the Historic Property Data File, the Caltrans State and Local Bridge Survey, and other pertinent historic data of relevance to the project area.

The archives of the authors revealed that a portion of the Briggs Canal (Mikesell 1991) between East Belmont Avenue and East Kings Canyon Avenue had been evaluated and determined not eligible for the National Register of Historic Places under Criterion A, B, and C.

There are no formally recorded prehistoric or historic cultural resources within the study area. There have been two surveys conducted within one-half mile radius of the present study area. One recorded historic-period site is situated east of the study area east of SR 99; P-10-002961 is a recorded segment of the Briggs Canal where it flows under Golden State Blvd. No resources known to have value to local cultural groups have been identified within or adjacent to the project area.

---

<sup>5</sup> The original ditch extended another 1.5 miles west of South Fowler Avenue, terminating on the northeast corner of South Minneewawa and East American avenues. This same section was piped underground between 1920 and 1940 (FID 1940:Malaga Extension 431 File)

<sup>6</sup> This is merely an approximation since the canal was at a maximum capacity at the time of the field visit.

### **3.2 Native American Consultation**

The Native American Heritage Commission (NAHC) was contacted in order to determine whether Native American sacred sites have been identified either within or in close proximity to the project area. The NAHC responded in a letter indicating that while no Native American cultural resources were located within one-half mile of the proposed project APE, there are several Native American cultural resources in close proximity to the APE. Letters describing the proposed canal improvement project and the findings of this report were sent to the individuals identified as local area contacts. To date no response has been received from any of these individuals.

### **3.3 Historical Research**

Jon L. Brady and William B. Secrest, Jr., conducted library and archival research, for the proposed project. Sources of information included the California History and Genealogy Room of the Fresno County Library; the Fresno County Assessor's Office; the Henry Madden Library, California State University, Fresno; City of Fresno Planning Department building permits; the archives of the Fresno Irrigation District Office, Fresno; the newspaper archives of the Godfrey Memorial Library (web based). Secrest also wrote portions of the historic section of this report.

### **3.4 Architectural Field Methods**

Several field visits were made between May 29, 2011 and June 12, 2011. Brady performed an architectural survey and all historic-era structures within the non-contiguous APE were photographed by Justin M. Brady. All structures over 50 years old within the non-contiguous APE were documented and evaluated. Those historic-era structures were recorded on California Department of Parks and Recreation Primary and Building, Structure and Object Record forms (DPR 523A and 523B). These completed forms are provided at Appendix B.

### **3.5 Archaeological Field Methods**

On June 15, 2011, Kristina Roper and one assistant (Archaeological Technician Justin Brady) conducted an archaeological survey of the project APE. Surface visibility within the non-contiguous APE was good to excellent. The project APE is limited to the individual improvement elements described in Section 1.1 and depicted on Figure 2a with a 10-foot buffer on either side of the canals and water control structures. The APE was intensively inspected using ca. 5-m transects.

## **4.0 RESULTS AND FINDINGS**

Between May 29 and June 15, 2011, the field survey team consisting of Jon L. Brady (architectural historian), C. Kristina Roper (archaeologist), and Justin M. Brady (archaeological technician), conducted an intensive cultural resources survey of the Briggs Canal APE. Surface visibility was good in most of the study area. The survey included surface inspection for evidence of prehistoric and/or historic-period archaeological artifacts and features, as well as historic structures.

### **4.1 Architectural Evaluation**

#### **4.1.1 *The Briggs Canal***

Portions of the Briggs Canal are located within the project APE (see Figures 1, 2a and 2b). Between the headwaters and East Butler Avenue, Briggs Canal is located in a urban

setting. South of East Butler Avenue the canal winds through a rural setting of small farms and ranches.

As noted earlier, Briggs Canal extends approximately 11 miles<sup>7</sup>. Between the headwaters of the ditch at Fancher Creek and where it intersects South Fowler and East American avenues the “U” shaped ditch measures, on average, from 22 to 25 feet across and approximately 7 feet wide at the bottom. Over the next 0.23 miles the earthen ditch, located on the west side of South Fowler Avenue and south of East American Avenue (previously, Washington Avenue), narrows to approximately 16 feet at its widest point and approximately 4 feet across the bottom<sup>8</sup>.



**Figure 9.** View north along canal at Long Crested check weir.

That portion of the canal located south of East American Avenue and west of South Fowler Avenue is within the non-contiguous APE. This portion of this open earthen water conveyance system is approximately 0.24 miles (1,250 feet) in length (Google Earth 2011). The canal measures approximately 16 feet across and 4 feet at the bottom. The banks of the canal are lined with concrete rubble that is designed to strengthen the earthen walls and reduce seepage. A check weir is located near the center of this length of the canal (Figure 8). At the southern end of this section is the South Briggs Headgate. From this headgate to the Cornell Pond, irrigation water travels through buried concrete pipe for a distance of 1.24 miles where it flows into Cornell Pond.

Water flowing into the Cornell Pond thence travels southwesterly for approximately 0.27 miles (1,400 feet) (Google Earth 2011) in a concrete-lined portion of Briggs Canal to a point just southeast of Jefferson Pond. This portion of the canal is approximately 12 feet across at the top and 2 feet at the bottom. South of the Jefferson Check the canal decreases in width from 12 feet across to 9 feet across, while maintaining the same width at the bottom.

The next 0.99 miles (5,213.02 feet) of the canal is a mixture of concrete-lined (approximately 80 percent of the 1.14 miles) and piped. The terminus of the canal is located on the northeast corner of East Lincoln and South Peach avenues.

---

<sup>7</sup> The length of the canal between the headwaters and South Golden State Boulevard was measured using Google Earth (2011). Measurements of the width of the canal and lateral were done at several locations. The depth of the canal and the width of the canal at the bottom were estimated due to safety concerns.

<sup>8</sup> As noted earlier, the canal was near capacity making precise measurements difficult.



Alterations or modifications to those sections of Briggs Canal within the non-contiguous APE include the placement of concrete rubble along the interior banks of the canal for that section of the canal south of East American Avenue and west of South Fowler Avenue; replacement of wooden check dams with modern weirs and gates (these changes were made after FID was formed); and buried concrete pipe for that section of the canal between the South Briggs Headgate and Cornell Pond. Documents on file at the FID's Office indicate that a number of requests to have portions of the canal piped were made by farmers within the Fowler and American avenues area commencing in the 1960s. The last segment of Briggs Canal adjacent to Jefferson Pond was also lined with concrete. The Briggs Canal file suggests that state and federal relief programs during the Great Depression allowed the district to line sections of the canal during the late 1930s. Documents within the Briggs Canal file make reference to concrete lining of portions of canals within the district occurring in the late 1930s; however, there is no specific reference to any specific canals or sections thereof.

Based on archival research it appears that construction on the Briggs Canal commenced prior to 1885 (Kearney 1885). The likelihood is that it was built after 1882 when G.G. Briggs came to Fresno County from Yolo County where he was well known as a vineyardist. When Briggs arrived in Fresno County he purchased land in the Washington Colony as well as amassing land holding in excess of 1000 acres. The Briggs Canal was constructed by the Briggs Canal Company, although there is no definitive evidence to suggest that the company was owned by G.G. Briggs. A review of biographical sketches for Fresno County suggests the presence of only one person with the last name of Briggs.

Based on documents in the FID archives, the Briggs Canal Company continued to retain ownership of the canal at least through at least 1890. The Company obtained land from F. Locan through a Deed of Trust dated November 20, 1889<sup>9</sup> in order to construct a section of the canal through Locan land located in Section 14, Township 14 South, Range 21 East, M.D.B.&M. This phase of construction appears to have been undertaken in an effort to realign a portion of the canal across Locan's property.

The period of significance for the Briggs Canal which is based primarily on the period of construction and its association with the Briggs Canal Company, date from approximately 1883 to 1890. It is during this period that most of the canal was both constructed and realigned.

Those portions of the canal within the project APE appear to be part of the original alignment; however, there have been numerous changes that have been made to the canal over the last 130 years. The Briggs Canal was maintained by the FCIC<sup>10</sup> until 1920 when FID was formed. In 1921 the newly formed district incorporated a majority of the canals of the FCIC. The district began a program of routine maintenance that included dredging and replacement of wooden regulatory structures with concrete structures. Between 1871 and 1920, the FCIC's maintenance program was not a priority. Thus, in 1921, the district manager of the newly formed irrigation district informed the Board of Directors of the need "for the clearing of trees, brush, fences, corrals, advertisement signs, and other obstructions from the canals and ditch banks, because they hampered the district's maintenance work" (Willison 1980:196).

---

<sup>9</sup> Copy of Deed of Trust is located in the Briggs Canal file in the FID archives.

<sup>10</sup> Fresno Canal and Irrigation Company was taken over by the Fresno Canal and Land Company in 1894, but continued to operate the company under its original name.

As part of the maintenance program all of the wood structures associated with the Briggs Canal were also replaced with concrete gates and weirs such as the one shown in Figure 9 above. The one section of earth-lined canal (a 0.23 mile section of the canal south of East American Avenue and west of South Fowler Avenue) has also been shored up with the inclusion of concrete rubble on the interior banks and bottom of the canal to prevent seepage, while other parts of the open conveyance system within the APE has been lined with concrete after 1920.

While those portions of Briggs Canal appear to have integrity of location, they lack integrity of materials, design, setting and feeling. In 1921, a priority for the FID was the maintenance of all of its water conveyance systems. As part of its maintenance program FID reinforced the embankments with concrete debris to forestall seepage, a common problem associated with earthen canals. The canal has also been routinely dredged. Maintenance records at the main FID office failed to note how often dredging occurred along the Briggs Canal. The addition of concrete rubble and the replacement of wood structures with concrete and metal gates and weirs has greatly reduced the integrity of materials and design. The use of concrete lining has also contributed to the loss of integrity of materials.

During the 1870s and early 1880s many of the larger bulk conveyance systems such as Fancher Creek Canal, Herndon Canal, and Gould Canal were built to transport large volumes of irrigation water as the size of these canals suggest. They often measure 30 to 40 feet across in comparison to some of the smaller systems like Briggs Canal that got smaller in width the further away from it got from its head gate at Fancher Creek Canal. The canals constructed in the 1870s were designed to provide irrigation water to colonies on the east and west side of Fresno as well as to the Washington Irrigation Colony located around Easton, California. The Briggs Canal did not convey as much water as the larger bulk conveyance systems. Thompson's 1891 Atlas of Fresno County suggests that by virtue of the size of Briggs Canal and the small number of laterals off it suggests that it was not developed as a major water conveyance system. The carrying capacity of the Briggs Canal is less than one-half of Herndon and Gould canals. Even more important that these bulk conveyance canals maintain a uniform width and depth along the length of them. The Briggs Canal is uniform in size (22 to 25 feet across the top and approximately 7 feet across the bottom) between its headwaters and its intersection of South Fowler and East American avenues. From this intersection to the terminus of the canal on the northeast corner of East Lincoln and South Peach avenues, a distance of approximately 2.47 miles, the earthen and concrete-lined portions of the canal average from 12 feet to 9 feet across the top of the structure. Consequently, those sections of the canal within the project APE are much smaller in carrying capacity compared to that portion of the canal north of East American Avenue, a distance of approximately 8.56 miles (1.24 miles of that is piped). It is possible the builders considered this smaller section of the canal to be a minor extension of the whole system. Based on the fact that the Cleveland Ditch, drawing water from the Fowler Switch Canal east of the project area, conveyed water west from South Fowler Avenue, the Briggs Canal Company may have decided to reduce the size of the canal south of East American Avenue (previously, Washington Avenue). It is also possible that the section south of East American Avenue was not a part of the original design. It certainly would explain why the canal was greatly reduced in size. Although it appears that after World War II the volume of water delivered via Briggs Canal to farmers east and south of the City of Fresno during the 1950s and 1960s more than tripled, it was due in large part to the increase in the number of small farmers requiring water for their crops. Most of these families used the farm as a secondary source of income. The increase volume of irrigation water delivered to farmers

following the end of World War II was not unique to those farmers drawing water from the Briggs Canal. This was occurring throughout the valley. The size of the canal was not increased in the post-1920 period, thus, FID simply increased the volume of water that traveled through the canal. Many of the secondary canals such as Briggs Canal saw an increase in demand in the post-1945 period. Small farms were popping up all over the county during the late 1940s and 1950s, first following the return of veterans from WWII and then again in the post-Korean War period. Therefore, those portions of the Briggs Canal within the project APE do not appear to have been associated with important events at the local, regional or national levels; thus, those segments within the APE do not appear to be eligible for the NRHP under Criterion A.

There is no definitive evidence to suggest that G.G. Briggs was the owner of the Briggs Construction Company that built the Briggs Canal. We do know that Briggs came to Fresno County in 1882 (Vandor 1919:263) from Yolo County. He purchased land in the Washington Irrigation Colony and eventually amassed land holdings near 1000 acres. Part of his lands were located in the vicinity of Malaga and south of the community of Fowler. It is unknown if Mr. Briggs was the owner of the Briggs Canal Company, thus, those portions of the canal and lateral within the project APE do not appear to be associated with important people at the local, regional, or national levels. Even if G.G. Briggs were associated with the canal, a review of local biographical sketches and local histories do not suggest that Mr. Briggs played a major role in local historical events. Consequently, the canal does not appear to be eligible for the NRHP under Criterion B.

Modifications to the canal include the use of concrete rubble to prevent seepage and to shore up the interior embankments of the canal such as that section along Fowler Avenue south of American Avenue and the use of concrete lining of the canal such as is found on that section of the canal located southeast of Jefferson Pond adjacent to the Golden State Freeway. Consequently, those sections of Briggs Canal within the project APE does not embody the characteristics that reflect a type, period, or method of construction, nor do these sections reflect the work of a master craftsman, or reflect a high style of architecture. The subject property is not eligible for the NRHP under Criterion C. If the larger system were to be evaluated and determined to be part of historic district, those sections evaluated for this report would not be contributors to that historic district. The Briggs Canal is not a historic resource for the purposes of CEQA.

There is no research potential associated with those sections of the Briggs Canal that cannot be gleaned from historic resources. Therefore, the Briggs Canal located within the APE is not eligible for listing in the NRHP under Criterion D.

#### *4.1.2 The Malaga Canal*

That section of the Malaga Canal located within the APE is both earth-lined and piped underground. The earth-lined portion of the canal is located approximately 0.13 miles east of South Armstrong Avenue and north of East American avenue (refer to Figure 9). In this section of the canal there is a concrete spillway and immediately west of this the banks on either side of the canal are lined with concrete rubble extending for a distance of about 50 feet. That portion (0.62 miles) of the canal east of Briggs Canal on the north side of East American Avenue is earth-lined. East of the spillway, the next 0.19 miles of the canal is piped (36 inch concrete pipe) underground. According to Michael Davis (Personal Communication, August 15, 2011) a ditch tender for FID, CID water is transported south through the Briggs Canal where a like amount that pours into the Briggs Canal will be released into another CID structure to continue further west. Upstream from the eastern terminus of the earth lined section of Malaga Canal to

South Temperance Avenue north of East American Avenue, this section of Malaga Canal is piped underground.

As noted above, modifications to Malaga Canal between South Fowler Avenue and South Temperance Avenue include concrete rubble lining portions of the earth lined banks, piping a section of the canal a distance of 0.36 miles (1877 feet), and constructing a spillway between 1979 and 1992 (FID Aerial Photographs 1973, 1979, and 1992).

The period of significance for the Malaga Canal is based on the period of construction which appears to have occurred between 1885 and 1889.

All of the modifications that have occurred to those sections of Malaga Canal within the APE occurred after the period of significance. Thus, while the some portions of the canal may have integrity of location, its integrity of materials, design, and feeling have been compromised. On the bases of this information, structural elements within the APE have no historical integrity.



**Figure 10.** View west toward open earthen portion of Malaga Canal (June 17, 2011).

Modifications to those sections of the Malaga Canal within the APE gives the canal a more contemporary look as opposed to that section of the canal that is located east of Temperance Avenue outside of the APE. Therefore, its contemporary look suggests that this section of the canal does not appear to be associated with important events at the local, regional, or national levels. Consequently, the canal is not eligible for the NRHP under Criterion A. Although the canal was constructed in the 1880s, it is unknown who constructed it. It is also one of many secondary canals found in the CID. Therefore, the canal does not appear to be associated with significant people, historically. Therefore, the canal within the APE is not eligible for the NRHP under Criterion B. Those sections of the canal within the project area do not appear to embody a type, period, or method of construction, nor appear to be the work of a master craftsman, or reflect high-style architecture; thus the canal is not eligible for the NRHP under Criterion C. And finally, there is no research potential associated with those sections of the Malaga Canal that cannot be gleaned from historic resources. Therefore, the Malaga Canal does not appear to be eligible for listing in the NRHP under Criterion D. If the larger system were to be evaluated and determined eligible for the National Register as a historic district, those sections of the canal within the APE would not be contributors. The Malaga Canal is not a historic resource for the purposes of CEQA.

#### **4.2 Summary**

Other than the canal and associated facilities documented above, no historic-era structures are present within the surveyed area. No archaeological deposits or isolated finds

were identified during the cultural resources survey. No plant resources of potential value for Native Americans such as sedge or deer grass, which are of importance in the traditional methods of basketry construction, were observed in the surveyed area.

In conclusion, no historic properties (i.e., cultural resources eligible for inclusion on the NRHP or the CR) were identified within the project APE; thus, it is unlikely that the proposed canal improvements will have an effect on significant or important archaeological or other cultural resources. Therefore, no further cultural resource investigation is recommended at this time. In the unlikely event that unanticipated buried archaeological deposits are encountered during Project-related activities, work in the immediate vicinity of the discovery must cease until the finds can be evaluated by a qualified archaeologist. Should human remains be encountered within the Project area, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted as well.

## REFERENCES CITED

Basgall, M. E. and D. L. True

- 1985 Archaeological Investigations in Crowder Canyon, 1973-1984: Excavations at Sites SBR-421B, SBR-421C, SBR-421D, and SBR-713. Report on file, Caltrans, Sacramento CA

Baumhoff, M. A.

- 1963 *Ecological Determinants of Aboriginal California Populations*. University of California Publications in American Archaeology and Ethnology 49(2).

Brady, Jon L.

- 1985 Stagecoaching in the San Joaquin Valley, California: 1850-1875. Unpublished Master's Thesis, California State University, Fresno.

Caltrans

- 2009 Structure Maintenance & Investigations, Historical Significance – Local Agency Bridges. June 2009. [http://www.dot.ca.gov/hq/structur/strmaint/hs\\_local.pdf](http://www.dot.ca.gov/hq/structur/strmaint/hs_local.pdf).

Carter, Brenda M.

- n.d. *Historic District Plan – Historic Structure Plan*. Prepared for the City of Fresno, California.

Clough, Charles W., and William B. Secrest, Jr.

- 1984 *Fresno County – The Pioneer Years*. Bobbye Sisk Temple, editor. Panorama Books, Fresno, CA

Cook, Sherburne F.

- 1955 *The Aboriginal Population of the San Joaquin Valley, California*. *University of California Anthropological Records* 16(2):31-80. Berkeley.
- 1962 *Expeditions to the Interior of California: Central Valley, 1820-1840*. *University of California Anthropological Records* 20(5):151-214. Berkeley.

Guinn, James H.

- 1905 *History of the State of California and Biographical Record of the San Joaquin Valley, California...* Chicago: Chapman Publishing Co.

Harvey, William Sr.

- 1907 *Atlas of Fresno County, California*. Fresno, CA: The Author.

Kings River Conservation District (KRCD) and Kings River Water Association (KRWA)

- 2003 *The Kings River Handbook*. 4<sup>th</sup> Printing. Published by KRCD and KRWA.

Kroeber, A. L.

- 1925 *Handbook of the Indians of California* (1976 Dover Edition). Bureau of American Ethnology Bulletin 76, Smithsonian Institution, Washington D.C.



- LaJeunesse, Roger M., and John M. Pryor  
 1996 *Skyrocket Appendices*. Report on file, Department of Anthropology, California State University, Fresno.
- Latta, Frank F.  
 1999 *Handbook of Yokuts Indians*. 50<sup>th</sup> Anniversary Commemorative Edition. Brewer's Historical Press, Exeter, CA, and Coyote Press, Salinas, CA.
- McFarland, J. Randall  
 1972 *Village on the Prairie: The Story of Fowler's First 100 Years*. Fowler, CA: Fowler Mother's Club/Ensign Publishing Co.
- McGuire, Kelly R.  
 1995 Test Excavations at CA-FRE-61, Fresno County, California. Occasional Papers in Anthropology 5. Museum of Anthropology, California State University Bakersfield.
- Mead, Elwood, et al.  
 1901 *Report of Irrigation Investigations in California*. Bulletin 100, U.S. Department of Agriculture, Office of Experiment Stations. Washington: Government Printing Office.
- Menefee, Eugene L., and Fred A. Dodge  
 1912 *History of Tulare and Kings Counties*. Historic Records Company, Los Angeles, CA.
- Mikesell, Stephen D.  
 1991 *Historical Resources Evaluation Report – Portions of Five Fresno Irrigation District Canals 6-Fre-180, P.M. R58.7/67.8, 06-342400*. Prepared for Bryan Apper, District 6, Fresno, Caltrans.
- Rosenthal, Jeffrey S., and Jack Meyer  
 2004 *Landscape Evolution and the Archaeological Record: A Geoarchaeological Study of the Southern Santa Clara Valley and Surrounding Region*. Center for Archaeological Research at Davis, Publication No. 14, University of California, Davis.
- Rosenthal, Jeffrey S., Gregory G. White and Mark Q. Sutton  
 2007 The Central Valley: A View from the Catbird's Seat. In *California Prehistory: Colonization, Culture, and Complexity*, pp. 147-164, edited by Terry L. Jones and Kathryn A. Klar. Alta Mira Press, New York.
- Smith, Wallace  
 1939 *Garden of the Sun*. Lyman House, Los Angeles, CA.
- Thickens, Virginia Emily  
 1942 *Pioneer Colonies of Fresno County*. Master's thesis, University of California, Berkeley.
- Vandor, Paul E.  
 1919 *History of Fresno County California with Biographical Sketches*. Los Angeles: Historic Record Company.

Wallace, William J.

- 1954 The Little Sycamore Site and the Early Milling Stone Cultures of Southern California. *American Antiquity* 20(2):112-123.

Wallace, William J.

- 1978a Post-Pleistocene Archeology, 9000 to 2000 B.C. In Handbook of North American Indians, vol. 8, *California*, edited by R. F. Heizer, pp. 25-36. Smithsonian Institution, Washington, D.C.
- 1978 Northern Valley Yokuts. In Handbook of North American Indians, vol. 8, *California*, edited by R. F. Heizer, pp. 448-461. Smithsonian Institution, Washington, D.C.
- 1991 Tulare Lake's Archaeological Past. In *Background to a Study of Tulare Lake's Archaeological Past*, pp. 23-33. Contributions to Tulare Lake Archaeology 1.

Walker, Ben R.

- 1941 *The Fresno County Blue Book*. Published by Arthur H. Cawston, Fresno, California.

Weitze, Karen J.

- 1992 "Historical Architectural Survey Report, Route 41, Elkhorn Avenue to North Avenue," Vol. 3. HDR Engineering Inc., Fresno. Prepared for California Department of Transportation, District 6.

Willison, Paul H.

- 1980 *Past, Present and Future of the Fresno Irrigation District*. [Fresno: The District].

## **Fresno Irrigation District Documents**

Grant Deed to Fresno Irrigation District dated 1940. On file Fresno Irrigation District Office, Malaga Extension No. 431 file.

Grant Deed from F. Locan to the Briggs Canal Company dated November 20, 1889. On file Fresno Irrigation District Office, Briggs Canal file.

## **Maps**

Guard, W.C.

- 1913 *Atlas of Fresno County, California*. Fresno, CA: The Author.

Kearney, M. Theo

- 1885 *Map of a Portion of Fresno County Showing Some of Its Principal Irrigating Canals, Colonies, Vineyards, and Orchards*. Published by M. Theo Kearney, San Francisco.

Thompson, Thomas H.

- 1891 Official Historical Atlas Map of Fresno County. Thos. H. Thompson, Tulare, California.

## **Web Sites**

Google Earth, <http://www.googleearth.com> accessed June 19, 2011 and August 15, 2011.

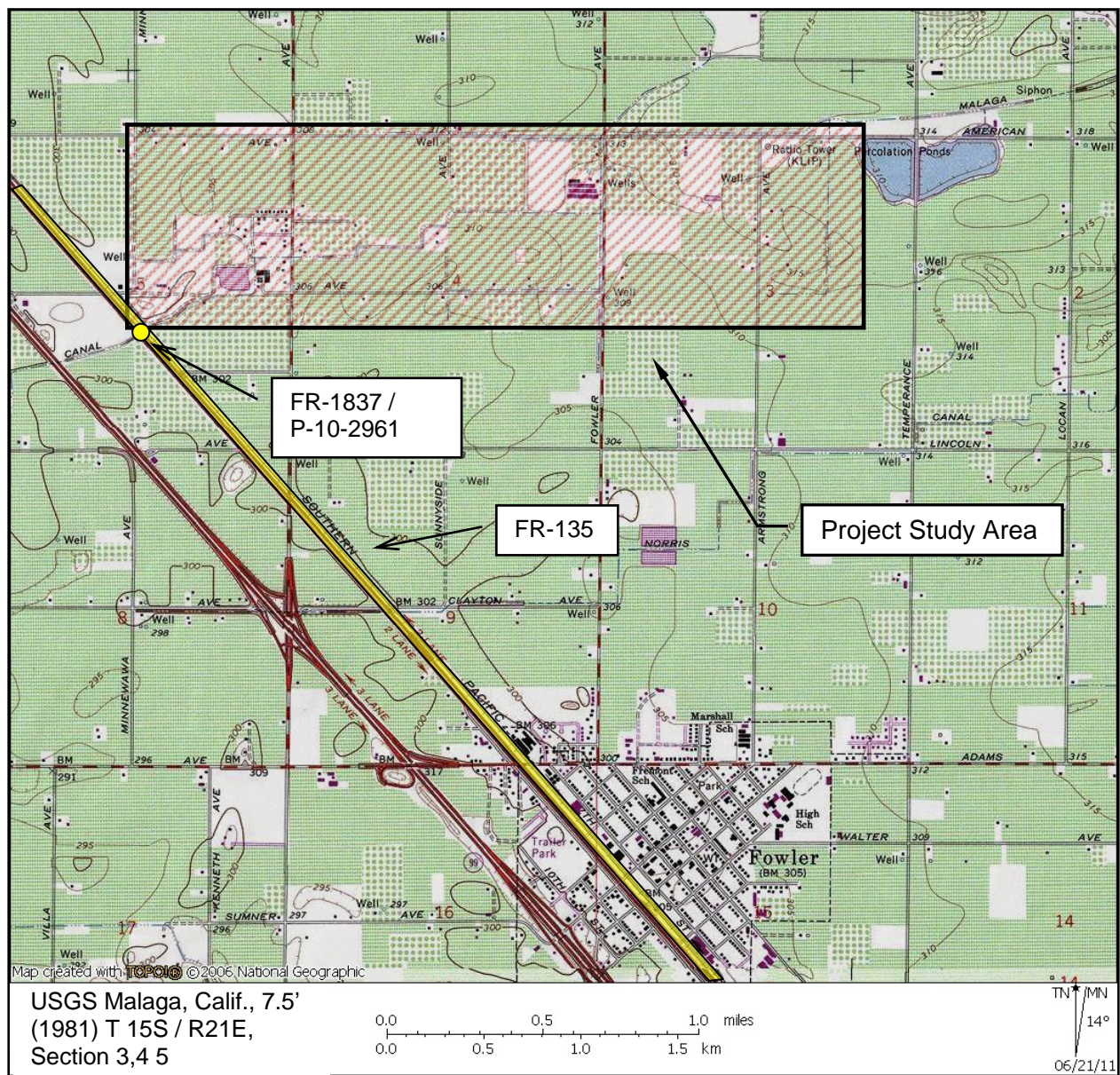
## PROFESSIONAL QUALIFICATIONS

**Jon L. Brady** meets the Secretary of the Interior's Guidelines for archaeology and architectural history. Mr. Brady has a B.A. in both Political Science and Anthropology and an M.A. in History (with an emphasis on Historical Archaeology) from California State University, Fresno. Mr. Brady has worked as a consulting archaeologist and historian over the last 30 years working with both Section 106 and CEQA compliance documents. He has also taught at the community college level in California over the last sixteen years as an adjunct instructor. Courses taught include Ancient Civilizations, Modern European History, U.S. History, Political Science, Cultural Anthropology, and Field Methods in Archaeology.

**William B. Secrest, Jr.** has been a historical researcher, specializing in Fresno County and the San Joaquin Valley, for the past thirty years. He holds a B.A. in Journalism from California State University, Fresno, and an M.S. in library science from Florida State University. In addition, he is a member of the Academy of Certified Archivists. Since 2006, he has been employed as the Local History Librarian for the Fresno County Public Library system. Among his publications are *Fresno County: The Pioneer Years* (1984) and the revised edition of Wallace Smith's San Joaquin Valley history, *Garden of the Sun* (2004). Two other publications include *California Desperadoes Stories of Early Outlaws in Their Own World* and *California Badmen: Mean with Guns on the Old West Coast*.

**C. Kristina Roper** meets the Secretary of the Interior's Guidelines for archaeology. Ms. Roper has a B.A. in Anthropology from the University of California, Berkeley, and a M.A. in Cultural Resources Management from Sonoma State University. She has 30 years of archaeological survey and excavation experience, including both prehistoric and historic sites, in California, Nevada, Oregon, and Idaho, and has produced over 250 professional reports. For the past 16 years Ms. Roper has served as a Lecturer in Anthropology at California State University, Fresno. Courses taught include World Prehistory, Introduction to Archaeology, Bio-Behavioral Evolution of the Human Species, Historical Archaeology, Critical Thinking, Food and Culture, Applied Anthropology, and Cultural Resources Management. Ms. Roper is a Registered Professional Archaeologist in good standing. As sole proprietor of a cultural resources management firm established in 1995, her responsibilities include all aspects of project management, from marketing and development, to project completion, and include NEPA, CEQA, and NHPA (Section 106) compliance.

**Attachment A: Cultural Resources Records Search,  
Southern San Joaquin Valley Information Center  
of the California Historical Resources  
Information System**



Areas highlighted in yellow have been previously surveyed for cultural resources. Reports are on file at the Southern San Joaquin Valley Information Center. Areas highlighted in red denote identified cultural resources (see Section 3.1, pg. 14).



**CONFIDENTIAL – NOT FOR PUBLIC DISTRIBUTION\***

**CULTURAL RESOURCES FINAL REPORT OF MONITORING  
AND FINDINGS FOR THE QWEST NETWORK CONSTRUCTION  
PROJECT, STATE OF CALIFORNIA**

Prepared for

**Qwest Communications**  
1801 California St.  
Denver, Colorado 80202  
(303) 992-1400

Prepared by

**SWCA ENVIRONMENTAL CONSULTANTS**  
3840 Rosin Court, Suite 130  
Sacramento, California 95834  
(916) 565-0356  
www.swca.com

SWCA Project No. 10715-180

SWCA Cultural Resources Report Database No. 06-507

December 2006

\*This report contains information on sensitive cultural resources and thus is confidential and not for public distribution. The legal authority to restrict cultural resources is pursuant with California Government Code 6254

REPORT IN KE3  
ALSO IN TUL. & MAD  
FEB 08 2007  
FR-2287



FINAL REPORT  
Volume 1: Section 1.0 - 6.0  
Docket No. CP93-258-000 et al.

NADB # 1140863

Southern San Joaquin Valley  
Archaeological Information Center  
9001 Stockdale Highway  
Bakersfield, CA 93311-1099

KE-01832

■■■■■■■■■ CULTURAL

RESOURCES

INVENTORY REPORT

FOR THE PROPOSED

MOJAVE NORTHWEST

EXPANSION PROJECT

TU-00102

MA-00083

KE-00028

FR-00035

Prepared for

Mojave Pipeline Company  
5001 Commercenter Dr. Suite 300  
Bakersfield, CA

by

Brian Hatoff, Barb Voss  
Sharon Waechter, and Stephen W.  
Vance Benté, Principal Investigator

July 1995

Southern San Joaquin Valley  
Archaeological Information Center  
9001 Stockdale Highway  
Bakersfield, CA 93311-1099

Woodward-Clyde 

Woodward-Clyde Consultants  
500 12th Street  
Suite 100  
Oakland, California 94607-4014

9253156-5

P-10-002961

State of California — The Resources Agency DEPARTMENT OF PARKS AND RECREATION <b>PRIMARY RECORD</b>		Primary # <u>P-10-002961</u>
		HRI # _____
		Trinomial _____
		NRHP Status Code _____
Other Listings _____		
Review code _____	Reviewer _____	Date _____

Page 1 of 2      \*Resource Name or #: (Assigned by recorder) Briggs Canal  
P 1. Other Identifier: SFPP-2  
\*P2. Location: ☐ Not for Publication ☒ Unrestricted      \*a. County Fresno  
and (P2b and P2c or P2d. Attach a Location Map as necessary.)  
\*b. USGS 7.5' Quad Malaga Date T 15S; R 21E; NW 1/4 of NW 1/4 of NE 1/4 of Sec 5; MD B.M.  
c. Address 3570 City \_\_\_\_\_ Zip \_\_\_\_\_  
d. UTM: (Give more than one for large and/or linear resources) Zone 11, 257990 mE/ 4059765 mN  
e. Other Locational Data (e.g., parcel #, legal description, directions to resource, elevation, etc., as appropriate):  
From Selma, drive north from intersection of Whitson and Floral on Golden State Boulevard 6.9 miles. Canal crosses under Golden State Boulevard.

\*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)  
Concrete lined canal with "1928" stamped in east face of concrete bridge where water flows under Golden State Blvd. Canal runs east to west and goes underground at SF railroad and Golden State Blvd. Concrete and brick line the supports where canal goes underground at RR. East of the RR tracks is a metal siphon. Canal flows through an agricultural area; mainly vineyards and orchards. Bridge appears to have had a recent concrete overlay as just below "1928" is a hand carved "1983".

\*P3b. Resource Attributes: (List attributes and codes) HP20

\*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo (view, date, accession #) East; 4-24-95; SFPP-CW-1 - 23



\*P6. Date Constructed/Age and

Sources: ☒ Historic  
☐ Prehistoric ☐ Both

\*P7. Owner and Address: \_\_\_\_\_

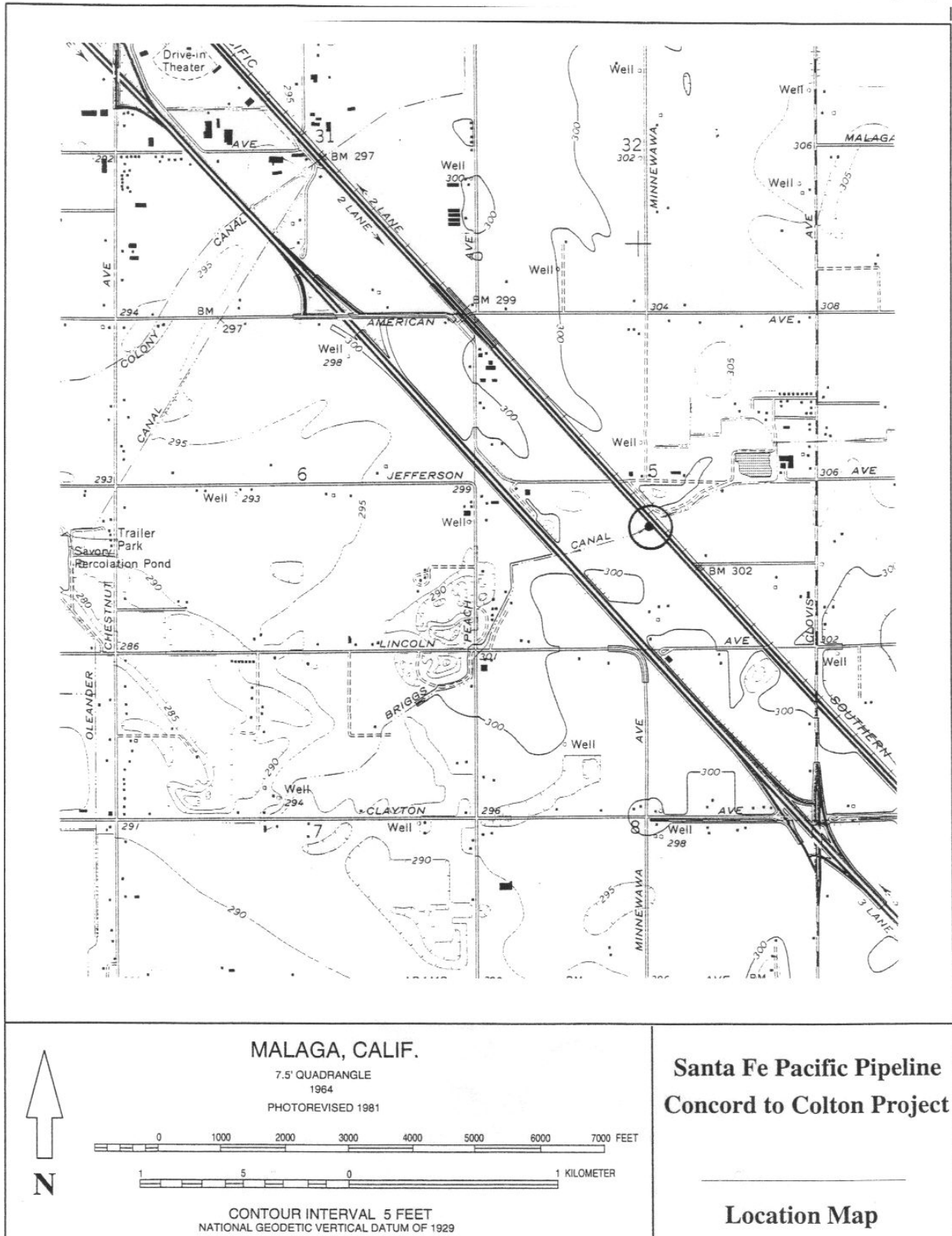
\*P8. Recorded by (Name, affiliation, and address): Carrie D. Wills & Allen Estes; William Self Associates 4 Orinda Way Suite 200A Orinda, CA 94563

\*P9. Date Recorded: April 24, 1995

\*P10. Survey Type: (Describe)  
Reconnaissance.

\*P11. Report Citation (Cite survey report and other sources, or enter "none."):  
Class I Overview Santa Fe Pacific Pipeline Partners, L.P., Proposed Concord to Colton Pipeline Project.

\*Attachments: ☐ NONE ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record  
☐ Archaeological Record ☐ District Record ☐ Linear Resource Record ☐ Milling Station Record ☐ Rock Art Record  
☐ Artifact Record ☐ Photograph Record ☐ Other (List): \_\_\_\_\_



CONFIDENTIAL INFORMATION NOT FOR PUBLIC DISTRIBUTION - PREPARED BY WILLIAM SELF ASSOCIATES

## **Attachment B: DPR-523 Records**

**PRIMARY RECORD**

Primary # \_\_\_\_\_

HRI # \_\_\_\_\_

Trinomial \_\_\_\_\_

NRHP Status Code 6Z

Other Listings \_\_\_\_\_

Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

\*Resource Name or #: Briggs Canal

**P1. Other Identifier:** Fresno Irrigation District

**\*P2. Location:** ☐ Not for Publication ☒ Unrestricted

**\*a. County** Fresno

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

**\*b. USGS 7.5' Quad** Malaga **Date** 1978/PR 1981 **T15S; R 21E; Sections** 4 and 5; **M.D.B& B.M.**

**c. Address** N/A **City** N/A **Zip** N/A

**d. UTM:** (give more than one for large and/or linear resources) Zone 11S; 260285mE / 4060886mN (east end) / 257915mE / 405998mN (west end)

**e. Other Locational Data:** (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Fresno Irrigation District, Southeast Fresno, Fresno County

**\*P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The Briggs Canal extends approximately 11 miles. Between the headwaters of the canal at Fancher Creek and where it intersects South Fowler and East American avenues, the "U" shaped-canal measures, on average, from 22 to 25 feet across and approximately 7 feet wide at the bottom. Over the next 0.23 miles the earthen canal, located on the west side of South Fowler Avenue and south of East American Avenue (previously, Washington Avenue), narrows to approximately 16 feet at its widest point and approximately 4 feet across the bottom. Between the headwaters and East Butler Avenue, Briggs Canal is located in an urban setting; south of East Butler Avenue the canal winds through a rural setting of small farms and ranches.

That portion of the canal located south of East American Avenue and west of South Fowler Avenue is within the non-contiguous APE (see P11, Report Citation). That portion of the Briggs Canal that is an open earthen water conveyance system is approximately 0.24 miles (1,250 feet) in length (Google Earth 2011); the remaining portions are piped (see continuation sheet).

**\*P3b. Resource Attributes:** (List attributes and codes) HP20, Canal

**\*P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



**Figure 1.** View north along Briggs Canal at Long Crested check weir at Fowler Avenue.

**\*P5b. Description of Photo:** (View, date, accession #) Refer to Photo Nos. 1-5

**\*P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both  
Circa 1883 - 1890

**\*P7. Owner and Address:**

Fresno Irrigation District  
2907 South Maple Avenue.  
Fresno, CA 93725

**\*P8. Recorded by:** (Name, affiliation, address)

Jon L. Brady  
J&R Environmental Services  
17900 Auberry Road  
Clovis, CA 93619

**\*P9. Date Recorded:** June 19, 2011

**\*P10. Survey Type:** Intensive

**\*P11. Report Citation:** Brady, J.L. and C.K. Roper. 2011. A Cultural Resources Survey of the Fresno Irrigation District's Briggs Canal Improvement Project, Malaga, Fresno County, California. Sierra Valley Cultural Planning. Submitted to Provost and Pritchard, Visalia, CA.

**\*Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record  
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record  
☐ Other (list) \_\_\_\_\_



**BUILDING, STRUCTURE, AND OBJECT RECORD**

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_

Page 2 of 7

\*NRHP Status Code 6Z

\*Resource Name or #: Briggs Canal

B1. Historic Name: N/A

B2. Common Name: Briggs Canal

B3. Original Use: Water Conveyance System B4. Present Use: Same

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations): The Briggs Canal was constructed circa 1883-1890. Portions of the canal within the APE have been modified during the 20<sup>th</sup> century. Those modifications include shoring up the interior banks with concrete rubble, replacing wooden structures with concrete head gates and weirs, lining portions of the canal with concrete, and underground piping.

\*B7. Moved? ☐ No ☒ Yes ☐ Unknown Date: 1890 Original Location: Sections 10 and 15, T 14S, R 21E

B8. Related Features: N/A

B9. a. Architect: Unknown b. Builder: Briggs Canal Company

\*B10. Significance: Theme Water Conveyance System Area Fresno

Period of Significance Circa 1883-1890 Property Type Water Conveyance System Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

Based on archival research it appears that the Briggs Canal was constructed between 1883 and 1890. The likelihood is that it was built after 1882 when G.G. Briggs came to Fresno County from Yolo County where he was well known as a vineyardist. When Briggs arrived in Fresno County he purchased land in the Washington Colony as well as amassing land holding in excess of 1,000 acres. The Briggs Canal was constructed by the Briggs Canal Company, yet, it is unknown if the company was owned by G.G. Briggs. A review of biographical sketches and local histories for Fresno County suggests the presence of only one person with the last name of Briggs; these sources do not suggest that G.G. Bridges made any substantial contributions to local historical events during the period of significance.

Those portions of the canal within the project APE appear to be part of the original alignment of the canal; however, there have been numerous changes that have been made to the canal over the last 130 years. The Briggs Canal was maintained by the Fresno Canal and Irrigation Company (later succeeded by the Fresno Canal and Land Corporation) until 1920 when the newly formed Fresno Irrigation District (FID) obtained this water asset (see continuation sheet).

B11. Additional Resource Attributes: (List attributes and codes)

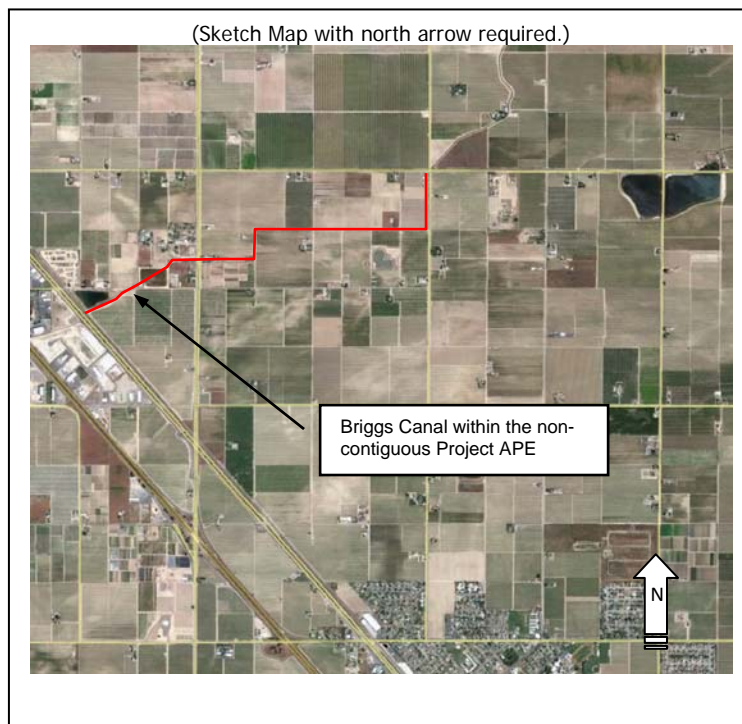
\*B12. References: Willison, Paul H. *Past and Present & Future of the Fresno Irrigation District*. Prepared for the Fresno Irrigation District, 1980; Fresno Irrigation District Archives; Mead, Elwood, et al. *Report of Irrigation Investigations in California*. Bulletin 100 U.S. Department of Agriculture, Office of Experiment Stations. Washington, Government Printing Office, 1901. Google Earth, <http://googleearth.com> accessed June 19, 2011 and August 15, 2011.

B13. Remarks:

\*B14. Evaluator: Jon L. Brady  
J & R Environmental Services  
17900 Auberry Road  
Clovis, CA 93619

\*Date of Evaluation: June 17, 2011

(This space reserved for official comments.)





Page 3 of 7

\*Resource Name or #: Briggs Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update

**\*P3a. Description (cont'd):**

The canal measures approximately 16 feet across and 4 feet at the bottom. The banks of the canal are lined with concrete rubble that is designed to strengthen the earthen walls and reduce seepage. A check weir is located near the center of this length of the canal (Photo 1). At the southern end of this section is the South Briggs Headgate. From this headgate to the Cornell Pond, irrigation water travels through buried concrete pipe for a distance of 1.24 miles where it flows into Cornell Pond.

Water flowing into the Cornell Pond thence travels southwesterly for approximately 0.27 miles (1,400 feet) (Google Earth 2011) in a concrete-lined portion of the Briggs Canal to a point just southeast of Jefferson Pond. This portion of the canal is approximately 12 feet across at the top and 2 feet at the bottom. South of the Jefferson Check the canal decreases in width from 12 feet across to 9 feet across, while maintaining the same width at the bottom.

The next 0.99 miles (5,213 feet) of the canal are a mixture of concrete-lined (approximately 80 percent of the 1.14 miles) and piped. The terminus of the canal is located on the northeast corner of East Lincoln and South Peach avenues.

Alterations or modifications to those sections of Briggs Canal within the non-contiguous APE include the placement of concrete rubble along the interior banks of the canal for that section of the canal south of East American Avenue and west of South Fowler Avenue; replacement of wooden check dams with modern weirs and gates (these changes were made after FID was formed); and buried concrete pipe for that section of the canal between the South Briggs Headgate and Cornell Pond. Documents on file at the FID's Office indicate that a number of requests to have portions of the canal piped were made by farmers within the Fowler and American avenues area commencing in the 1960s. The last segment of Briggs Canal adjacent to Jefferson Pond was also lined with concrete. The Briggs Canal file suggests that state and federal relief programs during the Great Depression allowed the district to line sections of the canal during the late 1930s. Documents within the Briggs Canal file make reference to concrete lining of portions of canals within the district occurring in the late 1930s; however, there is no specific reference to any specific canals or sections thereof.

**\*B10. Significance (cont'd):**

While those portions of Briggs Canal appear to have integrity of location, they lack integrity of materials, design, setting and feeling. In 1921, a priority for the FID was the maintenance of all of its water conveyance systems. As part of its maintenance program the FID reinforced the embankments with concrete debris to forestall seepage, a common problem associated with earthen canals. The canal has also been routinely dredged. Maintenance records at the main FID office failed to note how often dredging occurred along the Briggs Canal. The addition of concrete rubble and the replacement of wood structures with concrete and metal gates and weirs has greatly reduced the integrity of materials and design. The use of concrete lining has also contributed to the loss of integrity of materials.

During the 1870s and early 1880s many of the larger bulk conveyance systems such as Fancher Creek Canal, Herndon Canal, and Gould Canal were built to transport large volumes of irrigation water as the size of these canals suggest. They often measure 30 to 40 feet across in comparison to some of the smaller systems like Briggs Canal that got smaller in width the further away from it got from its head gate at Fancher Creek Canal. The canals constructed in the 1870s were designed to provide irrigation water to colonies on the east and west side of Fresno as well as to the Washington Irrigation Colony located around Easton, California. The Briggs Canal did not convey as much water as the larger bulk conveyance systems. Thompson's 1891 Atlas of Fresno County suggests that, by virtue of the size of Briggs Canal and the small number of laterals off it, it was not developed as a major water conveyance system. The carrying capacity of the Briggs Canal is less than one-half of that of the Herndon and Gould canals. Even more important is that these bulk conveyance canals maintain a uniform width and depth along the length of them. The Briggs Canal is uniform in size (22 to 25 feet across the top and approximately 7 feet across the bottom) between its headwaters and its intersection of South Fowler and East American avenues. From this intersection to the terminus of the canal on the northeast corner of East Lincoln and South Peach avenues, a distance of approximately 2.47 miles, the earthen and concrete-lined portions of the canal average from 12 feet to 9 feet across the top of the structure. Consequently, those sections of the canal within the project APE are much smaller in carrying capacity compared to that portion of the canal north of East American Avenue, a distance of approximately 8.56 miles (1.24 miles of that is piped). It is possible the builders considered this smaller section of the canal to be a minor

Page 4 of 7

\*Resource Name or #: Briggs Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update

extension of the whole system. Based on the fact that the Cleveland Ditch, drawing water from the Fowler Switch Canal east of the project area, conveyed water west from South Fowler Avenue, the Briggs Canal Company may have decided to reduce the size of the canal south of East American Avenue (previously Washington Avenue). It is also possible that the section south of East American Avenue was not a part of the original design. It certainly would explain why the canal was greatly reduced in size. Although it appears that after World War II the volume of water delivered via Briggs Canal to farmers east and south of the city of Fresno during the 1950s and 1960s more than tripled, it was due in large part to the increase in the number of small farmers requiring water for their crops. Most of these families used the farm as a secondary source of income. The increase volume of irrigation water delivered to farmers following the end of World War II was not unique to those farmers drawing water from the Briggs Canal; this was occurring throughout the Central Valley. The size of the canal was not increased in the post-1920 period; thus, FID simply increased the volume of water that traveled through the canal. Many of the secondary canals such as Briggs Canal saw an increase in demand in the post-1945 period. Small farms were popping up all over the county during the late 1940s and 1950s, first following the return of veterans from World War II and then again in the post-Korean War period. Therefore, those portions of the Briggs Canal within the project APE do not appear to have been associated with important events at the local, regional or national levels; thus, those segments within the APE do not appear to be eligible for the National Register of Historic Places under Criterion A.

There is no definitive evidence to suggest that G.G. Briggs was the owner of the Briggs Construction Company that built the Briggs Canal. We do know that Mr. Briggs came to Fresno County in 1882 (Vandor 1919:263) from Yolo County. He purchased land in the Washington Irrigation Colony and eventually amassed land holdings near 1,000 acres. Part of his lands were located in the vicinity of Malaga and south of the community of Fowler. It is not determinable whether Mr. Briggs was the owner of the Briggs Canal Company; thus, those portions of the canal and lateral within the project APE do not appear to be associated with important people at the local, regional, or national levels. Even if G.G. Briggs were associated with the canal, a review of local biographical sketches and local histories do not suggest that Mr. Briggs played a major role in local historical events. Consequently, the canal does not appear to be eligible for the National Register of Historic Places under Criterion B.

Modifications to the canal include the use of concrete rubble to prevent seepage and to shore up the interior embankments of the canal such as that section along Fowler Avenue south of American Avenue, and the use of concrete lining of the canal such as is found on that section of the canal located southeast of Jefferson Pond adjacent to the Golden State Freeway. Consequently, those sections of Briggs Canal within the project APE does not embody the characteristics that reflect a type, period, or method of construction, nor do these sections reflect the work of a master craftsman, or reflect a high style of architecture. The subject property is not eligible for the National Register of Historic Places under Criterion C. If the larger system were to be evaluated and determined to be part of historic district, those sections evaluated for this report would not be contributors to that historic district.

There is no research potential associated with those sections of the Briggs Canal that cannot be gleaned from historic resources. Therefore, the Briggs Canal located within the APE is not eligible for listing in the National Register under Criterion D.

Additionally, in accordance with Section 15064.5 (a)(2)-(3) of CEQA Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code, the Briggs Canal does not appear to be an historical resource for the purposes of CEQA.

Page 5 of 7

\*Resource Name or #: Briggs Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update

**Photographs (cont'd):**



**Photograph 2:** View of section of Briggs Canal south of American Avenue and west of Fowler Avenue (Photo taken June 17, 2011).



**Photograph 3:** View south toward open concrete-lined section of Briggs Canal southwest of Cornell Pond (Photo taken June 17, 2011).

Page 6 of 7

\*Resource Name or #: Briggs Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update

**Photographs (cont'd):**



**Photograph 4:** View southwest toward concrete-lined portion of Briggs Canal southwest of the Jefferson Check Weir (Photo taken June 17, 2011)



## LOCATION MAP

Primary #

HRI#

Trinomial

Page 7 of 7

\*Resource Name or #: Briggs Canal

\*Map Name: Malaga, Calif.

\*Scale: 7.5' \*Date of Map: 1978 (p.r. 1981)





**PRIMARY RECORD**

Primary # \_\_\_\_\_

HRI # \_\_\_\_\_

Trinomial \_\_\_\_\_

NRHP Status Code 6Z

Other Listings \_\_\_\_\_

Review Code \_\_\_\_\_ Reviewer \_\_\_\_\_ Date \_\_\_\_\_

\*Resource Name or #: Malaga Canal

**P1. Other Identifier:** Consolidated Irrigation District (CID)

**\*P2. Location:** ☐ Not for Publication ☒ Unrestricted

**\*a. County** Fresno

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

**\*b. USGS 7.5' Quad** Malaga **Date** 1978/PR 1981 **T14S; R 21E; SE ¼ of Sec 34; M.D.B.&M.**

**c. Address** N/A **City** N/A **Zip** N/A

**d. UTM:** (give more than one for large and/or linear resources) Zone 11S; 261267mE/ 4060870mN (west end) / 261619mE / 4060870mN (east end)

**e. Other Locational Data:** (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

Consolidated Irrigation District, Southeast Fresno County

**\*P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The section of the Malaga Canal located within the non-contiguous project APE is both earth-lined and piped underground. The earth-lined portion of the canal is located approximately 0.13 miles east of South Armstrong Avenue and north of East American avenue. In this section of the canal there is a concrete spillway and immediately west of this the banks on either side of the canal are lined with concrete rubble extending for a distance of about 50 feet. That portion (0.62 miles) of the canal east of Briggs Canal on the north side of East American Avenue is earth-lined. East of the spillway, the next 0.19 miles of the canal is piped (36-inch concrete pipe) underground. According to Michael Davis (Personal Communication, August 15, 2011) a ditch tender for the Fresno Irrigation District, CID water is transported south through the Briggs Canal where a like amount that pours into the Briggs Canal will be released into another CID structure to continue further west. Upstream from the eastern terminus of the earth-lined section of Malaga Canal to South Temperance Avenue north of East American Avenue, this section of Malaga Canal is piped underground.

As noted above, modifications to Malaga Canal between South Fowler Avenue and South Temperance Avenue include concrete rubble lining portions of the earth lined banks, piping a section of the canal a distance of 0.36 miles (1877 feet), and constructing a spillway between 1979 and 1992 (FID Aerial Photographs 1973, 1979, and 1992).

**\*P3b. Resource Attributes:** (List attributes and codes) HP20, Canal

**\*P4. Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

**\*P5b. Description of Photo:** (View, date, accession #) Refer to Photo Nos. 1-3

**\*P6. Date Constructed/Age and Sources:**

☒ Historic ☐ Prehistoric ☐ Both  
Circa 1883

**\*P7. Owner and Address:**

Consolidated Irrigation District  
2255 Chandler Street  
Selma, CA 93662-3041

**\*P8. Recorded by:** (Name, affiliation, address)

Jon L. Brady  
J&R Environmental Services  
17900 Auberry Road  
Clovis, CA 93619

**\*P9. Date Recorded:** June 19, 2011

**\*P10. Survey Type:** Intensive



Photo 1. View west (north side of E. American Avenue) of earth-lined portion of Malaga Canal

**\*P11. Report Citation:** Brady, J.L. and C.K. Roper. 2011. A Cultural Resources Survey of the Fresno Irrigation District's Briggs Canal Improvement Project, Malaga, Fresno County, California. Sierra Valley Cultural Planning. Submitted to Provost and Pritchard, Visalia, CA.

**\*Attachments:** ☐ NONE ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record

☐ Other (list) \_\_\_\_\_

**BUILDING, STRUCTURE, AND OBJECT RECORD**

Primary # \_\_\_\_\_  
HRI # \_\_\_\_\_

Page 2 of 5

\*NRHP Status Code 6Z

\*Resource Name or #: Malaga Canal

B1. Historic Name: N/A

B2. Common Name: Malaga Canal

B3. Original Use: Water Conveyance System B4. Present Use: Same

\*B5. Architectural Style: Utilitarian

\*B6. Construction History: (Construction date, alteration, and date of alterations): The Malaga Canal was constructed circa 1885-1886. Those portions of the canal in the non-contiguous project APE have been modified during the 20<sup>th</sup> century. These modifications include shoring up the interior banks with concrete rubble, replacing wooden structures with concrete head gates and weirs, and lining portions of the canal with concrete lining. Other modifications include construction of a concrete spillway between 1979 and 1992 (Fresno Irrigation District Aerials dated 1979 and 1992) and piping the other section of the canal within the project APE.

\*B7. Moved? ☐ No ☒ Yes ☐ Unknown Date: 1979 and 1992 Original Location: From the spillway the alignment took a more northeasterly direction. The current section proceeds more easterly along the north side of East American Avenue

\*B8. Related Features: N/A

B9. a. Architect: Unknown b. Builder: Unknown

\*B10. Significance: Theme Water Conveyance System Area Fresno

Period of Significance Circa 1885-1888 Property Type Water Conveyance System Applicable Criteria N/A

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The period of significance for the Malaga Canal is based on the period of construction which appears to have occurred between 1885 and 1889.

All of the modifications that have occurred to those sections of Malaga Canal within the non-contiguous project APE occurred after the period of significance. Thus, while the some portions of the canal may have integrity of location, its integrity of materials, design, and feeling have been compromised. On the bases of this information, structural elements within the project APE have no historical integrity.

B11. Additional Resource Attributes: (List attributes and codes)

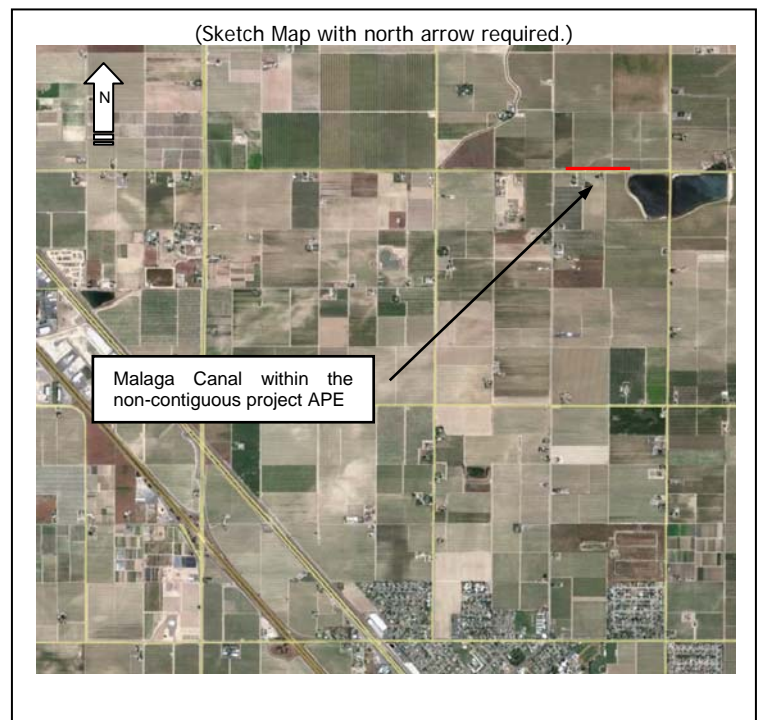
\*B12. References: Willison, Paul H. *Past and Present & Future of the Fresno Irrigation District*. Prepared for the Fresno Irrigation District, 1980. Mead, Elwood, et al. *Report of Irrigation Investigations in California*. Bulletin 100, U.S. Department of Agriculture, Office of Experiment Stations. Washington: Government Printing Office. 1901. Fresno Irrigation District Aerial Photographs dated 1973, 1979 and 1992, respectively. Google Earth, <http://googleearth.com> accessed June 19, 2011 and August 15, 2011.

B13. Remarks:

\*B14. Evaluator: Jon L. Brady  
J & R Environmental Services  
17900 Auberry Road  
Clovis, CA 93619

\*Date of Evaluation: August 15, 2011

(This space reserved for official comments.)



Page 3 of 5

\*Resource Name or #: Malaga Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update

**\*B10. Significance (cont'd):**

Historically, it appears that the Malaga Canal was originally known as the Cleveland Ditch and appears to have been constructed prior to the completion of the Briggs Canal. According to Mead (1901:Plate XXIV) there was a name change before 1900 when the Cleveland Ditch became known as the Malaga Extension Ditch.

Modifications to those sections of the Malaga Canal within the non-contiguous project APE gives the canal a more contemporary look as opposed to that section of the canal that is located east of Temperance Avenue outside of the APE. Therefore, its contemporary look suggests that this section of the canal does not appear to be associated with important events at the local, regional, or national levels. Consequently, the canal is not eligible for the National Register of Historic Places under Criterion A. Although the canal was constructed in the 1880s, it is unknown who constructed it. It is also one of many secondary canals found in the CID. Therefore, the portion of the canal within the project APE does not appear to be associated with significant people, historically, and is thus not eligible for the National Register under Criterion B. Those sections of the canal within the project APE do not appear to embody a type, period, or method of construction, nor appear to be the work of a master craftsman, or reflect high-style architecture; thus the canal is not eligible for the National Register under Criterion C. And finally, there is no research potential associated with those sections of the Malaga Canal that cannot be gleaned from historic resources. Therefore, the Malaga Canal does not appear to be eligible for listing in the National Register under Criterion D. If the larger system were to be evaluated and determined eligible for the National Register as a historic district, those sections of the canal within the APE would not be contributors.

Additionally, in accordance with Section 15064.5 (a)(2)-(3) of CEQA Guidelines and using the criteria outlined in Section 5024.1 of the California Public Resources Code, the Malaga Canal does not appear to be an historical resource for the purposes of CEQA.

**Photographs (cont'd):**



**Photograph 2:** View east toward Malaga spillway at the eastern terminus of the earth-lined section of the canal within the non-contiguous APE(Photo taken June 17, 2011).



Page 4 of 5

\*Resource Name or #: Malaga Canal

\*Recorded by Jon L. Brady\_ \*Date August 15, 2011 ☒ Continuation ☐ Update



**Photograph 3:** View northeast toward section of Malaga Canal that is piped between the Malaga Spillway depicted in Photograph 2 and South Temperance Avenue (Photo taken June 17, 2011).

## LOCATION MAP

Primary #

HRI#

Trinomial

Page 5 of 5

\*Resource Name or #: Malaga Canal

\*Map Name: Malaga, Calif.

\*Scale: 7.5' \*Date of Map: 1978 (p.r. 1981)

