# A PHASE I CULTURAL RESOURCES ASSESSMENT FOR THE RESERVOIR 5B-2 SITE IMPROVEMENT PROJECT

## RANCHO CUCAMONGA, CALIFORNIA

**APNs 1074-101-21 and 22**
**Project Location: Section 23, Township 1 North,**
**Range 7 West of the *Cucamonga Peak* USGS Quadrangle Topographic Map**

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***Prepared for:***

**Cucamonga Valley Water District**
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***March 31, 2022***
***Fieldwork Performed: March 10, 2022***
***Key Words: 5.5-acre project; existing 5B-1 reservoir; historic 1930s manmade channel recorded (Temp-1); monitoring of ground disturbance recommended.***

# Archaeological Report Summary Information

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***Report Title:*** A Phase I Cultural Resources Assessment for the Reservoir 5B-2 Site Improvement Project, Rancho Cucamonga, California

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***Assessor's Parcel Number(s):*** 1074-101-21 and 22

***USGS Quadrangle:*** Section 23, Township 1 North, Range 7 West of the *Guasti* USGS topographic quadrangle map.

***Study Area:*** 5.5 acres

***Key Words:*** Archaeological survey program; city of Rancho Cucamonga; *Cucamonga Peak* USGS topographic quadrangle; existing 5B-1 reservoir; historic 1930s manmade channel recorded (Temp-1); monitoring of ground disturbance recommended.

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# 1.0 MANAGEMENT SUMMARY/ABSTRACT

The following report describes the results of the cultural resources survey conducted by Brian F. Smith and Associates, Inc. (BFSA) for the Reservoir 5B-2 Site Improvement Project. The project includes 5.5 acres for a planned reservoir within Assessor's Parcel Number (APN) 1074-101-21 and -22, located in the city of Rancho Cucamonga, San Bernardino County, California. The project is located northwest of the intersection of Mayberry Avenue and Carrari Street, at the northern terminus of Rocky Mountain Place, in the city of Rancho Cucamonga, California. Further, the project can be located within Section 23, Township 1 North, Range 7 West, as shown on the U.S. Geological Survey (USGS) *Cucamonga Peak* Quadrangle. This study was conducted in compliance with the California Environmental Quality Act (CEQA) to locate and record any cultural resources present within the project.

Currently the 5B-1 reservoir, constructed in 1975, is situated within the northeastern portion of the property. The proposed project includes the construction of a new 3.4 MG welded steel tank reservoir, 5B-2, and associated improvements directly adjacent to the existing tank. BFSA conducted the assessment to locate and record any cultural resources identified within the project in compliance with CEQA and following City of Rancho Cucamonga cultural resource guidelines.

## 1.1 Purpose of Investigation

The purpose of this investigation was to determine if any significant cultural resources would be affected by the proposed reservoir construction. This study consisted of the processing of a records search of previously recorded archaeological sites on or near the property and the completion of an archaeological survey of the project. In addition, the Native American Heritage Commission (NAHC) was contacted for a Sacred Lands File (SLF) search. The NAHC SLF results are pending as of the date of this report.

## 1.2 Major Findings

The survey did not encounter any prehistoric resources; however, BFSA personnel did identify a manmade earthen drainage channel, which is first visible on the 1938 aerial photograph. The channel was recorded following the Office of Historic Preservation's (OHP) manual Instructions for Recording Historical Resources, using Department of Parks and Recreation (DPR) forms (Appendix B). The channel has not been recently maintained as vegetation has overtaken much of the depression, and the alignment has deviated some from the straight channel first visible on the 1938 aerial. Further, the alignment of the channel outside of the project has been removed by the development of the surrounding properties. In addition, just south of the project parcel, the drainage alignment has been altered to drain into a storm drain located at the intersection of Rocky Mountain Place and Carrari Street. Given the removal of all historic elements of the earthen channel outside of the project, the resource generally lacks integrity and would likely not qualify

for inclusion in the California Register of Historical Resources (CRHR). Further, based upon the current project plans, Temp-1 will not be directly impacted or removed by the Reservoir 5B-2 Site Improvement Project.

### 1.3 Recommendation Summary

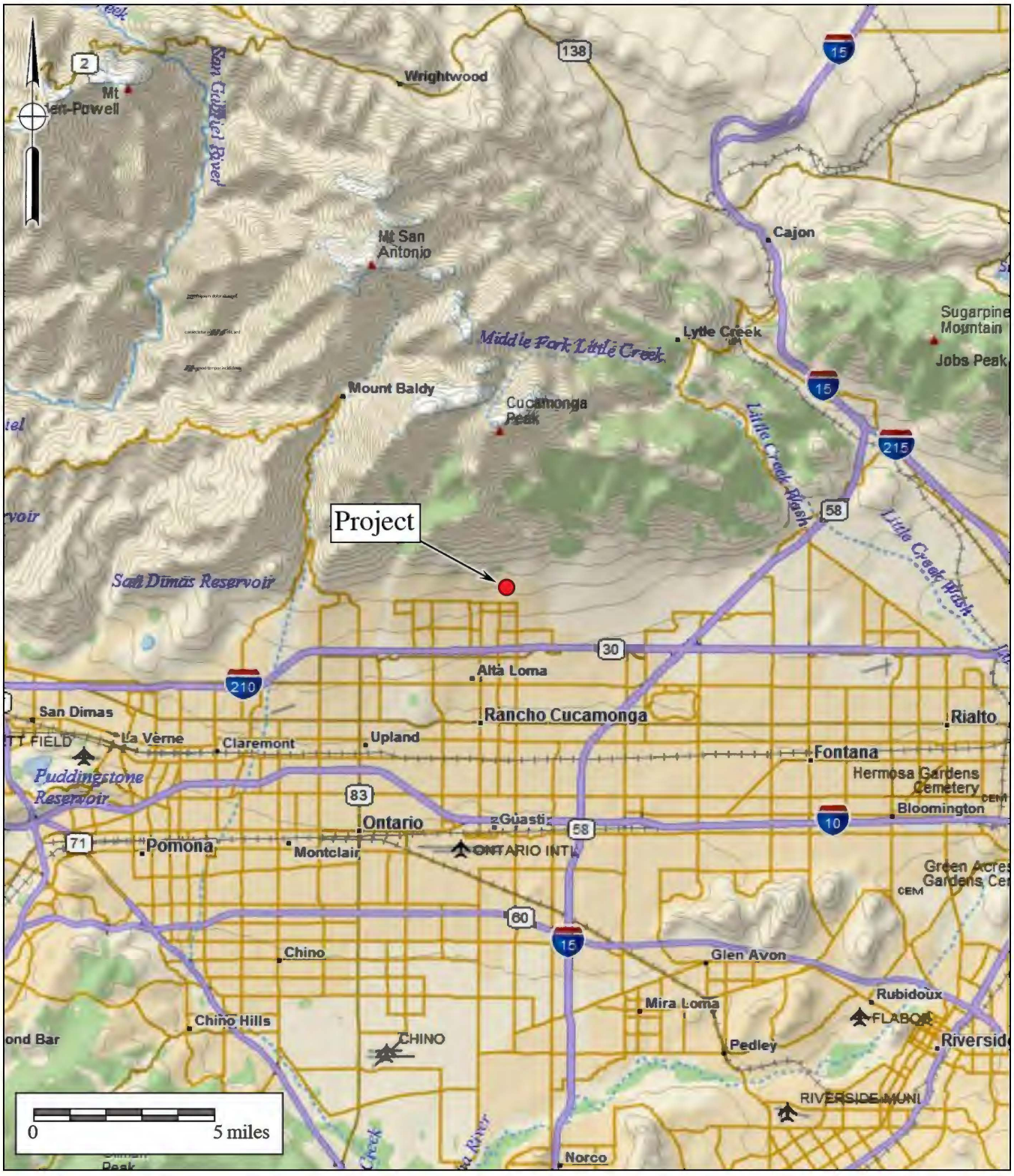
Site Temp-1 does not appear to qualify for the CRHR and will not be impacted by the project as it is currently designed. If the project is redesigned to include direct impacts or removal of Temp-1, additional study and evaluation of the the resource is recommended. Further, based upon the records search results, a significant prehistoric site (SBR-895) was located approximately a short distance northeast of the property and multiple historic resources are documented within one mile. Given the presence of a historic feature on the subject property and the cultural resources in close proximity to the project, the potential exists that buried or masked cultural resources could be exposed during grading of the property. Therefore, it is also recommended that a Mitigation Monitoring and Reporting Program (MMRP) be included as part of the conditions of project approval. The MMRP should include archaeological monitoring of all excavation and grading activities within five feet of the natural ground surface. A copy of this report will be permanently filed with the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton). All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

# 2.0 INTRODUCTION

BFSA was retained by the applicant to conduct a cultural resources survey of the proposed Cucamonga Valley Water District (CVWD) Reservoir 5B-2 Site Improvement Project in the city of Rancho Cucamonga in San Bernardino County. The lead agency for the project is the CVWD, and the archaeological study was conducted in order to comply with CEQA guidelines with regards to development-generated impacts to cultural resources. The project is located in an area of moderate cultural resource sensitivity, as is suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns, which in the southwestern San Bernardino County area are focused around environments with accessible food and water.

The Reservoir 5B-2 Site Improvement Project consists of the development of a new reservoir within a 5.5-acre property (APNs 1074-101-21 and -22), located in the city of Rancho Cucamonga within southwestern San Bernardino County, California (Figure 2.0–1). The subject property is located northwest of the intersection of Mayberry Avenue and Carrari Street, at the northern terminus of Rocky Mountain Place, in the city of Rancho Cucamonga, California. Further, the project can be located within Section 23, Township 1 North, Range 7 West, as shown on the USGS *Cucamonga Peak* Quadrangle (Figure 2.0–2). Currently, the 5B-1 reservoir is situated within the northeastern portion of the property. The proposed project includes the construction of a new 3.4 MG welded steel tank reservoir, 5B-2, and associated improvements within the project (Figure 2.0–3).

Principal Investigator Brian F. Smith, M.A. directed the cultural resources study for the project. Field Archaeologist Clarence Hoff conducted the pedestrian survey of the project on March 10, 2022. The survey was accomplished by walking survey transects in 10-meter intervals across the property. The survey primarily focused on the western portion of the project (APN 1074-101-21) as the eastern portion (APN 1074-101-22) was developed in 1975 with the current 5B-1 reservoir and associated improvements. Visibility of the natural ground surface during the survey was moderate as it was obscured by the current 5B-1 tank in the eastern parcel and dense vegetation primarily consisting of coastal sage scrub in the western parcel. This technical report was prepared by Andrew J. Garrison M.A., RPA and Brian Smith M.A. Andrew Garrison generated the report graphics, and Summer Forsman conducted technical editing and report production. Qualifications of key personnel are provided in Appendix A.

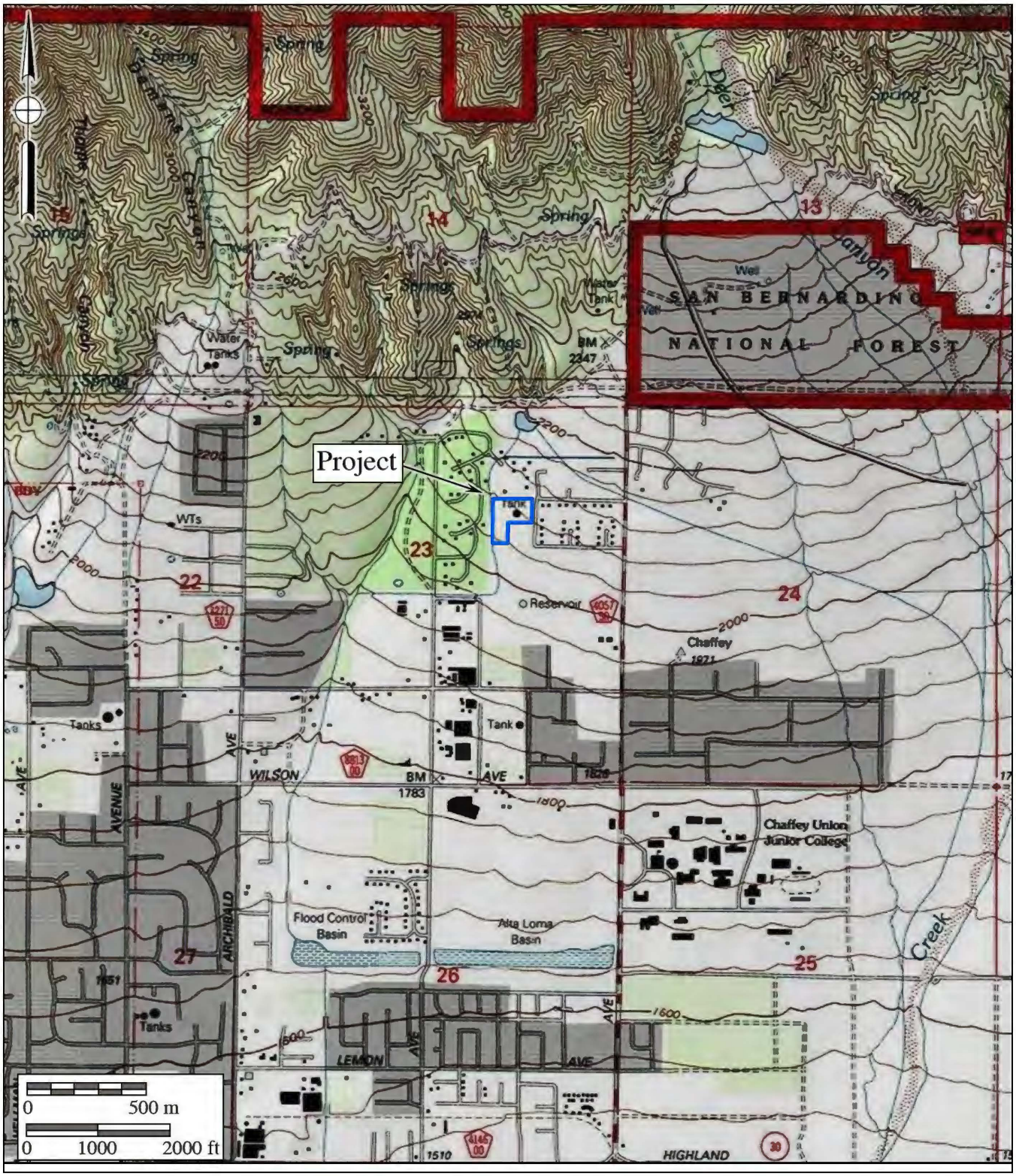



# Figure 2.0–1

## General Location Map

The Reservoir 5B-2 Site Improvement Project

DeLorme (1:250,000)

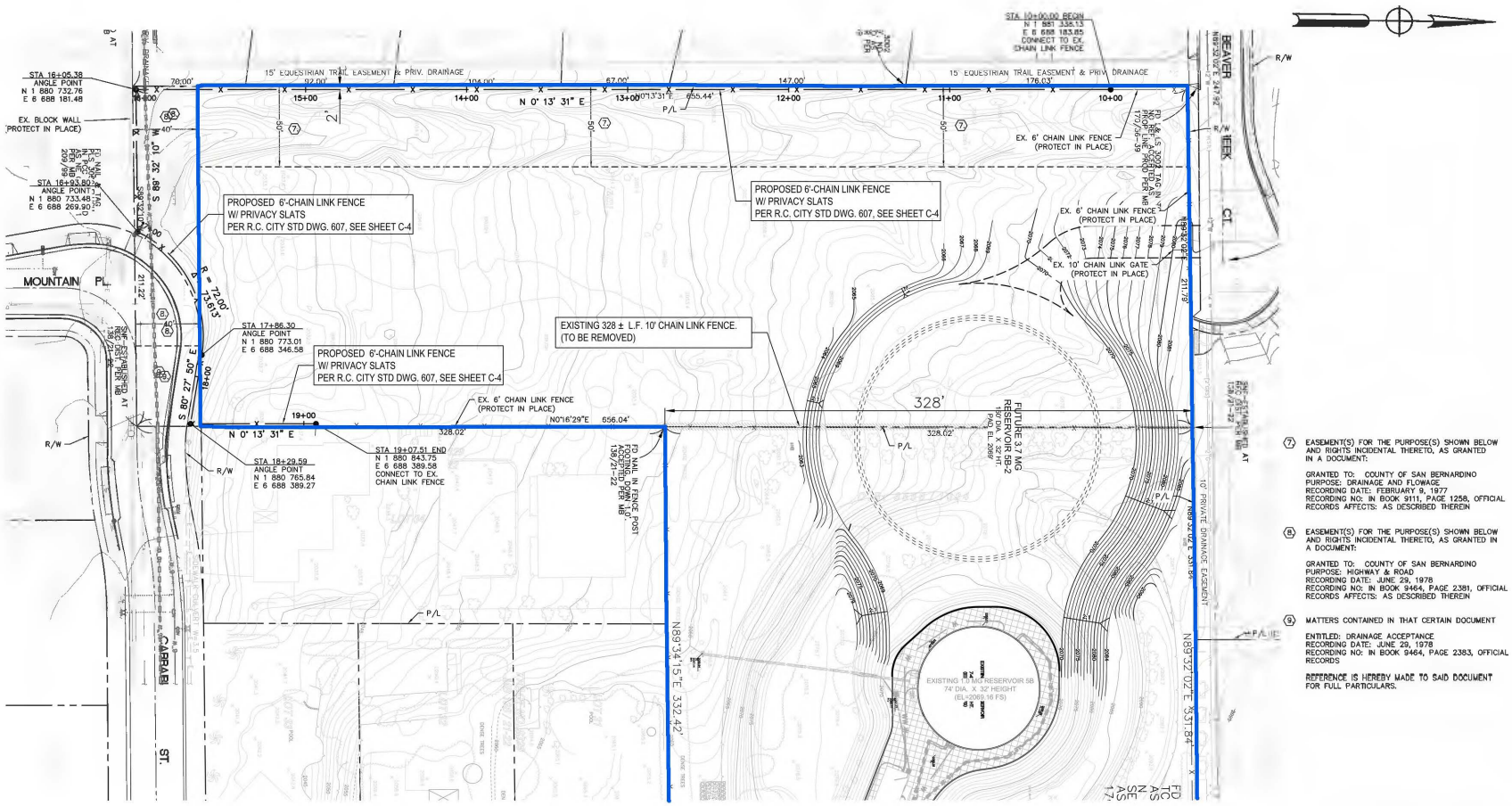



# Figure 2.0–2

## Project Location Map

The Reservoir 5B-2 Site Improvement Project

USGS *Cucamonga Peak* Quadrangle (7.5-minute series)




# Figure 2.0–3

## Project Development Plan

The Reservoir 5B-2 Site Improvement Project

## 2.1 Previous Work

The records search for the property conducted by BFSA personnel at the SCCIC at CSU Fullerton reported that no archaeological sites have been recorded within the subject property. However, 15 resources have been recorded within a one-mile radius of the project. Additionally, a total of 32 cultural resources studies have been conducted within a one-mile radius of the project. Three of the previous studies included portions of the current project (Hearn 1976; Bonner and Kay 2006; Fulton and Tibbet 2014). A discussion of the complete records search is provided in Section 4.1 of this report.

## 2.2 Project Setting

The proposed project is generally located in southwestern San Bernardino County at the northern terminus of Rocky Mountain Place in the city of Rancho Cucamonga and is primarily surrounded by single-family residential properties. As such, the subject property is located south of the San Gabriel Mountains, the San Bernardino National Forest, and the Cucamonga Wilderness. The San Gabriel Mountains extend from Newall Pass in Los Angeles County to the east to the Cajon Pass in San Bernardino County. These mountains are part of the Transverse Ranges with peaks exceeding 9,000 feet Above Mean Sea Level (AMSL). Situated at the base of the foothills associated with the San Gabriel Mountains, the project is mapped by Morton and Matti as the Holocene age "young alluvial fan deposits" (Morton and Matti 2001).

The project is situated west of the convergence of Deer and Day creeks and surrounded by various north-to-south-trending seasonal drainages that transport water from the higher elevated foothills and mountains. To the southeast, both Deer and Day creeks have been channelized and are tributaries of the larger Cucamonga Creek. Currently, the property is vacant and contains a drainage channel along the western boundary that diverts water to the south into a culvert situated just off the project at the corner of Carrari Street and Rocky Mountain Place. This drainage appears to have been a natural drainage channalized between 1930 and 1938. Elevations within the project range from approximately 2,075 to 2,030 feet AMSL. Vegetation found within the property primarily consists of coastal sage scrub plants. The property contains some bedrock outcroppings along with natural cobbles of various sizes consistent with the project's geographic location within the Holocene-aged alluvial fan. Although some outcroppings within the property look to be situated naturally, many appear to have been pushed or moved from neighboring properties.

During the prehistoric period, vegetation near the project provided sufficient food resources to support prehistoric human occupants. Animals that inhabited the project during prehistoric times included mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians. The natural setting of the project during the prehistoric occupation offered a rich nutritional resource base. Fresh water was likely obtainable from sesonal drainages like the one located within the western portion of the project as well as the Day, Deer, and Cucamonga creeks.

## 2.3 Cultural Setting

### *2.3.1 Prehistoric Period*

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino County references the San Dieguito Complex, the Encinitas Tradition, the Milling Stone Horizon, the La Jolla Complex, the Pauma Complex, and the San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component in the southwestern area of San Bernardino County was represented by the Gabrielino and Serrano Indians. According to Kroeber (1976), the Serrano probably owned a stretch of the Sierra Madre from Cucamonga east to above Mentone and halfway up to San Timoteo Canyon, including the San Bernardino Valley and just missing Riverside County. However, Kroeber (1976) also states that this area has been assigned to the Gabrielino, "which would be a more natural division of topography, since it would leave the Serrano pure mountaineers."

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to use these terms interchangeably. Reference will be made to the geologic framework that divides the culture chronology of the area into four segments: late Pleistocene (20,000 to 10,000 years before the present [YBP]), early Holocene (10,000 to 6,650 YBP), middle Holocene (6,650 to 3,350 YBP), and late Holocene (3,350 to 200 YBP).

***Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)***

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation, utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

***Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)***

The Archaic Period of prehistory began with the onset of the Holocene around 9,000 YBP.

The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America (Antevs 1953; Van Devender and Spaulding 1979). The general warming trend caused sea levels to rise, lakes to evaporate, and drainage patterns to change. In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and sea levels. The coastal shoreline at 8,000 YBP, depending upon the particular area of the coast, was near the 20-meter isobath, or one to four kilometers further west than its present location (Masters 1983).

The rising sea level during the early Holocene created rocky shorelines and bays along the coast by flooding valley floors and eroding the coastline (Curray 1965; Inman 1983). Shorelines were primarily rocky with small littoral cells, as sediments were deposited at bay edges but rarely discharged into the ocean (Reddy 2000). These bays eventually evolved into lagoons and estuaries, which provided a rich habitat for mollusks and fish. The warming trend and rising sea levels generally continued until the late Holocene (4,000 to 3,500 YBP).

At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established (Gallegos 1985; Inman 1983; Masters 1994; Miller 1966; Warren and Pavesic 1963). Many former lagoons became saltwater marshes surrounded by coastal sage scrub by the late Holocene (Gallegos 2002). The sedimentation of the lagoons was significant in that it had profound effects on the types of resources available to prehistoric peoples. Habitat was lost for certain large mollusks, namely *Chione* and *Argopecten,* but habitat was gained for other small mollusks, particularly *Donax* (Gallegos 1985; Reddy 2000). The changing lagoon habitats resulted in the decline of larger shellfish, the loss of drinking water, and the loss of Torrey Pine nuts, causing a major depopulation of the coast as people shifted inland to reliable freshwater sources and intensified their exploitation of terrestrial small game and plants, including acorns (originally proposed by Rogers 1929; Gallegos 2002).

The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, horizons, and periods, including San Dieguito, La Jolla, Encinitas, Milling Stone, Pauma, and Intermediate.

***Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)***

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow darts, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far reaching as the Colorado River Basin and cremation of the dead.

***Protohistoric Period (Late Holocene: 1790 to Present)***

*Gabrielino*

The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino lived in permanent villages and smaller resource gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams, as well as in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978a; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray, shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin, porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and snakes (Bean and Smith 1978a; Kroeber 1976).

The social structure of the Gabrielino is little known; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978a; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting tribute from the village(s)

under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, which was a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978a; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978a; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978a; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978a; Kroeber 1976).

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a *yuvar,* an open-air structure built near the chief's house (Bean and Smith 1978a; Kroeber 1976).

Clothing was minimal. Men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978a; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978a; Kroeber 1976).

*Serrano*

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

> The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1929] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains east of Cajon Pass and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

The Serrano were part of "exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk$^{w}$utam* (Wildcat) and *wahiʔiam* (Coyote)" (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon "economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California" (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous, political and landholding units formed patrilineally, with all males descending from a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage, and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

> There are twin creator gods, a creation myth told in "epic poem" style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman, a person who acquired their powers through dreams, which were

induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and "sucking out the disease-causing agents" (Bean and Smith 1978b).

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband's parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweathouses (Bean and Smith 1978b).

The Serrano were primarily hunters and gatherers. Vegetal staples varied with locality. Acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow was used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

The Serrano were very similar technologically to the Cahuilla. In general, manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

### *2.3.2 Historic Period*

The historic background of the project began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). In the late eighteenth century, the San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego County) missions began colonizing southern California, and gradually expanded their use of the interior valley (presently western Riverside County) for raising grain and cattle to support the missions. The San Gabriel Mission claimed lands in what is presently Jurupa,

Riverside, San Jacinto, and the San Gorgonio Pass, while the San Luis Rey Mission claimed land in what is presently Lake Elsinore, Temecula, and Murrieta (American Local History Network: Riverside County, California 1998). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1964). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

In the mid- to late 1770s, Juan Bautista de Anza passed through much of what is now Riverside County while searching for an overland route from Sonora, Mexico to San Gabriel and Los Angeles, describing fertile valleys, lakes, and sub-desert areas (American Local History Network: Riverside County, California 1998; Riverside County n.d.). Spanish missionaries formed Mission San Gabriel in the San Bernardino Valley in the early nineteenth century. The mission established Rancho San Bernardino in 1819, which included the present-day areas of San Bernardino, Fontana, Rialto, Redlands, and Colton (City of San Bernardino 2015). Since there was no reliable water source in the area, from 1819 to 1820, the missionaries developed a zanja through the use of Native American labor from the Guachama Rancheria (Smallwood 2006). The creation of the zanja was implemented to divert waters from Mill Creek all the way through the city of Redlands, ending near the mission to assist with agricultural enterprises. The new water source allowed nearby ranching districts to develop during the nineteenth century (City of Redlands 2010; Smallwood 2006).

Mexico gained independence in 1822 and desecularized the missions in 1832, signifying the end of the Mission Period (Brigandi 1998; Riverside County n.d.). By this time, the missions owned some of the best and most fertile land in southern California. In order for California to develop, the land would have to be made productive enough to turn a profit (Brigandi 1998). The new government began distributing the vast mission holdings to wealthy and politically connected Mexican citizens. The "grants" were called "ranchos," and many of these ranchos have lent their names to modern-day locales (American Local History Network: Riverside County, California 1998).

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from the San Luis Rey Mission petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

> We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission … We plead and beseech you … to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The Mexican and American ranchers did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

In 1846, war erupted between Mexico and the United States. In 1848, with the signing of the Treaty of Guadalupe Hidalgo, the region was annexed as a territory of the United States, leading to California became a state in 1850. These events generated a steady flow of settlers into the area, including gold miners, entrepreneurs, health-seekers, speculators, politicians, adventurers, seekers of religious freedom, and individuals desiring to create utopian colonies.

In 1851, 500 Mormons moved to the Redlands/San Bernardino area and purchased Rancho San Bernardino from the Lugo family (City of Redlands 2010). The settlement that the Mormons created within the rancho was short-lived, however, as in 1857, Brigham Young recalled all Mormons in San Bernardino back to Utah. Approximately 1,400 Mormons returned to Utah, while the remaining 45 percent stayed in San Bernardino, choosing "to forsake the church rather than leave their homes" (Lyman 1989).

By the late 1880s and early 1890s, there was growing discontent between San Bernardino and Riverside, its neighbor 10 miles to the south, due to differences in opinion concerning religion, morality, the Civil War, politics, and fierce competition to attract settlers. After a series of instances in which charges were claimed about unfair use of tax monies to the benefit of only San Bernardino, several people from Riverside decided to investigate the possibility of a new county. In May 1893, voters living within portions of San Bernardino County (to the north) and San Diego County (to the south) approved the formation of Riverside County. Early business opportunities were linked to the agriculture industry but commerce, construction, manufacturing, transportation, and tourism also provided a healthy local economy (American Local History Network: Riverside County, California 1998; Riverside County n.d.).

*General History of Rancho Cucamonga*

The word "Cucamonga" is Shoshone in origin, meaning "sandy place," and was first documented in 1811 in records of Mission San Gabriel. The 13,000-acre Rancho Cucamonga was granted to Tiburcio Tapia, the president of the Los Angeles City Council, in 1839 (City of Rancho Cucamonga 2010). Tapia lived on the land granted to him, on top of Red Hill, planted vineyards, and built a small winery (enlarged and called Thomas Winery in 1933 and Filippi Vineyards in 1967). These historic winery buildings are located at the northeast corner of Foothill Boulevard and Vineyard Avenue and are currently used for commercial purposes (City of Rancho Cucamonga 2010).

Tapia's daughter Maria Merced Tapia de Prudhomme inherited Rancho Cucamonga after Tapia died in 1845, and her husband Leon Victor Prudhomme took control until he sold it to John Rains in 1858 (City of Rancho Cucamonga 2010). Rains expanded the vineyards on the rancho with the addition of roughly 125,000 to 150,000 new vines (City of Rancho Cucamonga 2010). When Rains was found murdered in 1862, his widow Dona Maria Merced Williams de Rains inherited the rancho but encountered financial problems and lost it, effectively ending the rancho era in the Cucamonga area (City of Rancho Cucamonga 2010).

The city of Rancho Cucamonga was incorporated in 1977 and included three towns: Cucamonga, Alta Loma, and Etiwanda. The subject property is situated within an area identified by the City of Rancho Cucamonga as originally being part of the community of Alta Loma (City of Rancho Cucamonga 2020).

Alta Loma was created from lands originally part of the Rancho holdings. Isaias Hellman purchased portions of the rancho after the death of John Rains and formed the Cucamonga Homestead Association. However, Hellman had trouble obtaining water for his subdivision. In 1881, Adolph Petsch, along with other investors, opened the Hermosa Tract just outside of the former rancho lands. This competition encouraged Hellman to establish the Iowa Tract in 1882 (City of Rancho Cucamonga History n.d.). Hellman solved the water issue by having Chinese laborer's dig water canals from the tract via the Cucamonga Canyon. In 1887, the two tracts merged and were known as Iomosa (City of Rancho Cucamonga History n.d.). Based upon irrigation maps from 1888, the current project was located outside of the Hermosa and the Iowa tracts; however, it is clear the area was located within the sphere of influence of the tracts (Figure 2.3–1).

In the late nineteenth century, agriculture became the main industry in the area, including citrus fruits and wine-making grapes, and as shown on Figure 2.3–1, the Hermosa Tract included the Cucamonga Fruit Land Company (City of Rancho Cucamonga 2010). In 1913, when the Pacific Electric Railway came to the area, the community became known as Alta Loma (City of Rancho Cucamonga History n.d.).

The rebranding of the area as Alta Loma corresponded with the founding of the Alta Loma Mutual Water Company in 1913 (Clucas 2005). The Alta Loma Mutual Water Company was established to serve the agricultural community in the area from a well on the south side of 19$^{th}$

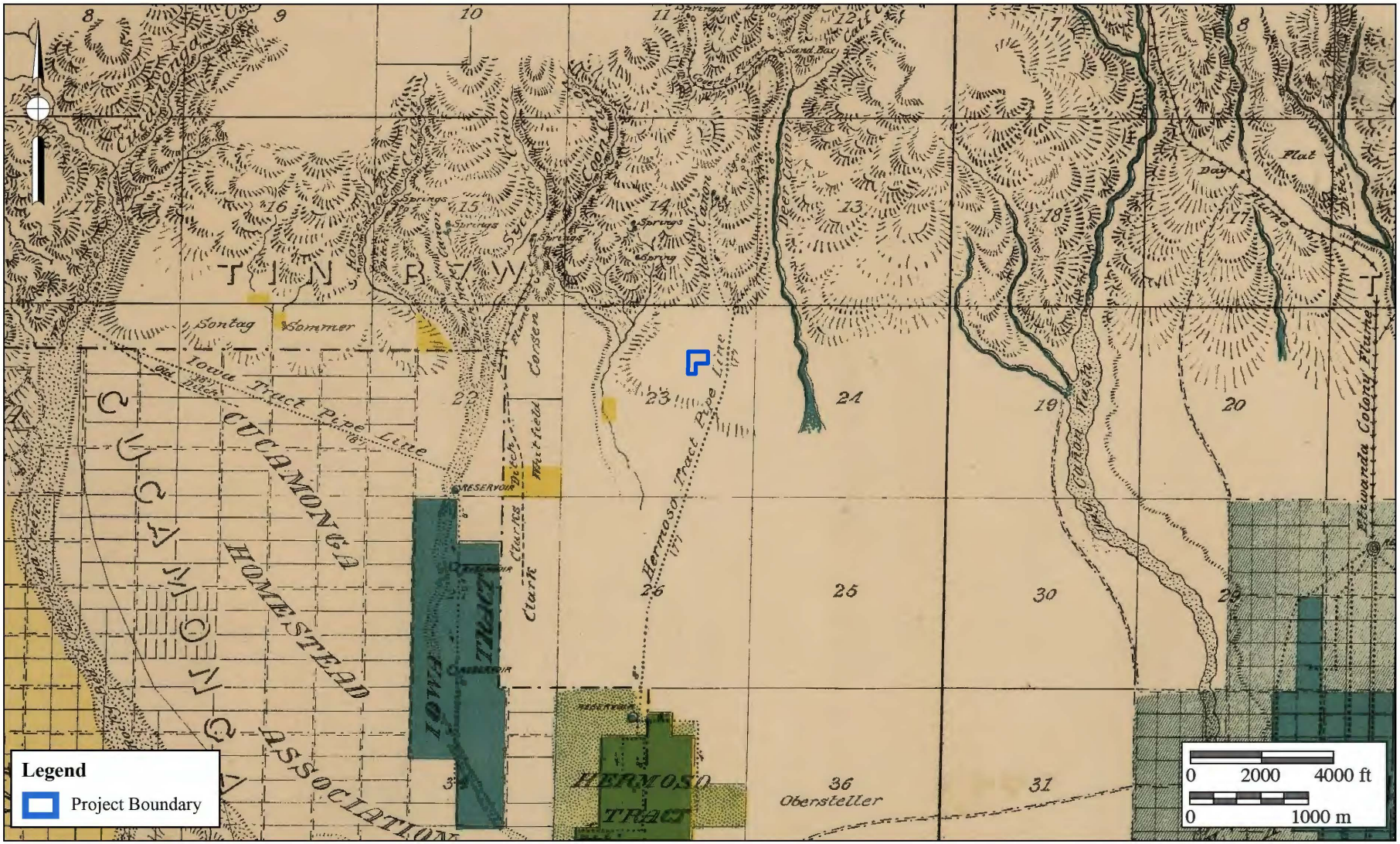



**Figure 2.3–1**

**1888 Detailed Irrigation Map**

The Reservoir 5B-2 Site Improvement Project

Street, west of Hellman Avenue. Other similar water companies were formed shortly after in 1914 including the Foothill Irrigation Company, Citrus Water Company, and the Joya Water Company. Throughout the early twentieth century, other water companies were formed, including the Schowalter Mutual Water Company. The Schowalter Mutual Water Company was located within the proximity of the current project "on the north side of Almond Street and the north side of Hillside Road east of Hermosa Avenue" (Clucas 2005). The records search data presented in Section 4.0 shows that Schowalter owned large swaths of agricultural land to the south of the project. He cleared the stones from his property stacking them by hand to create a five to 15-foot-high, 2,500-foot-long rock pile that became known as the Schowalter rock pile which is a City of Rancho Cucamonga Historical Point of Interest (The Historical Marker Database n.d.).

During the 1950s, many of the water companies were consolidated into the Cucamonga County Water District which in 2004 became the CVWD (Clucas 2005). Although the early half of the twentieth century within the Rancho Cucamonga area focused on agriculture and access to water, the second half was one of "uncontrolled growth due to Los Angeles and Orange County families seeking affordable housing" (City of Rancho Cucamonga History n.d.). This led to the development of a committee to incorporate the communities of Cucamonga, Alta Loma, and Etiwanda. In 1977, the three communities were incorporated and became the city of Rancho Cucamonga.

> The population at incorporation was 44,600 and in fewer than ten years it increased to 73,842, an average annual increase of 9.5 percent compared to the State average of 2.8 percent. Upon incorporation, Rancho Cucamonga was now the third-largest city in San Bernardino County. The average household income in 1986 was 55 percent higher than in 1980. (City of Rancho Cucamonga History n.d.)

Although the agriculture industry in Rancho Cucamonga has changed over time, it remains a recognizable feature of the city's landscape (City of Rancho Cucamonga 2010).

### 2.4 Research Goals

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project area through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is the southwestern portion of San Bernardino County. The scope of work for the archaeological program conducted for the Reservoir 5B-2 Site Improvement Project included the survey of 5.5 acres to evaluate the potential for cultural resources. Given the area involved and the narrow focus of the cultural resources study, the research design for this project was necessarily limited and general in nature. Since the main objective of the investigation was to identify the presence of, significance of, and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern

California, but to investigate the role and importance of the identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of characteristics, as well as the ability of the resource to address regional research topics and issues.

Although initial site evaluation investigations are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The basic research effort employed is focused upon gathering sufficient data to determine the boundaries of any identified resource, the depth, stratigraphy, and contents of any subsurface deposits, and the overall integrity of the site. Testing and recordation of the contents of the site would provide the basis to complete an analysis of spatial relationships of artifacts, features, and natural resources. Ultimately, this information forms the foundation to determine the cultural affiliation of the site, the period of occupation, site function, and potential to address more focused research questions. The following research questions take into account the size and location of the project discussed above.

***Research Questions:***

- Can located cultural resources be situated with a specific time period, population, or individual?
- Do the types of located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do the located sites compare to others reported from different surveys conducted in the area?
- How do the located sites fit existing models of settlement and subsistence for valley environments of the region?

*Data Needs*

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project area occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with these primary research goals in mind:

1) To identify cultural resources occurring within the project;
2) To determine, if possible, site type and function, context of the deposit, and chronological placement of each cultural resource identified;
3) To place each cultural resource identified within a regional perspective; and
4) To provide recommendations for the treatment of each of the cultural resources identified.

# 3.0 METHODOLOGY

The archaeological program for the Reservoir 5B-2 Site Improvement Project consisted of an institutional records search, an intensive pedestrian survey of the 5.5-acre property, and the preparation of a technical study. This archaeological study conformed to the City of Rancho Cucamonga cultural resource guidelines. Statutory requirements of CEQA and subsequent legislation (Section 15064.5) were followed in evaluating the significance of cultural resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

## 3.1 Archaeological Records Search

The records search conducted by BFSA at the SCCIC at CSU Fullerton was reviewed for an area of one mile surrounding the project in order to determine the presence of any previously recorded sites. Results of the records search are provided in Appendix C and discussed in Section 4.1. The SCCIC also provided the standard review of the National Register of Historic Places (NRHP) and the OHP Historic Property Directory. Land patent records, held by the Bureau of Land Management (BLM) and accessible through the BLM General Land Office (GLO) website, were also searched for pertinent project information, and the BFSA research library was consulted for any relevant historical information.

## 3.2 Field Methodology

In accordance with CEQA review requirements, an intensive pedestrian reconnaissance was conducted that employed a series of parallel survey transects spaced at 10-meter intervals to locate archaeological sites within the project that primarily focused on the previously undeveloped western portion of the property. The archaeological survey of the project was conducted on March 10, 2022. The entire project was covered by the survey process, and photographs were taken to document project conditions during the survey (see Section 4.2). Ground visibility throughout the property was moderate.

## 3.3 Report Preparation and Recordation

This report contains information regarding previous studies, statutory requirements for the project, a brief description of the setting, the research methods employed, and the overall results of the survey. The report includes all appropriate illustrations and tabular information needed to make a complete and comprehensive presentation of these activities, including the methodologies employed and the personnel involved. A copy of this report will be placed at the SCCIC at CSU Fullerton.

## 3.4 Native American Consultation

The analysis of nearby site components and artifacts did not indicate Native American

religious, ritual, or other special activities at this location. In addition, BFSA requested a review of the SLF by the NAHC to determine if any recorded Native American sacred sites or locations of religious or ceremonial importance are present within one mile of the project. At the present, the NAHC SLF results are still pending. All correspondence is provided in Appendix D.

## 3.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Bernardino County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the CEQA criteria that a resource must meet in order to be determined important.

### *3.5.1 California Environmental Quality Act*

According to CEQA (§15064.5a), the term "historical resource" includes the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (Public Resources Code [PRC] SS5024.1, Title 14 CCR. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey, meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

    a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
    b) Is associated with the lives of persons important in our past;
    c) 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; or

d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1[g] of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2) The significance of an historical resource is materially impaired when a project:

   a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the CRHR; or
   b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
   c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

1) When a project will impact an archaeological site, a lead agency shall first determine

whether the site is an historical resource, as defined in subsection (a).

2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

    1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
    2) The requirement of CEQA and the Coastal Act.

# 4.0 RESULTS

## 4.1 Records Search Results

An archaeological records search for the project and the surrounding area within a one-mile radius was conducted by BFSA at the SCCIC at CSU Fullerton. The records search for the project did not identify any previously recorded cultural resources within the subject property. However, 15 cultural resources have been recorded within a one-mile radius of the project. The previously recorded resources include one prehistoric habitation site, a historic transmission line, a historic orchard with associated water control features, a rock pile, two historic ranch properties, four historic single-family residences, a historic carriage house, a historic barn, a historic ancillary structure, a historic rock wall, and a historic wall and associated water control features. Brief descriptions of the sites located within a one-mile radius are provided in Table 4.1–1, and the complete records search results are provided in Appendix C.

**Table 4.1–1**
Archaeological Sites Located Within One Mile
of the Reservoir 5B-2 Site Improvement Project

| Site(s) | Description |
|---|---|
| SBR-895 | Prehistoric habitation site |
| SBR-7694H | Historic transmission line |
| SBR-9000H | Historic orchard and water control features |
| SBR-10,304H | Historic Schowalter rock pile |
| SBR-10,305H and P-36-033150 | Historic ranch property |
| P-36-016476; P-36-016477; P-36-016478; and P-36-016492 | Historic single-family residence |
| P-36-020134 | Historic carriage house |
| P-36-020145 | Historic barn |
| P-36-021688 | Historic ancillary building |
| SBR-31,685H | Historic rock wall |
| SBR-31,687H | Historic wall and water control features |

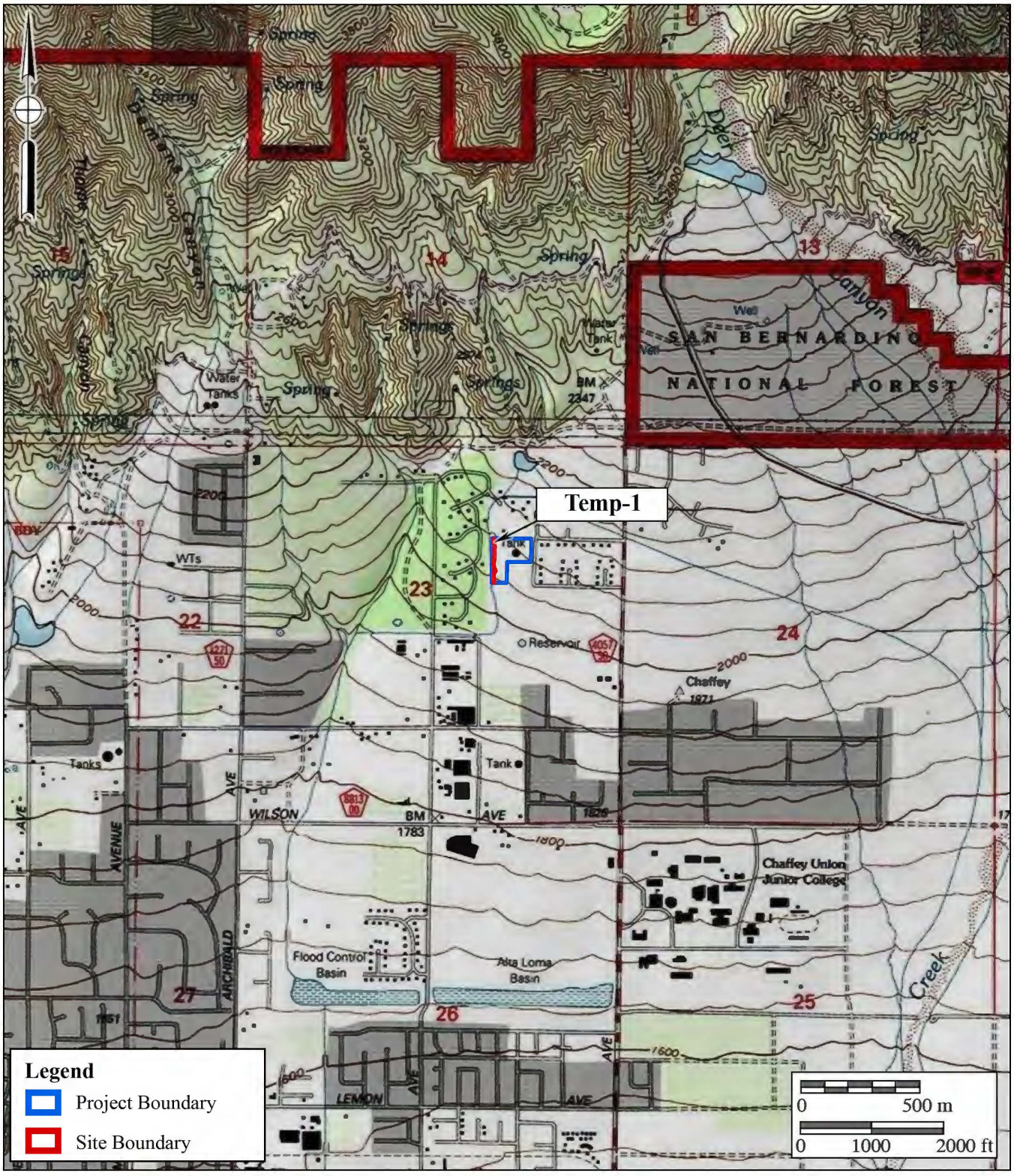
A total of 32 cultural resources studies have been conducted within a one-mile radius of the proposed project (Appendix C), three of which include portions of the current project (Hearn 1976; Bonner and Kay 2006; Fulton and Tibbet 2014). The Hearn (1976) study was a general overview of the area and does not directly address the subject property. The remaining two studies were focused on cell tower locations within the boundaries of the CVWD reservoir 5B-1 property (Bonner and Kay 2006; Fulton and Tibbet 2014). Regardless, none of the previous studies identified any resources within the subject property.

BFSA also reviewed the following sources:

- The NRHP Index
- The OHP, Archaeological Determinations of Eligibility
- The OHP, Directory of Properties in the Historic Property Data File
- Historic USGS maps including the 1897 and 1944 15' *Cucamonga*, 1955, 1968, and 1984 7.5' *Cucamonga Peak* quadrangle maps.
- Aerial photographs (1930, 1938, 1959, 1966, 1980, 1985, 2002, 2010, and 2021) available from the University of California Santa Barbra, Historicaerials.com, and Google.

The historic maps and aerial photographs do not show any structures ever having been located within the subject property. However, both the maps and aerial photographs show a manmade earthen drainage channel along the western boundary of the project (Figure 4.1–1). The channel is not visible on the first aerial from 1930, rather it appears that at that time, a southeast-trending natural drainage crossed the project (Plate 4.1–1). This natural drainage is one of many that drain from the higher elevated foothills to the north. Based upon the records search data, it also appears that this drainage corresponded with the recorded location of prehistoric Site SBR-895, approximately three-tenth-of-a-mile northeast of the current project. By 1938, the seasonal drainage appears to have been channelized by the creation of a manmade earthen channel along the western boundary of the project, diverting water south to another channel located along Vista Grove Street. It is possible that the channel was part of the the Schowalter Mutual Water Company holdings as it appears the channel was one of many utilized for irrigation of the orchards found south of Vista Grove Street (Plate 4.1–2). Subsequent photos continue to show the channel, but it appears it was not actively maintained as the alignment deviates through the years due to erosion (Plate 4.1–3). The 1976 aerial shows the channel within the eastern portion of the property and the CVWB 5B-1 reservoir within the eastern portion of the project (Plate 4.1–4). The 5B-1 reservoir was constructed in 1975 and its construction impacted the entire eastern portion of the project (APN 1074-101-22). Based upon the aerial photographs, much of the surrounding neighborhood was developed between 1980 and 1985, which appears to have removed many of the manmade drainage alignment outside of the current project. The aerial photographs show that although much of the surrounding area including the eastern portion of the project was developed during the late twentieth century, the western portion of the project (APN 1074-101-21) has remained relatively unchanged except for the channelization of the seasonal drainage.

BFSA also requested a records search of the SLF of the NAHC. As of the date of this report, the NAHC SLF results are still pending. All correspondence is provided in Appendix D.

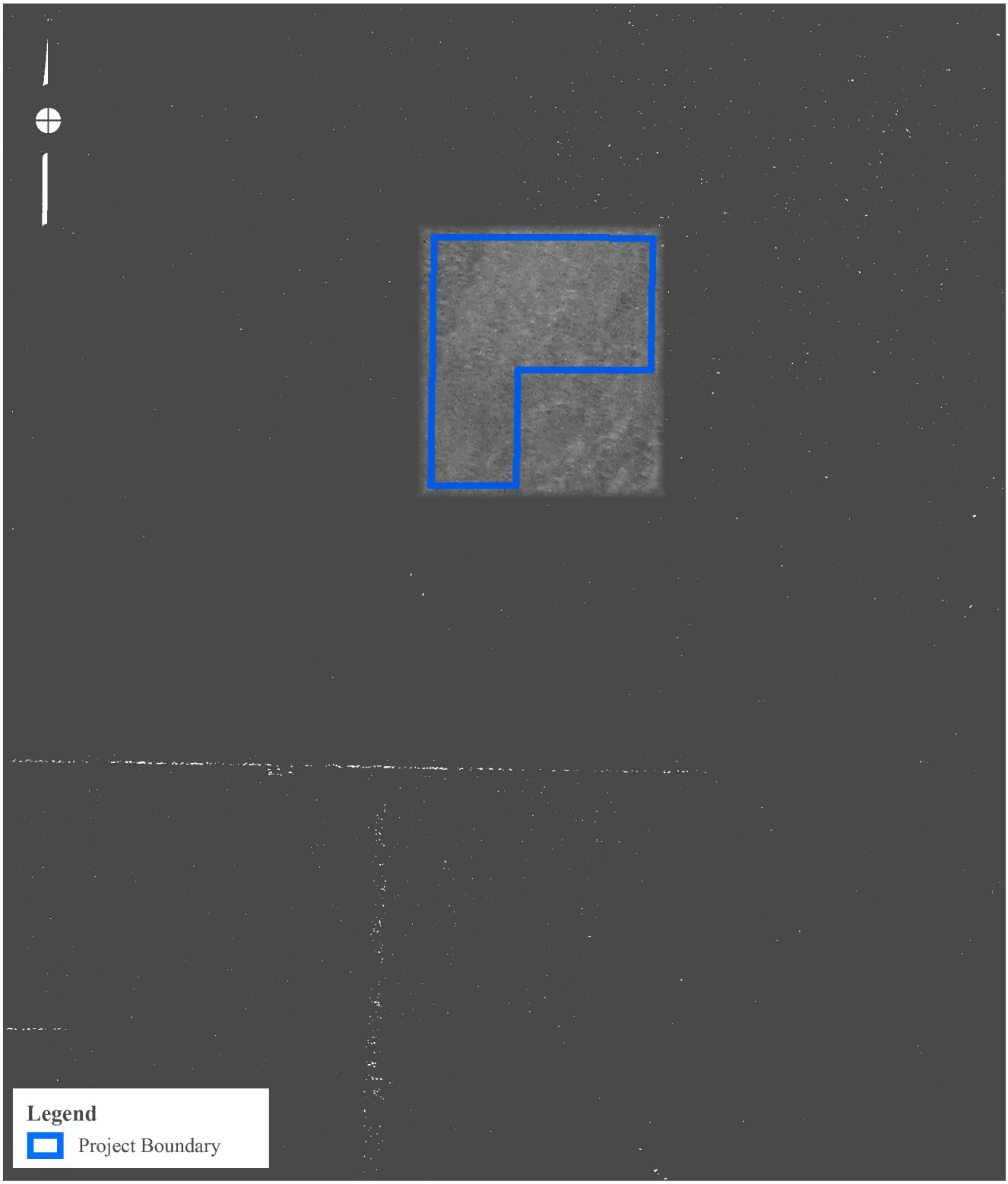



# Figure 4.1–1

## Cultural Resourc Location Map

The Reservoir 5B-2 Site Improvement Project

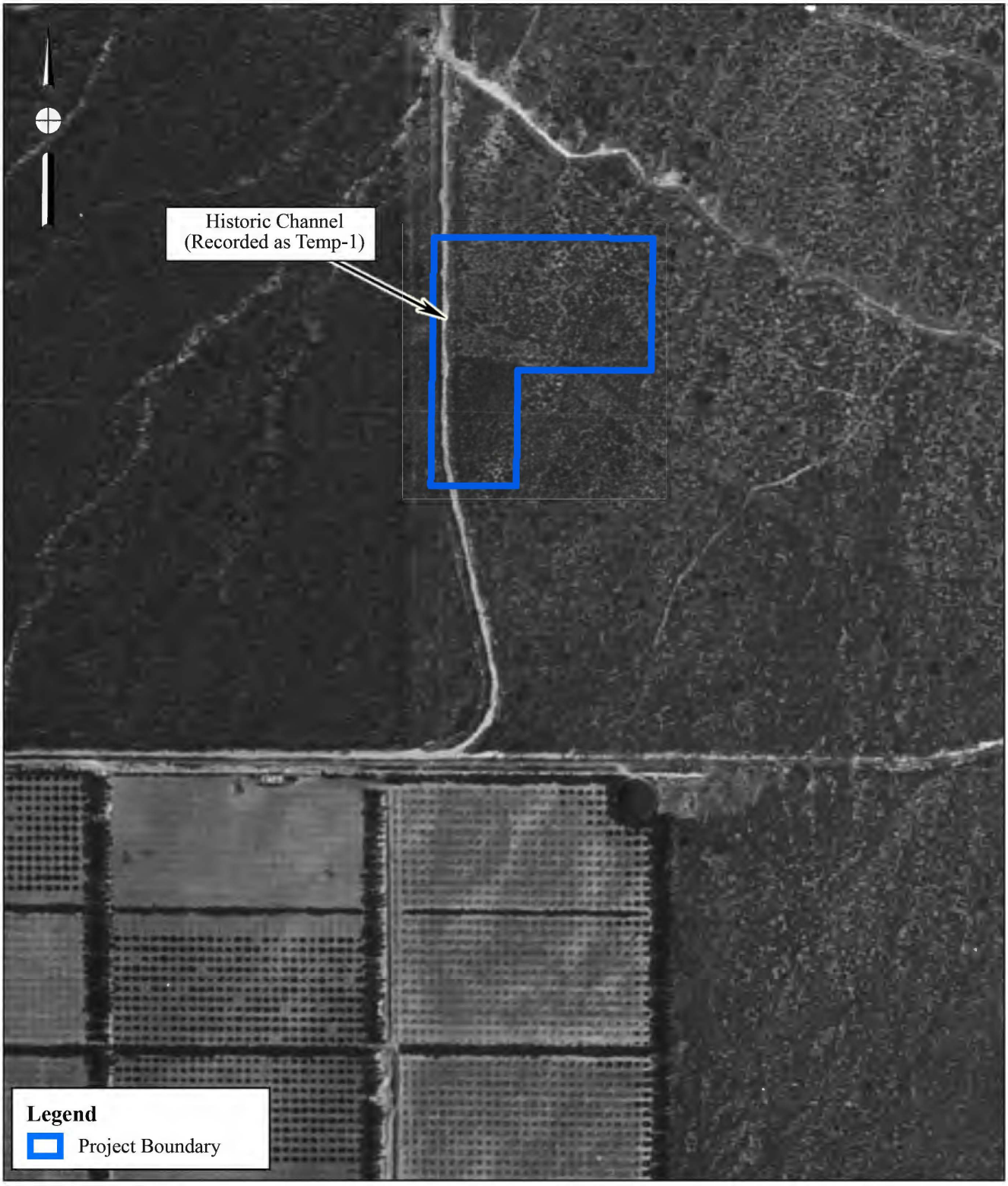
USGS *Cucamonga Peak* Quadrangle (7.5-minute series)




# Plate 4.1–1

## 1930 Aerial Photograph

The Reservoir 5B-2 Site Improvement Project




# Plate 4.1–2

## 1938 Aerial Photograph

The Reservoir 5B-2 Site Improvement Project


# Plate 4.1–3

## 1959 Aerial Photograph

The Reservoir 5B-2 Site Improvement Project


# Plate 4.1–4

## 1976 Aerial Photograph

The Reservoir 5B-2 Site Improvement Project

The records search and literature review suggest that there is a moderate potential for archaeological sites to be contained within the boundaries of the property, primarily within the western portion (APN 1074-101-21). The eastern portion is already developed containing the CVWD 5B-1 reservoir; however, the western parcel has had little impacts. Further, it contains a natural source of water which corresponds to the prehistoric habitation Site SBR-895, located a short distance northeast of the project. Site SBR-895 was determined eligible for the NRHP in 1980, although based upon the information on file with the SCCIC, the site was destroyed by the construction of the Hillside Basin in 1982 (Shepard and Myers 2014). In addition, multiple historic resources are recorded within one mile of the project, and the aerial photographs show that between 1930 and 1938, the seasonal drainage within the project was channelized. As such, the project has potential for both prehistoric and historic resources.

### 4.2 Results of the Field Survey

Field Archaeologist Clarence Hoff conducted the archaeological survey for the Reservoir 5B-2 Site Improvement Project on March 10, 2022. The archaeological survey of the property was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately 10-meter intervals that primarily focused on the undeveloped areas of the project. The survey primarily focused on the western parcel (APN 1074-101-21) as the eastern parcel was developed in the mid-1970s and contains the current CVWD 5B-1 reservoir, cell towers, and other associated improvements. Photographs were taken to document project conditions at the time of the survey.

During the survey, visibility of the natural ground surface was moderate as dense vegetation primarily consisting of coastal sage scrub was found throughout the undeveloped portions of the project (Plates 4.2–1 and 4.2–2). The undeveloped portions of the property contain some bedrock outcroppings along with natural cobbles of various sizes. Some outcroppings within the property look to be situated naturally, however, many appear to have been pushed or moved from neighboring properties.

No prehistoric resources were encountered during the survey. However, the manmade earthen drainage channel first visible on the 1938 aerial photograph was encountered (Plate 4.2–3). As such, the channel alignment was recorded as Site Temp-1 according to the OHP's manual, *Instructions for Recording Historical Resources,* using DPR forms (Appendix B). The earthen channel appears to be dug between approximately three to five feet below the surrounding elevation and what remains of it is approximately 575 feet long. The channel has not been recently maintained as vegetation has overtaken much of the depression and, again, the alignment has deviated from the straight channel first visible on the 1938 aerial (Figure 4.2–1).

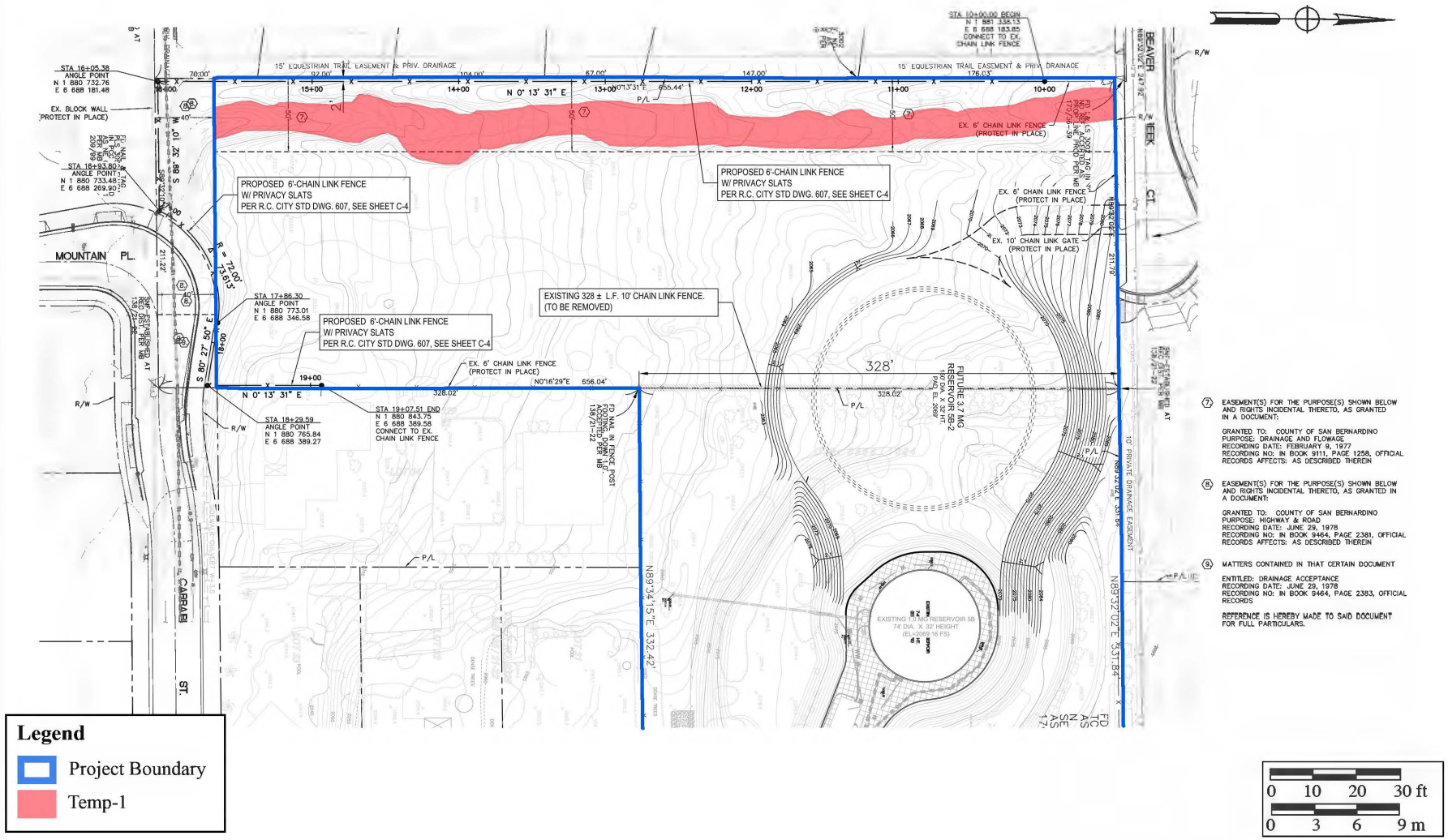
Further, the alignment of the channel outside of the project has been removed by the development of the surrounding properties. In addition, just south of the project parcel, the drainage alignment has been altered to drain into a storm drain located at the intersection of Rocky Mountain Place and Carrari Street (Plate 4.2–4).

**Plate 4.2–1: Overview of the project from the northwest corner, facing south.**

**Plate 4.2–2: Overview of the project from the northeast corner, facing southwest.**

**Plate 4.2–3: Overview of the manmade channel, facing southeast.**

**Plate 4.2–4: Overview of the altered alignment into storm drain off the project, facing east.**




⑦ EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: COUNTY OF SAN BERNARDINO
PURPOSE: DRAINAGE AND FLOWAGE
RECORDING DATE: FEBRUARY 9, 1977
RECORDING NO: IN BOOK 9111, PAGE 1258, OFFICIAL RECORDS AFFECTS: AS DESCRIBED THEREIN

⑧ EASEMENT(S) FOR THE PURPOSE(S) SHOWN BELOW AND RIGHTS INCIDENTAL THERETO, AS GRANTED IN A DOCUMENT:

GRANTED TO: COUNTY OF SAN BERNARDINO
PURPOSE: HIGHWAY & ROAD
RECORDING DATE: JUNE 29, 1978
RECORDING NO: IN BOOK 9464, PAGE 2381, OFFICIAL RECORDS AFFECTS: AS DESCRIBED THEREIN

⑨ MATTERS CONTAINED IN THAT CERTAIN DOCUMENT

ENTITLED: DRAINAGE ACCEPTANCE
RECORDING DATE: JUNE 29, 1978
RECORDING NO: IN BOOK 9464, PAGE 2383, OFFICIAL RECORDS

REFERENCE IS HEREBY MADE TO SAID DOCUMENT FOR FULL PARTICULARS.

# Figure 4.2–1

## Project Development Plan

The Reservoir 5B-2 Site Improvement Project

Given the removal of all historic elements of the earthen channel outside of the project, the resource generally lacks integrity and would likely not qualify for inclusion in the CRHR. Further, based upon the current project plans, Temp-1 will not be directly impacted or removed by the Reservoir 5B-2 Site Improvement Project (See Figure 4.2–1). The drainage is situated within an easement granted to San Bernardino County for the purpose of drainage and flowage, and the newly proposed 5B-2 reservoir is to be located to the east, directly adjacent to the existing 5B-1 reservoir. However, if the project is redesigned to remove the channel, additional study of Temp-1 is recommended to include ownership and construction history, detailed drawings or sketches, evaluation of the resource, and, if found eligible for the CRHR, any additional mitigation measures deemed applicable to mitigate its removal.

# 5.0 RECOMMENDATIONS

The cultural resources study for the Reservoir 5B-2 Site Improvement Project was completed in accordance with CEQA. Although one historic-era resource, a manmade earthen water channel (Temp-1), was identified within the project parcel, this resource will not be directly impacted by the proposed project. Based upon project plans, it will continue to remain as is located within an easement granted to the County of San Bernardino specifically for the drainage and flowage of water. However, if the project is redesigned to include the removal of the resource, then additional study and evaluation for inclusion in the CRHR in accordance with CEQA is recommended.

Although further study of Temp-1 is only recommended should the project be redesigned to impact the resource, monitoring of all ground disturbances associated with the project is also recommended. Based upon the records search results, a significant prehistoric site (SBR-895) was located a short distance northeast of the property and multiple historic resources are documented within one-mile of the project. Therefore, based upon the presence of a historic resource within the property, the records search results, and the limited visibility of the natural ground surface during the survey, there remains a potential for buried or masked archaeological deposits to be present within the project boundaries. Based upon the potential to encounter buried or masked cultural deposits, it is recommended that a MMRP be implemented as a condition of project approval. The MMRP should include archaeological monitoring of all excavation and grading activities conducted within a maximum of the first five feet below the natural ground surface or until the project archaeologist has determined there no longer remains the potential for resources to be present. Monitoring shall also include any trenching for utilities or other distubances that will impact the upper five feet of soil. The MMRP shall also include measures for testing and significance evaluations should historic or prehistoric resources be encountered.

*Mitigation Monitoring and Reporting Program (MMRP)*

A MMRP to mitigate potential impacts to undiscovered buried cultural resources within the Reservoir 5B-2 Site Improvement Project shall be implemented to the satisfaction of the lead agency. This program shall include, but not be limited to, the following actions:

1) Prior to issuance of a grading permit, the applicant shall provide written verification in the form of a letter from the project archaeologist to the lead agency stating that a certified archaeologist has been retained to implement the monitoring program.
2) The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program.
3) During the original cutting of previously undisturbed deposits, the archaeological monitor(s) shall be on-site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections will depend upon

the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The consulting archaeologist shall have the authority to modify the monitoring program if the potential for cultural resources appears to be more or less than anticipated.

5) Isolates and clearly non-significant deposits will be minimally documented in the field so the monitored grading can proceed.
6) In the event that previously unidentified cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the lead agency at the time of discovery. The archaeologist, in consultation with the lead agency, shall determine the significance of the discovered resources. The lead agency must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the lead agency before being carried out using professional archaeological methods. If any human bones are discovered, the county coroner and lead agency shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.
7) Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The project archaeologist shall determine the amount of material to be recovered for an adequate artifact sample for analysis.
8) All cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation.
9) A report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the lead agency prior to the issuance of any building permits. The report will include DPR Primary and Archaeological Site Forms.

# 6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Andrew J. Garrison — March 31, 2022

Andrew J. Garrison
Project Archaeologist

Date

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# APPENDIX A

**Qualifications of Key Personnel**

# Brian F. Smith, MA

## Owner, Principal Investigator

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com

## Education

**Master of Arts, History, University of San Diego, California** **1982**

**Bachelor of Arts, History, and Anthropology, University of San Diego, California** **1975**

## Professional Memberships

Society for California Archaeology

## Experience

**Principal Investigator** **1977–Present**
**Brian F. Smith and Associates, Inc.** **Poway, California**

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Corps of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

## Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the Southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects, some of which included Broadway Block (2019), 915 Grape Street (2019), 1919 Pacific Highway (2018), Moxy Hotel (2018), Makers Quarter Block D (2017), Ballpark Village (2017), 460 16th Street (2017), Kettner and Ash (2017), Bayside Fire Station (2017), Pinnacle on the Park (2017), IDEA1 (2016), Blue Sky San Diego (2016), Pacific Gate (2016), Pendry Hotel (2015), Cisterra Sempra Office Tower (2014), 15th and Island (2014), Park and G (2014), Comm 22 (2014), 7th and F Street Parking (2013), Ariel Suites (2013), 13th and Marker (2012), Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft

Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

1900 and 1912 Spindrift Drive: An extensive data recovery and mitigation monitoring program at the Spindrift Site, an important prehistoric archaeological habitation site stretching across the La Jolla area. The project resulted in the discovery of over 20,000 artifacts and nearly 100,000 grams of bulk faunal remains and marine shell, indicating a substantial occupation area (2013-2014).

San Diego Airport Development Project: An extensive historic assessment of multiple buildings at the San Diego International Airport and included the preparation of Historic American Buildings Survey documentation to preserve significant elements of the airport prior to demolition (2017-2018).

Citracado Parkway Extension: A still-ongoing project in the city of Escondido to mitigate impacts to an important archaeological occupation site. Various archaeological studies have been conducted by BFSA resulting in the identification of a significant cultural deposit within the project area.

Westin Hotel and Timeshare (Grand Pacific Resorts): Data recovery and mitigation monitoring program in the city of Carlsbad consisted of the excavation of 176 one-square-meter archaeological data recovery units which produced thousands of prehistoric artifacts and ecofacts, and resulted in the preservation of a significant prehistoric habitation site. The artifacts recovered from the site presented important new data about the prehistory of the region and Native American occupation in the area (2017).

The Everly Subdivision Project: Data recovery and mitigation monitoring program in the city of El Cajon resulted in the identification of a significant prehistoric occupation site from both the Late Prehistoric and Archaic Periods, as well as producing historic artifacts that correspond to the use of the property since 1886. The project produced an unprecedented quantity of artifacts in comparison to the area encompassed by the site, but lacked characteristics that typically reflect intense occupation, indicating that the site was used intensively for food processing (2014-2015).

Ballpark Village: A mitigation and monitoring program within three city blocks in the East Village area of San Diego resulting in the discovery of a significant historic deposit. Nearly 5,000 historic artifacts and over 500,000 grams of bulk historic building fragments, food waste, and other materials representing an occupation period between 1880 and 1917 were recovered (2015-2017).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—included project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February- September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites

for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single- dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997- January 2000.

Phase I, II, and II Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

# Andrew J. Garrison, MA, RPA

## Project Archaeologist

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## Education

**Master of Arts, Public History, University of California, Riverside** **2009**

**Bachelor of Science, Anthropology, University of California, Riverside** **2005**

**Bachelor of Arts, History, University of California, Riverside** **2005**

## Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Society for American Archaeology
California Council for the Promotion of History
Society of Primitive Technology
Lithic Studies Society
California Preservation Foundation
Pacific Coast Archaeological Society

## Experience

**Project Archaeologist** **June 2017–Present**
**Brian F. Smith and Associates, Inc.** **Poway, California**

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

**Senior Archaeologist and GIS Specialist** **2009–2017**
**Scientific Resource Surveys, Inc.** **Orange, California**

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

**Preservation Researcher** **2009**
**City of Riverside Modernism Survey** **Riverside, California**

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

**Information Officer** **2005, 2008–2009**
**Eastern Information Center (EIC), University of California, Riverside** **Riverside, California**

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

## Reports/Papers

2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California. Contributing author. Brian F. Smith and Associates, Inc.

2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California. Brian F. Smith and Associates, Inc.

2019 A Phase I Cultural Resources Assessment for the 10575 Foothill Boulevard Project, Rancho Cucamonga, California. Brian F. Smith and Associates, Inc.

2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.

2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Contributing author. Brian F. Smith and Associates, Inc.

2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.

2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.

2018 Phase I Cultural Resource Survey for the Stone Residence Project, 1525 Buckingham Drive, La Jolla, California 92037. Brian F. Smith and Associates, Inc.

2018 A Phase I Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.

2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of

Mills Act application.

2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.

2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.

## Presentations

2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.

2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.

2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

# APPENDIX B

**Site Forms**

***(Deleted for Public Review; Bound Separately)***

# APPENDIX C

**Archaeological Records Search Results**

***(Deleted for Public Review; Bound Separately)***

# APPENDIX D

**NAHC Sacred Lands File Search Results**

***(Deleted for Public Review; Bound Separately)***