A CULTURAL AND PALEONTOLOGICAL RESOURCES STUDY FOR THE 1101 CALIFORNIA STREET PROJECT

CITY OF REDLANDS, SAN BERNARDINO COUNTY, CALIFORNIA

APNs 0292-033-11 and -13

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Redlands, California 92373

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October 18, 2023; Revised February 9, 2024

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Archaeological and Paleontological Database Information

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Report Date:	October 18, 2023; Revised February 9, 2024
Report Title:	A Cultural and Paleontological Resources Study for the 1101 California Street Project, City of Redlands, San Bernardino County, California
Type of Study:	Phase I Cultural Resources Survey and Paleontological Assessment
USGS Quadrangle:	Township 1 South, Range 3 West (projected) of the USGS *Redlands, California* Quadrangle
APNs:	0292-033-11 and -13
Acreage:	Approximately 16 acres
Key Words:	Survey; no resources identified; *Redlands* USGS Quadrangle; no further archaeological or paleontological study recommended.

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request by the applicant, a Phase I Cultural Resources Survey and Paleontological Assessment were conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the proposed 1101 California Street Project. The approximately 16-acre project (Assessor's Parcel Numbers [APNs] 0292-033-11 and -13) is located north of Interstate 10 and south of Lugonia Avenue at 1101 California Street, within the city of Redlands, San Bernardino County, California. The project is situated within the unsectioned former San Bernardino Land Grant, Township 1 South, Range 3 West (projected), as shown on the U.S. Geological Survey (USGS) *Redlands*, *California* (7.5-minute) Quadrangle.

The purpose of this investigation was to locate and record any cultural resources within the project and subsequently evaluate any resources as part of the City of Redlands environmental review process conducted in compliance with the California Environmental Quality Act (CEQA), as well as review the property for potential sensitivity for paleontological resources. The archaeological investigation of the project also includes the review of an archaeological records search performed at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project or in the immediate vicinity. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC). The SLF search has been returned with positive results for potential sites or locations of Native American importance within the vicinity. The NAHC suggested contacting local Native American groups for further information. This additional outreach will be conducted by the lead agency under the official AB 52 Native American consultation process. In addition, records of fossil localities in the project vicinity were also reviewed.

The SCCIC records search did not identify any recorded resources or previous studies within the project. However, 62 resources are recorded within one mile of the project. A review of maps and aerial photographs (1938 through 2022) indicate the property historically was utilized for agriculture but graded between 1994 and 1996 for the development of the now defunct Pharaoh's Lost Kingdom amusement park (later known as the Splash Kingdom Water Park). The field survey was conducted on September 29, 2023. The property contains what remains of the Pharaoh's Lost Kingdom amusement park. Given the current developed nature of the property, visibility of the natural ground surface was limited. However, various previously landscaped areas within and surrounding the property were carefully inspected. The survey did not result in the identification of any cultural or paleontological resources. As a result of previous ground-disturbing activities associated with 1990s development of the property, there is minimal potential for archaeological resources to be present or disturbed by the proposed project. In addition, the paleontological review of the property found that no known significant fossil resources have been found in the area of the project.

Based upon the findings of the cultural and paleontological study, mitigation monitoring is not recommended as part of project approval since there is little to no potential to encounter any

significant cultural sites or fossil localities during the development of this property. However, if any cultural resources or fossils are inadvertently discovered, all construction work in the immediate vicinity of the discovery shall stop, and a qualified archaeologist and/or paleontologist shall be consulted to determine if further mitigation measures are warranted. Should human remains be discovered, treatment of these remains shall follow California Public Resources Code (PRC) 5097.9. Any human remains that are determined to be Native American shall be reported to the San Bernardino County Sheriff's Department, Coroner Division, and subsequently to the NAHC. A copy of this report will be filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

The archaeological and paleontological survey program for the 1101 California Street Project was conducted in order to comply with CEQA and City of Redlands environmental compliance requirements. The approximately 16-acre project (APNs 0292-033-11 and -13) is located north of Interstate 10 and south of Lugonia Avenue at 1101 California Street in the city of Redlands, San Bernardino County, California (Figure 1.1–1). The project is situated within the unsectioned former San Bernardino Land Grant, Township 1 South, Range 3 West (projected) on the USGS *Redlands, California* topographic quadrangle (Figure 1.1–2) and proposes the construction of an industrial warehouse with associated parking, landscaping, and infrastructure (Figure 1.1–3). The decision to request this investigation was based upon the cultural resource sensitivity of the locality as 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 southwestern San Bernardino County, were focused around fresh water resources and a food supply. Further, resources within the Redlands area tend to be associated with the historic development of the region.

1.2 Environmental Setting

The 1101 California Street Project is generally situated in the Peninsular Ranges Geologic Province of southern California. The range, which lies in a northwest to southeast trend through the county, extends some 1,000 miles from the Raymond-Malibu Fault Zone in western Los Angeles County to the southern tip of Baja California. The project lies within the broad, fault-bounded alluvial valley of the Santa Ana Wash between the San Bernardino Mountains to the north and the San Timoteo Badlands to the south (Matti et al. 2003). The San Andreas Fault lies at the foot of the San Bernardino Mountains and the Banning Fault lies less than a mile southwest of the project (Figure 1.2–1, after Matti et al. 2003). Stratigraphically, the project overlies middle Holocene young axial-valley deposits, "Unit 3" (labeled as "Qya_3" on Figure 1.2–1). These sedimentary deposits are characterized as fine- to coarse-grained sands and pebbly sands that coarsen eastward. The unit is capped by weak to moderate A/AC soils. Based on borings and terrace wall exposures in the Santa Ana Wash, these deposits are at least 10 to 15 meters thick (equivalent to approximately 33 to 49 feet) (Matti et al. 2003). The specific soil type within the project is characterized as Hanford sandy loam, 0 to 2 percent slopes (NRCS 2023). The subject property has an average elevation of 1,160 feet above mean sea level (AMSL). The property has been previously developed and contains the remnant hardscape and landscaping of the now defunct Pharaoh's Lost Kingdom amusement park (later known as the Splash Kingdom Water Park).

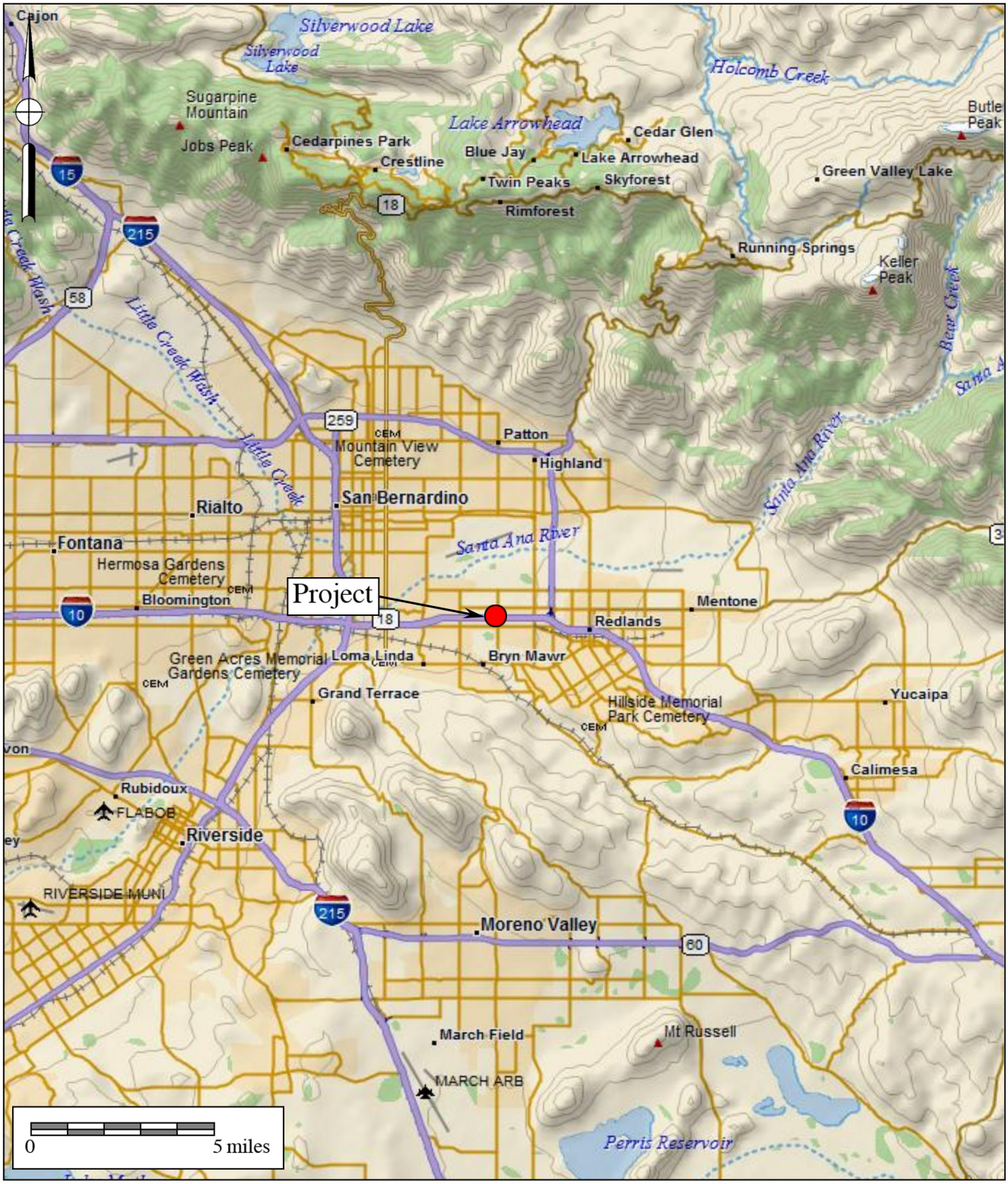

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Figure 1.1–1
General Location Map
The 1101 California Street Project
DeLorme (1:250,000 series)

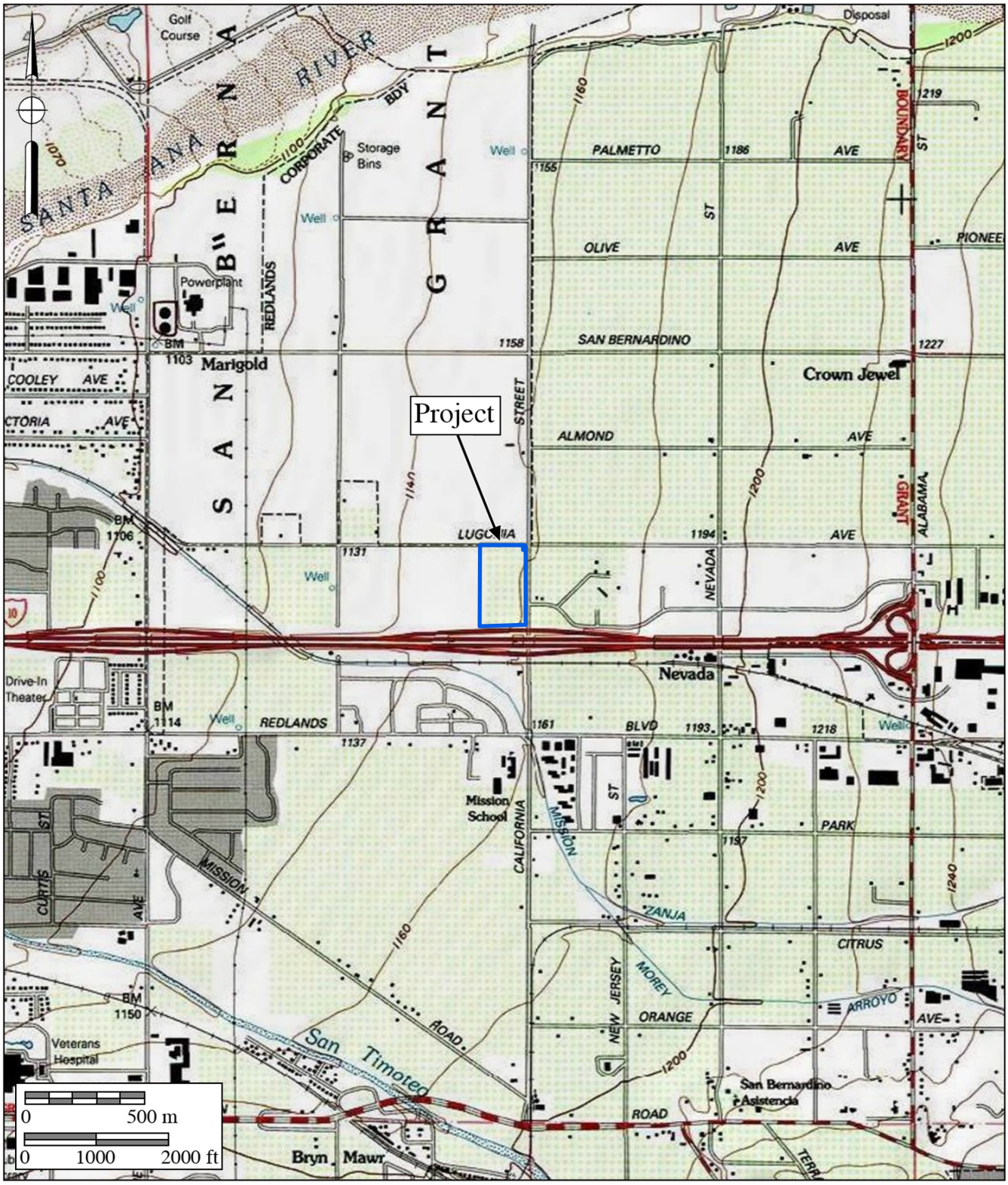

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Figure 1.1–2
Project Location Map

The 1101 California Street Project

USGS *Redlands* Quadrangle (7.5-minute series)

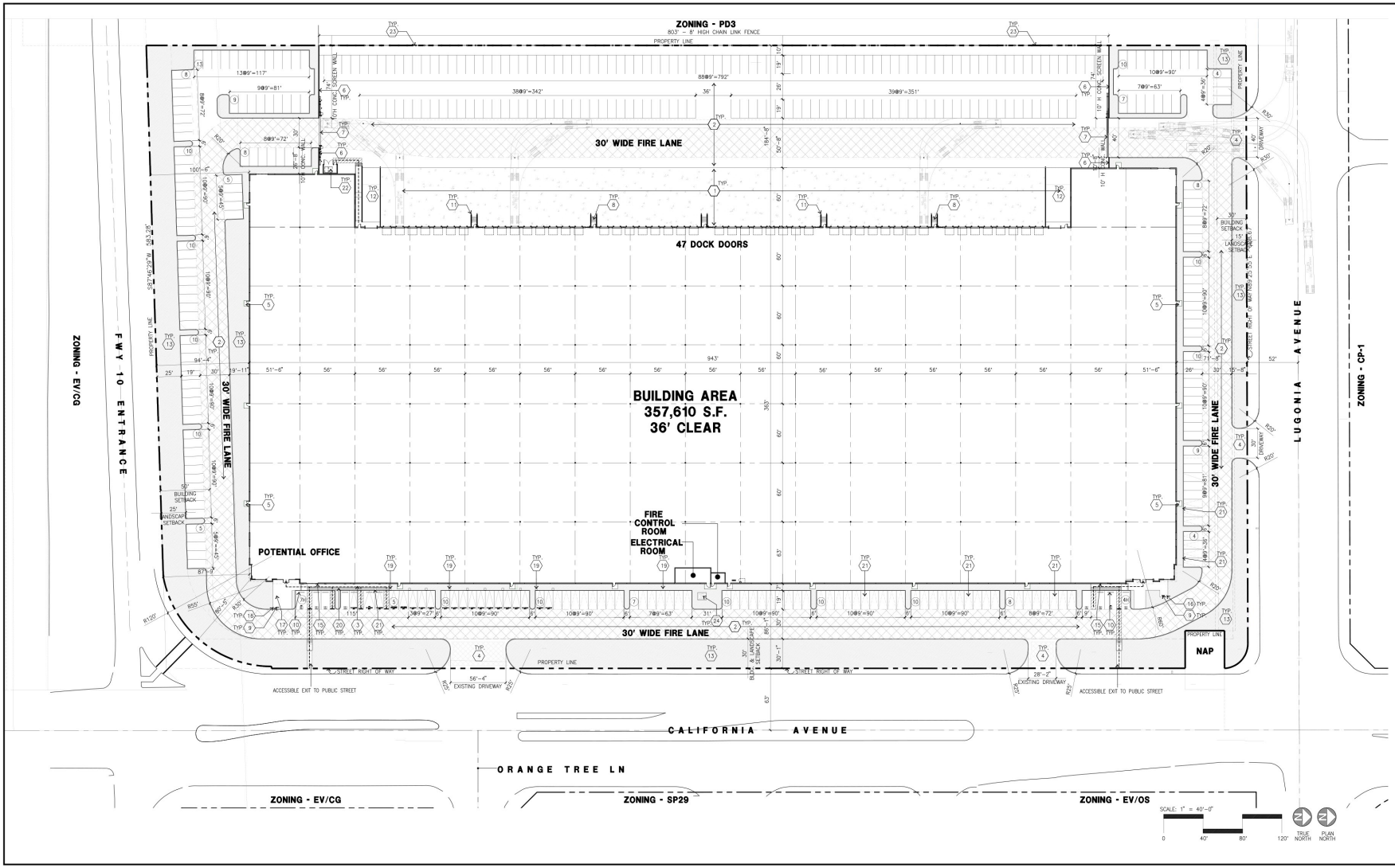

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Figure 1.1–3
Site Plan
The 1101 California Street Project

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Figure 1.2–1
Geologic Map

The 1101 California Street Project

Geology after Matti et al. (2003)

1.3 Cultural Setting

1.3.1 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. These general cultural periods are accepted archaeological interpretations but not the only way in which the cultural history of the area has been described. 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 9000 to 1300 YBP)

Archaeological data indicates that between 9,000 and 8,000 YBP, a widespread complex was established in the southern California region, primarily along the coast (Warren and True 1961). This complex is locally known as the La Jolla Complex (Rogers 1939; Moriarty 1966), which is regionally associated with the Encinitas Tradition (Warren 1968) and shares cultural components with the widespread Milling Stone Horizon (Wallace 1955). Recent work by Sutton has identified a more localized complex known as the Greven Knoll Complex. The Greven Knoll Complex is a redefined northern inland expression of the Encinitas Tradition first put forth by Mark Sutton and Jill Gardner (2010). Sutton and Gardner (2010:25) state that "[t]he early millingstone archaeological record in the northern portion of the interior southern California was not formally named but was often referred to as 'Inland Millingstone,' 'Encinitas,' or even 'Topanga.'" Therefore, they proposed that all expressions of the inland Milling Stone in southern California north of San Diego County be grouped together in the Greven Knoll Complex.

The Greven Knoll Complex, as postulated by Sutton and Gardner (2010), is broken into three phases and obtained its name from the type-site Greven Knoll located in Yucaipa, California. Presently, the Greven Knoll Site is part of the Yukaipa't Site (SBR-1000) and was combined with the adjacent Simpson Site. Excavations at Greven Knoll recovered manos, metates, projectile points, discoidal cogged stones, and a flexed inhumation with a possible cremation (Kowta 1969:39). It is believed that the Greven Knoll Site was occupied between 5,000 and 3,500 YBP. The Simpson Site contained mortars, pestles, side-notched points, and stone and shell beads. Based upon the data recovered at these sites, Kowta (1969:39) suggested that "coastal Milling Stone Complexes extended to and interdigitated with the desert Pinto Basin Complex in the vicinity of the Cajon Pass."

Phase I of the Greven Knoll Complex is generally dominated by the presence of manos and metates, core tools, hammerstones, large dart points, flexed inhumations, and occasional cremations. Mortars and pestles are absent from this early phase, and the subsistence economy emphasized hunting. Sutton and Gardner (2010:26) propose that the similarity of the material culture of Greven Knoll Phase I and that found in the Mojave Desert at Pinto Period sites indicates that the Greven Knoll Complex was influenced by neighbors to the north at that time. Accordingly, Sutton and Gardner (2010) believe that Greven Knoll Phase I may have appeared as early as 9,400 YBP and lasted until about 4,000 YBP.

Greven Knoll Phase II is associated with a period between 4,000 and 3,000 YBP. Artifacts common to Greven Knoll Phase II include manos and metates, Elko points, core tools, and discoidals. Pestles and mortars are present; however, they are only represented in small numbers. Finally, there is an emphasis upon hunting and gathering for subsistence (Sutton and Gardner 2010:8).

Greven Knoll Phase III includes manos, metates, Elko points, scraper planes, choppers, hammerstones, and discoidals. Again, small numbers of mortars and pestles are present. Greven Knoll Phase III spans from approximately 3,000 to 1,000 YBP and shows a reliance upon seeds

and yucca. Hunting is still important, but bones seem to have been processed to obtain bone grease more often in this later phase (Sutton and Gardner 2010:8).

The shift in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource (Sutton 2011a). Sutton's (2011b) argument posits that the development of mortars and pestles during the middle Holocene can be attributed to the year-round exploitation of acorns as a main dietary provision. Additionally, the warmer and drier climate may have been responsible for groups from the east moving toward coastal populations, which is archaeologically represented by the interchange of coastal and eastern cultural traits (Sutton 2011a).

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 points, 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.

Ethnohistoric Period (Late Holocene: 1790 to Present)

Although ethnographic data suggests the Redlands area primarily was inhabited by the Gabrielino and Serrano peoples, the area was also influenced by the Cahuilla (Kroeber 1976; City of Redlands 2017b). The following sections provide brief overviews of the Gabrielino, Serrano, and Cahuilla.

Gabrielino

At the time of Spanish contact, the territory of the Gabrielino, also known ethnographically as the Tongva, covered 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 several different species of 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 village tributes, and arbitrating disputes within the village(s). The status of the chief was legitimized by safekeeping of the sacred bundle, 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 yuvar, an open-air, ceremonial 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 wooden 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 [1971] 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 who acquired 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 hunter/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).

Cahuilla

According to Bean (1978) and Kroeber (1976), at the time of Spanish contact in the sixteenth century, the Cahuilla occupied territory that included the Orocopia Mountains, and the Chocolate Mountains to the west; Salton Sea and Borrego Springs to the south; Palomar Mountain and Lake Mathews to the east; and the San Bernardino Mountains and Santa Ana River to the north. According to Bean et al. (1992) the Cahuilla were centered around the San Jacinto and Santa Rosa mountains. While Milanovich (2021), quoting the Late Cahuilla elder Alvino Siva, states, "The Cahuilla boundaries existed as far west as Colton, north to the San Bernadino Mountains, east to the Chocolate Mountains, and south to Palomar Mountain."

The Cahuilla are a Takic-speaking people closely related to their Gabrielino neighbors. They differ from the Gabrielino in that their religion is more similar to the Mohave tribes of the eastern deserts than the Chingichngish religious group of the Gabrielino (Bean 1978; Kroeber 1976).

Cahuilla villages were typically permanent and located on low terraces within canyons in proximity to water sources. These locations proved to be rich in food resources and also afforded protection from prevailing winds. Villages had areas that were publicly owned and areas that were privately owned by clans, families, or individuals. Each village was associated with a particular lineage and series of sacred sites that included unique petroglyphs and pictographs. Villages were occupied throughout the year; however, during a several-week period in the fall, most of the village members relocated to mountain oak groves to take part in acorn harvesting (Bean 1978; Kroeber 1976).

The Cahuilla's use of plant resources is well documented. Plant foods harvested by the Cahuilla included valley oak acorns and single-leaf pinyon pine nuts. Other important plant species included bean and screw mesquite, agave, Mohave yucca, cacti, palm, chia, quail brush, yellowray goldfield, goosefoot, manzanita, catsclaw, desert lily, mariposa lily, and a number of

other species such as grass seed. A number of agricultural domesticates were acquired from the Colorado River tribes including corn, bean, squash, and melon grown in limited amounts. Animal species taken included deer, bighorn sheep, pronghorn antelope, rabbit, hare, rat, quail, dove, duck, roadrunner, and a variety of rodents, reptiles, fish, and insects (Bean 1978; Kroeber 1976).

The Cahuilla was not a political nation, but rather a cultural nationality with a common language. Two non-political, non-territorial patrimoieties were recognized: the Wildcats (túktem) and the Coyotes (?ístam). Lineage and kinship were memorized at a young age among the Cahuilla, providing a backdrop for political relationships. Clans were comprised of three to 10 lineages; each lineage owned a village site and specific resource areas. Lineages within a clan cooperated in subsistence activities, defense, and rituals (Bean 1978; Kroeber 1976).

A system of ceremonial hierarchy operated within each lineage. The hierarchy included the lineage leader, who was responsible for leading subsistence activities, guarding the sacred bundle, and negotiating with other lineage leaders in matters concerning land use, boundary disputes, marriage arrangements, trade, warfare, and ceremonies. The ceremonial assistant to the lineage leader was responsible for organizing ceremonies. A ceremonial singer possessed and performed songs at rituals and trained assistant singers. The shaman cured illnesses through supernatural powers, controlled natural phenomena, and was the guardian of ceremonies, keeping evil spirits away. The diviner was responsible for finding lost objects, telling future events, and locating game and other food resources. Doctors were usually older women who cured various ailments and illnesses with their knowledge of medicinal herbs. Finally, certain Cahuilla specialized as traders, who ranged as far west as Santa Catalina and as far east as the Gila River (Bean 1978; Kroeber 1976).

Marriages were arranged by parents from opposite moieties. When a child was born, an alliance formed between the families, which included frequent reciprocal exchanges. The Cahuilla kinship system extended to relatives within five generations. Important economic decisions, primarily the distribution of goods, operated within this kinship system (Bean 1978; Kroeber 1976).

Cahuilla houses were dome-shaped or rectangular, thatched structures. The home of the lineage leader was the largest, located near the ceremonial house with the best access to water. Other structures within the village included the men's sweathouse and granaries (Bean 1978; Kroeber 1976).

Cahuilla clothing, like other groups in the area, was minimal. Men typically wore a loincloth and sandals; women wore skirts made from mesquite bark, animal skin, or tules. Babies wore mesquite bark diapers. Rabbit skin cloaks were worn in cold weather (Bean 1978; Kroeber 1976).

Hunting implements included the bow and arrow, throwing sticks, and clubs. Grinding tools used in food processing included manos, metates, and wood mortars. The Cahuilla were known to use long grinding implements made from wood to process mesquite beans; the mortar was typically a hollowed log buried in the ground. Other tools included steatite arrow shaft straighteners (Bean 1978; Kroeber 1976).

Baskets were made from rush, deer grass, and skunkbush. Different species and leaves were chosen for different colors in the basket design. Coiled-ware baskets were either flat (for plates, trays, or winnowing), bowl-shaped (for food serving), deep, inverted, and cone-shaped (for transporting), or rounded and flat-bottomed for storing utensils and personal items (Bean 1978; Kroeber 1976).

Cahuilla pottery was made from a thin, red-colored ceramic ware that was often painted and incised. Four basic vessel types are known for the Cahuilla: small-mouthed jars, cooking pots, bowls, and dishes. Additionally, smoking pipes and flutes were fashioned from ceramic (Bean 1978; Kroeber 1976).

1.3.2 Historic Period

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Vizcaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area 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). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Father Francisco Garcés first searched

the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista De Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish established asistencias in San Bernardino, Pala, and Santa Ysabel. Between the founding of the asistencia and secularization in 1834, most of the Serranos in the San Bernardino Mountains were removed to the nearby missions (Beattie and Beattie 1951:366), while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1951; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or capilla, at a Cahuilla rancheria called Guachama (Beattie and Beattie 1951). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama rancheria was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of estancias at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1951). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey, who in turn established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). 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).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as "ranchos," covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963).

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 Mission San Luis Rey 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 as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, 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, and in 1850, California became a state. 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. As the non-native population increased through immigration, the indigenous population rapidly declined from the high morbidity of European diseases, low birth rates, and conflict and violence. California became a state in 1850 and was divided into 21 counties. The dwindling native populations were eventually displaced into reservations after California became a state.

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 the city of San Bernardino, several people from Riverside decided to investigate the possibility of a new county. In May of 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.

General History of the Redlands Area

The Redlands area was originally located within the 35,509 acres of land that comprised Rancho San Bernardino Land Grant. This Rancho was created by Mission San Gabriel in 1819 and, like most of the ranchos, it was used for agriculture and cattle raising through the nineteenth century. Since there was no reliable water source in the area, from 1819 to 1820, the missionaries developed Mill Creek Zanja through the use of Native American labor from the Guachama Rancheria. This Zanja extended from Mill Creek, through Redlands, ending near the Mission San Gabriel, facilitating the agricultural and cattle raising enterprises (Smallwood 2006). After Spain relinquished control of the Alto and Baja California in 1821, the missions became secularized and, by 1834, the missions were closed. The former mission lands started to be granted to wealthy private citizens, often through political and familial connections (San Bernardino History and Railroad Museum 2010). The Mill Creek Zanja was nominated to and subsequently listed on the National Register of Historic Places (NRHP) in 1976, and is still used for local drainage, spreading, and flood control (City of Redlands 2017a).

Don Antonio Maria Lugo, a wealthy landowner in Los Angeles, requested the land grant in San Bernardino for his three sons and nephew: José del Cármen Lugo, Vincente Lugo, José Maria Lugo, and Diego Sepúlveda (San Bernardino County Historical Archives 2012). It was granted by the governor, Juan Bautista Alvarado, Don Lugo's grandnephew, on June 21, 1842. The three Lugos and their cousin built homes on the land and raised cattle, but they eventually sold it off to the Mormon church in 1851 (Haenszel 1984). At the time the Mormons purchased the land, the exact boundaries had not been established, and many non-Mormons were living on portions of the land grant. When the boundaries were determined, the Mormons claimed land occupied by Jerome Benson. Benson refused to move and was joined by several other people in the same predicament. In response, Benson's adobe barn was fortified with a cannon and dubbed "Fort Benson." Ultimately, the fort was never attacked nor was anyone forced off their land. 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 half returned to Utah, while the other half remained in San Bernardino, choosing "to forsake the church rather than leave their homes" (Lyman 1989).

As with much of the inland portion of southern California, irrigation systems played a crucial role in the development and settlement of the San Bernardino region by supporting the spread of agriculture. The Mill Creek Zanja was the first ditch constructed in the region; however, the construction of several irrigation ditches diverting water from the Santa Ana River and its tributaries in the 1870s and 1880s facilitated agriculture and population growth within the region and created a demand for railway transportation. Many of the ditches created during the nineteenth century, including the zanja, were built by local Native Americans. Agriculture, particularly citriculture, flourished in the region, leading to increased population and economic growth through the late nineteenth and early twentieth centuries (City of Redlands 2017b).

The portion of Rancho San Bernardino where the asistencia is now located was purchased by several wealthy ranchers around 1859 (County of San Bernardino 2017). This area became

known as the Mission District. Among these new residents were Dr. Benjamin Barton, Anson Van Leuven, and J. W. Curtis. Another townsite, the Redlands Colony, was formed just east of the Mission District in 1881 by Frank Brown and Edward Judson. Judson and Brown laid out the townsite parallel to the slope of a canal they had built, known as the Judson and Brown Ditch. The Judson and Brown Ditch extended from Santa Ana Canyon to Reservoir Canyon, located along the path of present-day Interstate 10. The canal was designed to bring water to the area for citrus groves. Judson and Brown named the town Redlands after the dry, red adobe soil (City of Redlands 2017a).

The town continued to grow over the next four years with the Bear Valley Dam and Reservoir, a consistent water supply, and the extension of two transcontinental rail lines through San Bernardino; however, the first population growth spurt began in 1887 (City of Redlands 2017a). Population growth spurred the subdivision of land for both residential and agricultural development with small, localized communities sprouting up around what is now Redlands. However, in 1888, after the collapse of the land boom in California, Redlands, Lugonia, the Brookside area, and a portion of Crafton voted to collectively incorporate as Redlands, joining the north-to-south Lugonia grid and the slope-oriented Redlands grid along the southern edge of San Bernardino Valley (City of Redlands 2017a).

In the 1890s, due to the downturn in economic development, residential development within Redlands was mostly limited to the southern area of the town, south of Redlands Boulevard (Hinckley 1956; Mermilliod 2002). During this period, the town began to pave streets and construct commercial and industrial properties. Due to the philanthropy of prominent Redlands residents, such as Albert K. and Alfred K. Smiley, many citywide beautification projects were funded, including the construction of the A.K. Smiley Public Library.

During the early twentieth century, Redlands again experienced a steady growth in population. More than two dozen packinghouses and over 15,000 acres of citrus groves earned Redlands, along with much of the Inland Empire, the reputation as the navel orange capital of the world. However, everything changed in early January of 1913, when a three-day-long cold spell referred to simply as "the Freeze" devastated most of the area's citrus groves. Nearly the entire yield from the 1913 season was ruined, "except for fruit from the very few groves with oil-fueled heaters known as smudgepots (about 7% of the total)" (City of Redlands 2017a). The loss of the crop led to a decline in business, property values, residential growth, and tourism, which impacted the Redlands population and economy.

By the 1920s, Redlands had reestablished its dominance in the citrus industry. New groves were planted and more packinghouses and industrial properties were developed. The citrus industry continued to thrive until after World War II, when land values began to make it more worthwhile to develop properties into residential subdivisions (Burgess and Gonzales 2004). Since the mid-twentieth century, the older citrus groves have steadily given way to residential and commercial development. However, the city of Redlands has continued to steadily grow while maintaining a connection to its historic agricultural roots. Currently, the City of Redlands owns

16 citrus groves, including Valencia oranges, navel oranges, Star Ruby grapefruit, and Rio Red grapefruit, throughout the city, totaling 164 acres (City of Redlands 2022).

1.4 Results of the Archaeological Records Search

An archaeological records search was conducted by BFSA at the SCCIC at CSU Fullerton. The records search did not identify any recorded resources within the project. However, 62 resources (one prehistoric, one multicomponent, and 60 historic) are recorded within one mile of the project. The single prehistoric resource is an isolate, while the multicomponent resource is the Guachama Rancheria Site. The remaining 60 historic resources are primarily associated with the historic development of the region and are mostly comprised of built resources. Descriptions of the resources identified within one mile of the project are presented below within Table 1.4–1.

Table 1.4–1
Cultural Resources Within One Mile of the 1101 California Street Project

Site Number(s)	Site Type
P-36-029539	Prehistoric isolate
SBR-2311	Multicomponent Guachama Rancheria site
P-36-012365, P-36-027673, and SBR-7139H*	Historic ranch complex site
SBR-7083H and SBR-32,950H	Historic trash scatter
SBR-7829H, P-36-013889, P-36-013891, P-36-013892, P-36-019920, P-36-019921, P-36-019922, P-36-019923*, P-36-019927, P-36-019928, P-36-019931, P-36-024295, P-36-026032, P-36-026033, P-36-026034, P-36-026035, P-36-026036, P-36-026037, P-36-026038, P-36-026039, P-36-026040, P-36-026041, P-36-026042, P-36-026043, P-36-026044, P-36-026045, P-36-026794, P-36-026795, P-36-026796, and P-36-026797	Historic single-family property
P-36-019919 and P-36-019932	Historic ancillary structure
P-36-026219	Historic substation
SBR-8092H	Historic Mill Creek Zanja
P-36-013491	Historic bridge
P-36-006847 and SBR-17,213H	Historic railroad grade
SBR-12,387H	Historic water control/irrigation feature with associated trash scatter
P-36-013775, P-36-024296, and P-36-033080	Historic water control/irrigation features
SBR-6852H	Historic water control features
P-36-029388	Historic flood control channel (Morey Ditch/Morey Arroyo)
P-36-013893	Historic Mission School

Site Number(s)	Site Type
P-36-015135	Historic San Bernardino County Museum
SBR-29387H	Historic orchard
P-36-019924 and P-36-019925	Historic commercial property
P-36-026051, P-36-026223, and P-36-026224	Historic transmission line
SBR-9991H	Historic palm tree windrow
SBR-9992H	Historic oil tanks
SBR-17,212H	Historic road
P-36-026030	Historic isolate

**Site no longer present or has been demolished*

The records search also indicated that a total of 43 cultural resources studies have been conducted within a one-mile radius of the project (Table 1.4–2 in Appendix D). None of the studies on file with the SCCIC included the subject property. The complete records search results can be found within Appendix B.

BFSA reviewed the following sources to help facilitate a better understanding of the historic use of the property:

- The NRHP index
- The Office of Historic Preservation (OHP) Built Environment Resources Directory (BERD)
- Historic maps (1888 California Department of Engineering San Bernardino Detail Irrigation Map; 1899, 1901, and 1954 *Redlands* [15-minute] USGS topographic quadrangle maps; 1954, 1969, and 1988 *Redlands* [7.5-minute] topographic quadrangle maps)
- Historic aerial photographs (1938, 1959, 1966, 1968, 1980, 1994, 2006, 2007, 2011, 2012, and 2022)

The maps and aerial photographs indicate that, historically, the property was utilized for agriculture. A structure, possibly a residence, is mapped on the 1899 *Redlands, California* (15-minute) USGS Quadrangle along the eastern boundary, primarily situated now within the alignment of California Street. The residence and associated ancillary structures are visible at this mapped location on the 1938 aerial photograph. Subsequent photographs show the reduction of agricultural use of the subject property; however, the imagery is blurry, and it is difficult to discern what modifications may have occurred to the structures. It appears the residence or possibly one of the ancillary structures persisted at this location through 1994. Regardless, between 1994 and 1996, the entirety of the property was cleared and graded for the now defunct Pharaoh's Lost Kingdom amusement park (later known as the Splash Kingdom Water Park). The amusement park operated at this location through 2020. Many of the buildings and attractions were destroyed by

fires in 2020 and 2021, and what remained was demolished in the summer of 2021 (CBS News 2021).

BFSA also requested a SLF search from the NAHC to search for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within one mile of the project. This request is not part of any Assembly Bill (AB) 52 Native American consultation. The SLF search has been returned with positive results for potential sites or locations of Native American importance within the vicinity. The NAHC suggested contacting local Native American groups for further information. This additional outreach will be conducted by the lead agency under the official AB 52 Native American consultation process. All correspondence can be found within Appendix C.

1.5 Applicable Cultural Resources 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, the criteria outlined in CEQA, City of Redlands environmental guidelines, and the City of Redlands Nomination and Designation (City of Redlands Municipal Code 2.62.170) provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 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 California Register of Historical Resources (CRHR) (Public Resources Code SS5024.1, Title 14 CCR [California Code of Regulations]. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, 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 (Public Resources Code 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 Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code 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 Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, 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 Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code 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 Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code 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 Public Resources Code 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 requirements of CEQA and the Coastal Act.

1.5.2 City of Redlands Nomination and Designation

According to City of Redlands Municipal Code (2.62.030), the term "historic resource" includes the following:

1) A general term that refers to areas, districts, streets, places, buildings, structures, outdoor works of art, natural or agricultural, cultural, archaeological, architectural, community or aesthetic value and are 50 years old or older.

Generally, a resource shall be considered by the City of Redlands to be "significant" if the resource meets the criteria for listing on the City of Redlands Register of Historic and Scenic Resources (Municipal Code 2.62.170) including the following:

A) It has significant character, interest, or value as part of the development, heritage, or cultural characteristics of the city of Redlands, state of California, or the United States;
B) It is the site of a significant historic event;
C) It is strongly identified with a person or persons who significantly contributed to the culture, history, or development of the city;
D) It is one of the few remaining examples in the city possessing distinguishing characteristics of an architectural type or specimen;
E) It is a notable work of an architect or master builder whose individual work significantly influenced the development of the city;
F) It embodies elements of architectural design, detail, materials, or craftsmanship that represent a significant architectural innovation;
G) It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community, or the city;
H) It has unique design or detailing;
I) It is a particularly good example of a period or style;
J) It contributes to the historical or scenic heritage or historical or scenic properties of the city (to include, but not be limited to, landscaping, light standards, trees, curbing, and signs);
K) It is located within a historic and scenic or urban conservation district, being a geographically definable area possessing a concentration of historic or scenic properties which contribute to each other and are unified aesthetically by plan or physical development. (Ord. 1954 § 8[a], 1986)

1.6 Applicable Paleontological Resources Regulations

1.6.1 California Environmental Quality Act

CEQA, which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological

resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, whether the impacts are significant, and provide recommendations, if necessary.

In CEQA's Environmental Checklist Form, a question to respond to is: "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources including fossils, which is paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

1.6.2 City of Redlands

The Draft Environmental Impact Report prepared for the City of Redlands General Plan Update contains policies that propose to reduce impacts to paleontological resources (City of Redlands 2017b). Specific attention is devoted to the San Timoteo Canyon area of the city (Impact 3.8–4) where, despite the presence of fossiliferous strata, impacts to paleontological resources are considered low due to a low development potential. In other areas of the city, the majority of development under the proposed General Plan is stated as limited to redevelopment or to new development in existing developed areas, and potential impacts are considered limited. Nevertheless, the General Plan contains policies to reduce impacts, including the preparation of a paleontological assessment to evaluate the potential impacts of a proposed project to paleontological resources (Principles 2-P.16 and 2-P.17), and for resource actions, including paleontological monitoring (if deemed necessary) and measures to evaluate and record encountered paleontological materials (Actions 2-A.75, 2-A.76) (City of Redlands 2017b). Resource actions 2-A.75 and 2-A.76 are stated below:

2-A.75 Require, as a standard condition of approval, that project applicants provide an assessment as to whether grading for the proposed project would impact underlying soil units or geologic formations that have a moderate to high potential to yield fossiliferous materials, prior to issuance of a grading permit. If the potential for fossil discovery is moderate to high, require applicants to provide a paleontological monitor during rough grading of the project.

2-A.76 Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:

- If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource.
- If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.
- Appropriate materials shall be prepared, catalogued, and archived at the applicant's expense and shall be retained within San Bernardino County if feasible.

2.0 RESEARCH DESIGN

The current project study area under investigation is located in southwestern San Bernardino County. The scope of work for the cultural and paleontological resources study conducted for the 1101 California Street Project includes the survey of an approximately 16-acre study area. Given the area involved, the research design for this project was focused upon realistic study options.

2.1 Cultural Resources Research Design

The primary goal of the cultural resources research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. Since one objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs 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 following research questions consider the size and location of the project discussed above.

2.1.1 Research Questions

- Can located cultural resources be associated with a specific period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site's function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous 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 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 the following 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 resource(s), 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 cultural resource identified.

2.2 Paleontological Resources Research Design and Data Needs

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils), for example, when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines (see Section 1.6 of this report).

The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify significant paleontological resources and unique geologic features potentially occurring within and near the project;
2) To determine, if possible, the potential for the project to adversely impact significant paleontological resources (fossils) that may be present;
3) To provide recommendations to minimize potential adverse impacts to paleontological resources to a level below significant, if identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural and paleontological resources study of the project consisted of an institutional records search, archival research, an intensive cultural resources survey of the approximately 16-acre study area, and the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California PRC and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of 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 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological and paleontological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking evenly spaced survey transects set approximately 15 meters apart while visually inspecting the ground surface. The survey was an intensive reconnaissance consisting of a series of survey transects across the project, the entirety of which was accessible. All potentially sensitive areas where cultural or paleontological resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently.

3.2 Results of the Field Survey

Under the direction of Principal Investigator Tracy A. Stropes, M.A., RPA, and Senior Paleontologist Todd A. Wirths, M.S., BFSA field staff David K. Grabski conducted the survey for the 1101 California Street Project on September 29, 2023. The property contains the remains of the Pharaoh's Lost Kingdom amusement park constructed during the mid-1990s. Although the buildings have been removed, the majority of the property is still covered in hardscape. Further, concrete rubble and modern trash was observed throughout the property. Given the current developed nature of the property, visibility of the natural ground surface was limited. However, various previously landscaped areas within and surrounding the property were carefully inspected. The survey did not result in the identification of any cultural or paleontological resources. Plates 3.2–1 to 3.2–3 depict the conditions of the project at the time of the survey.

Plate 3.2–1: Drone overview of the subject property, facing south.

Plate 3.2–2: Drone overview of the subject property, facing west.

Plate 3.2–3: Overview of former water attraction, facing south.

3.3 Results of the Paleontological Records Search

A paleontological literature review and collections and locality records search was conducted for the project using records obtained from prior projects at BFSA Environmental Services from the Division of Geological Sciences at the San Bernardino County Museum, the Los Angeles County Museum of Natural History, the Western Science Center in Hemet, and data from published and unpublished paleontological literature (Jefferson 1986, 1991, 2009). The resulting locality records search did not identify any previously recorded fossil localities from within the boundaries of the project. The closest-known locality is located about 10 miles southeast of the project in Calimesa, consisting of the Pleistocene-aged "Shutt Ranch fauna" (Reynolds 2017). Fossil remains from the Shutt Ranch fauna include bones from two species of rabbits, several species of rodents, giant ground sloth, possible dire wolf, and gomphothere (a type of mastodon) (Jefferson 2009; Reynolds and Reeder 1986).

3.4 Results of Geotechnical Investigation

The results of a project-specific geotechnical investigation were very recently completed in a revised report dated February 7, 2024, by NorCal Engineering (Tucker and Barone 2024).

Soil sampling during exporatory drilling activities indicated the surface of the project property consists of one to five feet of artificial fill, except one boring adjacent to Lugonia Avenue (B-15) indicated fill at least as thick as 12 feet. Below the fill soils, native soil consisted of brown to light gray, medium dense, silty, fine- to medium-grained sand, to the total depth explored of 20 feet.

Tucker and Barone (2024) recommended removal of all fill soils prior to placement of any recompacted fill for the proposed project development. They also speculated that fill materials likely underlie the various subsurface park structures that are still present there, such as swimming pools and a lazy river. These fill soils were recommended for removal once the structures were removed. A uniform layer of compacted fill at least three feet deep below the proposed slab-on-grade foundations was recommended.

3.5 Paleontological Sensitivity

3.5.1 Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and thus is typically assigned a low paleontological sensitivity. Pleistocene (older than 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire and western Riverside County, however, are known to yield important terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, and camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are thus accorded a high paleontological resource sensitivity. Additionally, and within any time frame, deposits of coarse sediments are usually not conducive to the preservation of animal remains, as the rapid mode needed to transport and deposit coarse sediments usually obliterates most organic materials.

3.5.2 Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.

- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or based upon a general scientific consensus that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Using these criteria, based upon the young geologic age of the sediments mapped at the project and the lack of nearby significant fossil localities, the deposits can be considered to have a low potential to yield significant paleontological resources.

3.5.3 City of Redlands Paleontological Sensitivity Assessment

According to Resource Action 2-A.75 of the Draft Environmental Impact Report (City of Redlands 2017b), a paleontological monitor would be required for projects that are assessed to have a moderate to high potential to yield fossiliferous materials (see Section 1.6.2). Based on the data and evaluation presented above, a low potential (sensitivity) has been assessed for fossils to incur adverse impacts at the project as a result of the development's proposed earth disturbance activities. Therefore, paleontological monitoring does not appear warranted.

4.0 RECOMMENDATIONS

The cultural and paleontological resources assessment for the 1101 California Street Project has concluded that no cultural or paleontological resources are present on the property. No resources have previously been recorded within the property while a review of aerial imagery illustrates that the property was graded and developed during the mid-1990s. Further, no cultural resources were identified during the current survey of the property. As such, the proposed development of the property will not adversely impact any known cultural resources. Further, as a result of previous ground-disturbing activities associated with 1990s development of the property, there is minimal potential for archaeological resources to be present or disturbed by the proposed project. Based upon these findings, no further archaeological study is recommended and no mitigation monitoring for cultural resources is recommended as a condition of approval. Regarding paleontological resources, based upon the findings of the paleontological records search and the presence of geologically young deposits mapped at the project, a low paleontological resource sensitivity may be applied to the geologic strata at the subject property. In addition, only shallow earth disturbance impacts to near-surface undisturbed soils are anticipated. As such, a paleontological mitigation monitoring program does not appear warranted for the project, in accordance with City of Redlands guidelines (City of Redlands 2017b).

Based upon the findings of the cultural and paleontological study, mitigation monitoring is not recommended as part of project approval since there is little to no potential to encounter any significant cultural sites or fossil localities during the development of this property. However, if any cultural or paleontological resources are inadvertently discovered, all construction work in the immediate vicinity of the discovery shall stop, and a qualified archaeologist and/or paleontologist shall be consulted to determine if further mitigation measures are warranted. Should human remains be discovered, treatment of these remains shall follow California PRC 5097.9. Any human remains that are determined to be Native American shall be reported to the San Bernardino County Sheriff's Department, Coroner Division, and subsequently to the NAHC.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the 1101 California Street Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA, and Todd A. Wirths, M.S., P.G., Senior Paleontologist. The field review of the property was conducted by BFSA field staff David K. Grabski. The report text was prepared by Andrew J. Garrison, M.A., RPA, and Todd A. Wirths, M.S., P.G., Senior Paleontologist. Report graphics were provided by Emily T. Soong. Technical editing and report production were conducted by Shawna M. Krystek. The archaeological records search was conducted at the SCCIC at CSU Fullerton.

6.0 REFERENCES CITED

Bean, Lowell John

1978 Cahuilla. In *California*, edited by R.F. Heizer, pp. 575–587. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Charles R. Smith

1978a Gabrielino. In *California,* edited by R.F. Heizer. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

1978b Serrano. In *California,* edited by R.F. Heizer, pp. 570–574. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Florence C. Shipek

1978 Luiseño. In *California*, edited by Robert F. Heizer, pp. 550–563. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, John Lowell, Sylvia Brakke Vane, and Jackson Young

1992 *The Cahuilla Landscape: The Santa Rosa and San Jacinto Mountains.* Ballena Press, Menlo Park, California.

Beattie, George W. and Helen P. Beattie

1951 *Heritage of the Valley: San Bernardino's First Century*. Biobooks, Oakland, California. Originally published 1939, Biobooks, Oakland, California.

Benedict, Ruth Fulton

1924 A Brief Sketch of Serrano Culture. *American Anthropologist* 26(3).

Brigandi, Phil

1998 *Temecula: At the Crossroads of History*. Heritage Media Corporation, Encinitas, California.

Burgess, Larry E. and Nathan D. Gonzales

2004 *Images of America: Redlands.* Arcadia Publishing. Charleston, South Carolina.

Caughey, John W.

1970 *California: A Remarkable State's Life History.* 3rd ed. Prentice-Hall, Englewood Cliffs, New Jersey.

CBS News
2021 *Splash Kingdom Waterpark in Redlands Torn Down After Years of Neglect*. Electronic document, https://www.cbsnews.com/losangeles/news/splash-kingdom-waterpark-redlands/, accessed October 2023.

Chapman, Charles E.
1921 *A History of California: The Spanish Period*. The Macmillan Company, New York.

City of Redlands
2017a City of Redlands: Citywide Historic Context Statement – *Administrative Draft.* Architectural Resources Group. Pasadena, California.

2017b City of Redlands General Plan: Update and Climate Action Plan, Environmental Impact Report, Revised Draft, July 21, 2017, SCH #2016081041. Electronic document, https://www.cityofredlands.org/sites/main/files/file-attachments/feir_072117.pdf, accessed October 2023.

2022 Citrus Division. Electronic document, https://www.cityofredlands.org/citrus-division, accessed July 20, 2022.

Cook, Sherburne F.
1976 *The Conflict Between the California Indian and White Civilization*. University of California Press, Berkeley and Los Angeles, California.

County of San Bernardino
2017 The "Asistencia." California Historical Landmark #42. Electronic document, http://www.sbcounty.gov/museum/branches/asist.htm, accessed May 2018.

Drucker, Philip
1937 Culture Element Distributions: V. Southern California. *Anthropological Records* 1(1):1–52. University of California, Berkeley.

Erlandson, John M. and Roger H. Colten (editors)
1991 An Archaeological Context for Archaeological Sites on the California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J.M. Erlandson and R.H. Colten. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.

Fagan, Brian M.
1991 *Ancient North America: The Archaeology of a Continent*. Thames and Hudson, London.

Haenszel, Arda M.
1984 Jumuba-Form Indian Huts to Condiminiums. *Odyssey*, 5(4):49-52.

Heizer, Robert F.
1978 Trade and Trails. In *California*, edited by Robert F. Heizer, pp. 690–693. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Hinckley, Edith Parker
1956 *Redlands' Yesterdays to 1956.* The Citrograph Press. Redlands, California.

Jefferson, George T.
1986 Fossil Vertebrates From the Late Pleistocene Sedimentary Deposits in the San Bernardino and Little San Bernardino Mountains Region. *In*, Kooser, M.A., and Reynolds, R.E., eds., Geology Around the Margins of the Eastern San Bernardino Mountains. Publications of the Inland Geological Society, v. 1, Redlands, California.

1991 A Catalogue of Late Quaternary Vertebrates From California: Part Two, Mammals. Natural History Museum of Los Angeles County, Technical Reports, no. 7: i-v + 1-129.
2009 A Catalogue of Blancan and Irvingtonian Vertebrates and Floras From Arizona, Southern California, Nevada, Utah, and Northwestern Mexico. Unpublished manuscript, Colorado Desert District Stout Research Center, Anza-Borrego Desert State Park, Borrego Springs, California.

Kowta, Makoto
1969 The Sayles Complex: A Late Milling Stone Assemblage from Cajon Pass and the Ecological Implications of Its Scraper Planes. *University of California Publications in Anthropology* No. 6.

Kroeber, Alfred L.
1976 *Handbook of the Indians of California*. Reprinted. Dover Editions, Dover Publications, Inc., New York. Originally published 1925, Bulletin No. 78, U.S. Government Printing Office, Washington, D.C.

Lyman, Edward Leo
1989 The Rise and Decline of Mormon San Bernardino. *Brigham Young University Studies* 29(4):43-63. Brigham Young University, Provo, Utah.

Martin, Paul S.
1967 Prehistoric Overkill. In *Pleistocene Extinctions: The Search for a Cause*, edited by Paul S. Martin and H.E. Wright. Yale University Press, New Haven, Connecticut.

1973 The Discovery of America. *Science* 179(4077):969–974.

Masters, Patricia M.
1983 Detection and Assessment of Prehistoric Artifact Sites off the Coast of Southern California. In *Quaternary Coastlines and Marine Archaeology: Towards the Prehistory of Land Bridges and Continental Shelves*, edited by Patricia M. Masters and Nicholas C. Fleming, pp. 189–213. Academic Press, London.

Matti, J.C., D.M. Morton, B.F. Cox, and K.J. Kendrick
2003 Geologic Map of the Redlands 7.5' Quadrangle, San Bernardino and Riverside Counties, California. U.S. Geological Survey Open-File Report 03-302, v. 1.0.

Mermilliod, Jennifer
2002 *Historic Resources Survey and Project Evaluation, 1293 and 1301 East Brockton Avenue, Redlands.* JM Research and Consulting. Riverside, California.

Milanovich, Sean Christian
2021 *The Treaty of Temecula: A Story of Invasion, Deceit, Stolen Land, and the Persistence of Power, 1846-1905 (Unpublished Doctor of Philosophy Thesis)*. University of California Riverside.

Moratto, Michael J.
1984 *California Archaeology*. Academic Press, New York.

Moriarty, James R., III
1966 Culture Phase Divisions Suggested by Topological Change Coordinated with Stratigraphically Controlled Radiocarbon Dating in San Diego. *Anthropological Journal of Canada* 4(4):20–30.

Moss, Madonna L. and Jon M. Erlandson
1995 Reflections on North American Pacific Coast Prehistory. *Journal of World Prehistory* 9(1):1–46.

Natural Resources Conservation Service (NRCS)
2023 Web Soil Survey. Electronic document, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed October 2023.

Pourade, Richard F.
1961 *Time of the Bells*. The History of San Diego Volume 2. Union-Tribune Publishing Company, San Diego, California.

1963 The Silver Dons. In *The History of San Diego* (Volume 3). Union-Tribune Publishing Company, San Diego, California.

Reynolds, R.E.
2017 Review of the Blancan / Irvingtonian Transition in the Northern Peninsular Range Province of Southern California. *In*, Reynolds, R.E., ed., ECSZ Does It, Revisiting the Eastern California Shear Zone. California State University Desert Studies Center 2017 Desert Symposium Field Guide and Proceedings.

Reynolds, R.E. and W.A. Reeder
1986 Age and Fossil Assemblages of the San Timoteo Formation, Riverside County, California. *In*, Kooser, M.A., and R.E. Reynolds, eds., Geology Around the Margins of the Eastern San Bernardino Mountains. Publications of the Inland Geological Society, v. 1, Redlands, California.

Rogers, Malcolm J.
1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. In *San Diego Museum Papers* (No. 3 – 1989 printing). San Diego Museum of Man, San Diego, California.

Rolle, Andrew F.
1969 *California: A History*. 2nd ed. Thomas Y. Crowell Company, New York.

San Bernardino County Historical Archives
2012 *Ranchos of San Bernardino County.* The San Bernardino Historical Archives. Electronic document, http://www.sbcounty.gov/ARC/Archives/Ranchos.aspx, accessed September, 2016.

San Bernardino History and Railroad Museum
2010 *Rancho San Bernardino.* Electronic document, http://sbdepotmuseum.squarespace .com/1800-1849/, accessed September 2016.

Smallwood, Josh
2006 Site record form for Site SBR-8092/H. On file at the South Central Coastal Information Center, California State University at Fullerton.

Society of Vertebrate Paleontology
2010 Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources; by the SVP Impact Mitigation Guidelines Revision Committee. Electronic document, https://vertpaleo.org/wp-content/uploads/2021/01/ SVP_Impact_Mitigation_Guidelines-1.pdf, accessed February 2024.

State Historic Preservation Office (SHPO)
1995 *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento, California.

Strong, William Duncan
1971 Aboriginal Society in Southern California. Reprint of 1929 *Publications in American Archaeology and Ethnology* No. 26, University of California, Berkeley.

Sutton, Mark Q.
2009 People and Language: Defining the Takic Expansion into Southern California. *Pacific Coast Archaeological Society Quarterly* 41(2&3):33–93.

2011a The Palomar Tradition and Its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(4):1–74.

2011b *A Prehistory of North America.* Routledge, New York.

Sutton, Mark Q. and Jill K. Gardner
2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1–64.

Tucker, Keith D. and Mike Barone
2024 Revised Geotechnical Engineering Investigation, Proposed Industrial Warehouse Development, 1101 California Street, Redlands, California. Consulting report prepared for North Palisade Partners, LLC, Newport Beach, California, by NorCal Engineering, Los Alamitos, California.

Wallace, William J.
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology* 11:214–230.

Warren, Claude N. (editor)
1968 Cultural Tradition and Ecological Adaptation on the Southern Coast, In: Archaic Prehistory in the Western United States. In *Eastern New Mexico University Contributions in Anthropology* 1(3):1–14.

APPENDIX A

Qualifications of Key Personnel

Andrew J. Garrison, M.A., 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**
BFSA Environmental Serives, A Perennial Company **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.

Todd A. Wirths, MS, PG No. 7588

Senior Paleontologist

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BFSA Environmental Services
A Perennial Company

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County*. Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County*. Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California*. Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California*. Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California*. Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County*. Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California*. Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego*. Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX D

Table 1.4–2

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Cultural Resources Studies Conducted Within One Mile of the 1101 California Street Project

Abdo-Hintzman, Kholood and Josh Smallwood

2015 Cultural Resources Monitoring Report for the Redlands Commerce Center Buildings 1 And 2 Project, City of Redlands, San Bernardino County, California. Applied EarthWorks, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Alexandrowicz, J. Stephen, Anne Q. Durrield-Stoll, and Susan R. Alexandrowicz

1992 A Cultural Resources Investigation for the Proposed Construction Site of the Thai Seventh-Day Adventist Church of Southern California, Redlands, San Bernardino County, California. Archaeological Consulting Services. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Brunzell, David

2013 Cultural Resources Assessment Hillwood Commerce Center Project, City of Redlands, San Bernardino County, California. BCR Consulting, LLC. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Budinger, Fred

2004a An Archaeological Resource Survey of Approximately 6 Acres for the MKJ Iowa Commerce Center, LLC Project Located at Iowa St & Citrus Ave in the City of Redlands, San Bernardino County, CA. 33PP. Tetra Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2004b An Archaeological Resources Survey of 8.6 Acres for the Nevada Street Project Northeast of the Intersection of Redlands Boulevard and Nevada Street (APNs 0292-063-12, -13, -17, and -41) in the City of Redlands, County of San Bernardino, California 92373. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Crull, Scott

2007 An Archaeological and Paleontological Mitigation-Monitoring Report for Tentative Parcel Map 17815, with APNs: 167-401-02, 03; 167-511-08 and 167-451-05, 06, 07- a 40 Acre Parcel Located in the City of Redlands, San Bernardino County, California. L&L Environmental, Inc. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Dahdul, Miriam

2003 Historical/Archaeological Resources Survey Report: Assessor Parcel #s 0292-152-40, 41, & 42 in the City of Redlands, San Bernardino County, CA. 13PP. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

DeCarlo, Matthew M. and Diane L. Winslow

2015 Cultural Resources Impact Assessment and Evaluation Status Report for Southern California Edison Company's West of Devers Upgrade Project, Riverside and San Bernardino Counties, California. ASM Affiliates. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Dice, Michael

2002 An Archaeological Resources Assessment of the Mission Glen Project, Eastern Section, A 41 +/- Acre Site Located in the City of Loma Linda, San Bernardino County, Ca. 51PP. Michael Brandman Associates. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2003a Cultural Resources Survey Letter Report: Negative Results for the American Pacific-Loma Linda Project Located on APN #0292-121-37, #0292-121-40, #0292-121-64, #0292-121-78, #0292-121-79 and #0292-131-80, Mission Road, City of Loma Linda, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2003b A Phase 2 Archaeological and Historical Assessment of Cultural Resources within "The Trails at Mission Park", A Single Family Residential Development Located in the City of Loma Linda, San Bernardino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2004a Native American Cultural Resources Monitoring Results for "The Trails at Mission Park" Project, City of Loma Linda, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2004 Phase I Cultural Resources Survey of a 73.45 Acre Property in Unincorporated San Bernardino County, APN: 0292-052-01, -03, -04, -06, -08, -10, -11, -12, -16 near Nevada Street/Almond Avenue, Section 13 of Township 1 North Range 6 West, County of San Bernardino, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2004d Records Search Results and Site Visit for Sprint Telecommunications Facility SB38XC919E (City Grove), California Street and I-10, Redlands, San Bernardino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2005 Cultural Resource Excavations and Monitoring at the Mission Lane Project, Tract # 16323, City of Loma Linda, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Foster, John M., James J. Schmidt, Carmen A. Weber, Gwendolyn R. Romani, and Roberta S. Greenwood
1991 Cultural Resource Investigation: Inland Feeder Project, MWD of Southern CA. Greenwood & Associates. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Glenn, Brian
2006 Cultural Resources Assessment Letter Report for the Approximately 5-Acre Park – Nevada Avenue Project Area, City of Redlands, County of San Bernardino, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Glover, Amy and Sherri Gust
2012 Cultural Resources Phase I Study Redlands Park Once Transit Center Project, City of Redlands, San Bernardino County, California. Cogstone. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Goodwin, Riordan and Judith Marvin
2004 Cultural Resources Assessment: House Land Development Parcels APNs: 0292-055-01 and -0292-055-05 through -10, Vicinity of Redlands, San Bernardino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Hatheway, Roger G.
1988 A Windshield Survey and Preliminary Architectural/Historical Inventory of Loma Linda, California. Hatheway & McKenna. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Hearn, Joseph E.
1977 Archaeological - Historical Resources Assessment of Project Site Located on the North Side of Redlands Boulevard and West of California Street in the Bryn Mawr Area. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

1978a Archaeological - Historical Resources Assessment of Approximately Eight Acres at the Northeast Corner of Redlands Boulevard and Bryn Mawr Avenue; Loma Linda Area. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California

1978b Archaeological - Historical Resources Assessment of 63 Acre Parcel of Land Located on the North Side of Redlands Boulevard Between Mountain View Avenue and Bryn Mawr Avenue, Loma Linda-Redlands Area. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Leonard III, N. Nelson, Jim Crowell, and Sheila Mone

1976 Archaeological Impact of Proposed Widening of Mountain View Avenue, Loma Linda. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Lerch, Michael K.

2004 The Zanja on Mission Road: Location and Evaluation of CA-SBR-8092, University Village Project Area, Loma Linda, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Love, Bruce

2000 Westside Landfill Expansion Project. 29pp. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2001 Identification and Evaluation of Historic Properties: City of Redlands Recycled Water Project in the City of Redlands, San Bernardino County, Ca. 27pp. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

McKenna, Jeanette A.

1994 Cultural Resources Investigations of the Fritzche Property, 10885 New Jersey Street, Loma Linda/Bryn Mawr, San Bernardino County, CA. McKenna et al. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2014a A Phase I Cultural Resources Investigation of Citrus Lane Project Area, Assessor's Parcel No. 0292-161-01-0000, City of Loma Linda, San Bernardino County, California. McKenna et al. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2014b A Phase I Cultural Resources Investigation for the Crossings at Redlands Project Area, Approximately 10 Acres of Land in the Redlands Area of San Bernardino County, California. McKenna et al. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Mone, Sheila, Jim Crowell, And N. Nelson Leonard III

1977 Archaeological Impact of Proposed Construction of a Water Transmission Main, Loma Linda, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Sander, Jay K.

2005a Cultural Resources Survey of an 8.50 Acre Parcel at Redlands Boulevard and Nevada Street, Redlands, San Bernardino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

2005b Cultural Resources Survey of a 3.92-Acre Parcel at the Southwest Corner of Pleasant View Drive And Marion Road Redlands, San Bernadino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Sanka, Jennifer

2008 Phase I Cultural Resources Assessment and Paleontological Records Review: Almond Plaza Project, Redlands, San Bernardino County, California. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Smith, Gerald A.

1980 Cultural Resources Assessment of the West Portion of Assessor's Parcel Number 292-061-11, Redlands Area. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Smith, Gerald A., Michael Lerch, and Arda Haenszel

1981 Cultural Resources Assessment of the Old San Bernardino Mission District, 315 Acres Northeasterly Planning Area, City of Loma Linda. San Bernardino County Museum Association. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Swope, Karen K.

1997 Cultural Resources Survey of the Mission Road Project, City of Loma Linda, San Bernardino County, CA. 59PP. ARU. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Swope, Karen K. and Michael K. Lerch

1992 Cultural Resources Assessment of the Barton Center of Redlands, Marigold Farms, City of Redlands, San Bernardino County, California. Michael K. Lerch & Associates. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Tang, Bai "Tom", Michael Hogan, Deirdre Encarnacion, and Nina Gallardo
2012 Historical/Archaeological Resources Survey Report: Orchard Park Project, City of Loma Linda, San Bernardino County, California. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Tang, Bai "Tom", Michael Hogan, Miriam Dahdul, Casey Tibbet, and Daniel Ballester
2003 Identification and Evaluation of Historic Properties: U.S. Department of Veterans Affairs Veterans Health Care Clinic Project, City of Loma Linda, San Bernardino County, California. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Tang, Bai "Tom", Michael Hogan, Miriam Dahdul, Casey Tibbet, and Daniel Ballester
2003 Historical/Archaeological Resources Survey Report: University Village Project, City of Loma Linda, San Bernardino County, California. CRM Tech. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.

Williams, Audry and Andrew Belcourt
2014 Archival Research and Evaluation Results of 33 Cultural Resources for Southern California Edison Company's West of Devers Upgrade Project, Riverside and San Bernardino Counties, California. Southern California Edison. Unpublished report on file at the South Central Coastal Information Center at California State University, Fullerton, Fullerton, California.