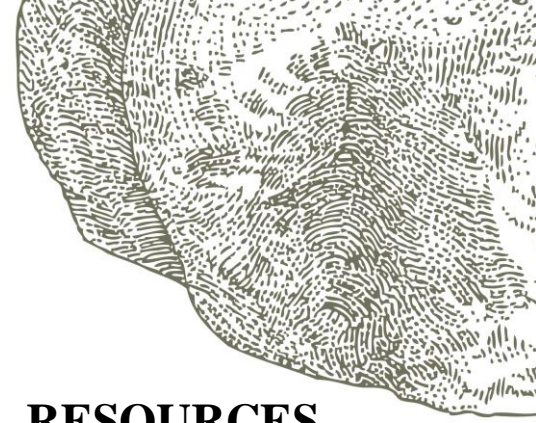


Appendix G Cultural Resources Assessment

Appendices

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**CULTURAL AND PALEONTOLOGICAL RESOURCES
ASSESSMENT FOR THE FONTANA CAMPUS MASTER
PLAN ENVIRONMENTAL IMPACT REPORT PROJECT,
CITY OF FONTANA, SAN BERNARDINO COUNTY,
CALIFORNIA**

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Kim Scott, M.S., Principal Investigator for Paleontology

Date

December 2021

Cogstone Project Number: 4910-01

Type of Study: Cultural and Paleontological Resources Assessment

Sites: 20211005.SD.001 (temp)

USGS 7.5' Quadrangle: Fontana (1980)

Area: 14.3 acres

Key Words: Negative for paleontological resources, negative for significant cultural resources, Gabrielino (Tongva) territory

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MANAGEMENT SUMMARY

The purpose of this study is to determine the potential effects to cultural and paleontological resources resulting from the implementation of the Fontana Campus Master Plan Environmental Impact Report Project (Project). This assessment provides environmental documentation as required by the California Environmental Quality Act (CEQA). The Chaffey Community College District is the lead agency.

The Project involves the construction of a new community college campus for the Chaffey Community College District consisting of a Welcome Center/Library, Instructional Buildings I and II, Automotive Technology Building, CTE Building, Operations and Maintenance Building, and Student and Community Center with associated parking and landscaped space. The Project is located on approximately 14.3 acres along Sierra Avenue, north of Jurupa Avenue, and south of Santa Ana Avenue, in the City of Fontana, San Bernardino County, California. Expected maximum depth of excavation is six feet.

Paleontological Resources

The Project is mapped as late Pleistocene (less than 126,000 years old) to Holocene young alluvial fan deposits. Modern artificial fill is also common in previously developed areas.

The results of the record search showed that no fossils have been recovered from units of this age within one mile of the proposed project. However, Pleistocene fossils of saber-toothed cat, horse, mastodon, mammoth, bison, and camel have locally been found in the Riverside and Fontana areas. Pleistocene fossils typically begin appearing about 8 to 10 feet deep in California valleys. Shallower sediments in the valleys usually do not contain the remains of extinct animals, although Holocene (less than 11,700 years old) remains may be present. As such, late Pleistocene to Holocene young alluvial fan deposits less than eight feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. More than eight feet below the modern surface these sediments are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. Additionally, various amounts of artificial fill may be present. Artificial fill has very low potential for scientifically significant paleontological resources (PFYC 1).

Excavation for the Project is only expected to reach six feet below the original surface, therefore the potential for adverse impacts to scientifically significant paleontological resources is low. Because there is a low potential for impacts to scientifically significant paleontological resources, no mitigation measures are currently recommended. No mitigation is required for any excavation into the young alluvial fan deposits and artificial fill. No further paleontological resources work is recommended for the proposed Project.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified paleontologist evaluates it.

Cultural Resources

Cogstone archaeologist Logan Freeberg requested a search of the California Historical Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton on August 9, 2021 which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that no previous studies have been completed within the Project Area while 17 studies have been completed previously within a half-mile radius of the Project Area.

No cultural resources have been previously recorded within Project Area. Outside of the Project Area a total of six cultural resources have been previously documented within the half-mile search radius. These consist of one historic built environment resource, one prehistoric archaeological site, and four prehistoric cultural isolates, all of which are located one quarter to one half mile from the Project Area.

Cogstone archaeologist Logan Freeberg submitted a Sacred Lands File (SLF) search request to the Native American Heritage Commission (NAHC) on August 9, 2021. The NAHC responded on September 2, 2021 and indicated that there are no sacred lands or resources known within the same USGS Quadrangle, Township, Range, and Section as the Project Area. The NAHC also provided a list of Native American individuals/organizations that may have knowledge of cultural resources and/or sacred lands within or near the Project Area. The Chaffey Community College District will be responsible for conducting Native American consultation, if warranted, in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18.

Cogstone archaeologist Sandy Duarte and architectural historian Shannon Lopez surveyed the Project Area on October 5, 2021 using one- to three-meter transects. Ground visibility within the Project Area was approximately 85 percent. The vegetation consisted of eucalyptus trees, Russian thistle, various low weeds, and pine trees. The intensive pedestrian survey revealed that the Project Area has been heavily disturbed for agricultural purposes. Sediments in the Project Area consist of dark brown sandy silt alluvium, consistent with geologic mapping by Morton and Miller (2006). One historic archaeological resource, 20211005.SD.001, was identified.

20211005.SD.001 consists of a 150-foot by 25-foot by 5-inch thick concrete slab foundation that contains five troughs, each 6 feet long by 2 feet wide by 9 inches deep. The USDA 1953 and 1966 historical aerial photograph shows a second slab aligned parallel to the east with an approximately 35-foot gap in between, and another pair of similar slabs 20 feet directly to the south.

The CHRIS record search conducted in support of the Project indicates that no cultural resources have been previously recorded within the APE and the SLF search was negative for tribal cultural resources within the Project Area and vicinity. Historic archaeological resource 20211005.SD.001 was fully documented using DPR 523 series forms. The resource is not significant and all important data has been collected. No further cultural resources work is necessary, and the Project should proceed as planned.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately

INTRODUCTION

PURPOSE OF STUDY

Cogstone Resource Management, Inc. (Cogstone) conducted a cultural and paleontological resources assessment for the Fontana Campus Master Plan Environmental Impact Report Project (Project; Figure 1). This assessment provides environmental documentation as required by the California Environmental Quality Act (CEQA). The Chaffey Community College District is the lead agency.

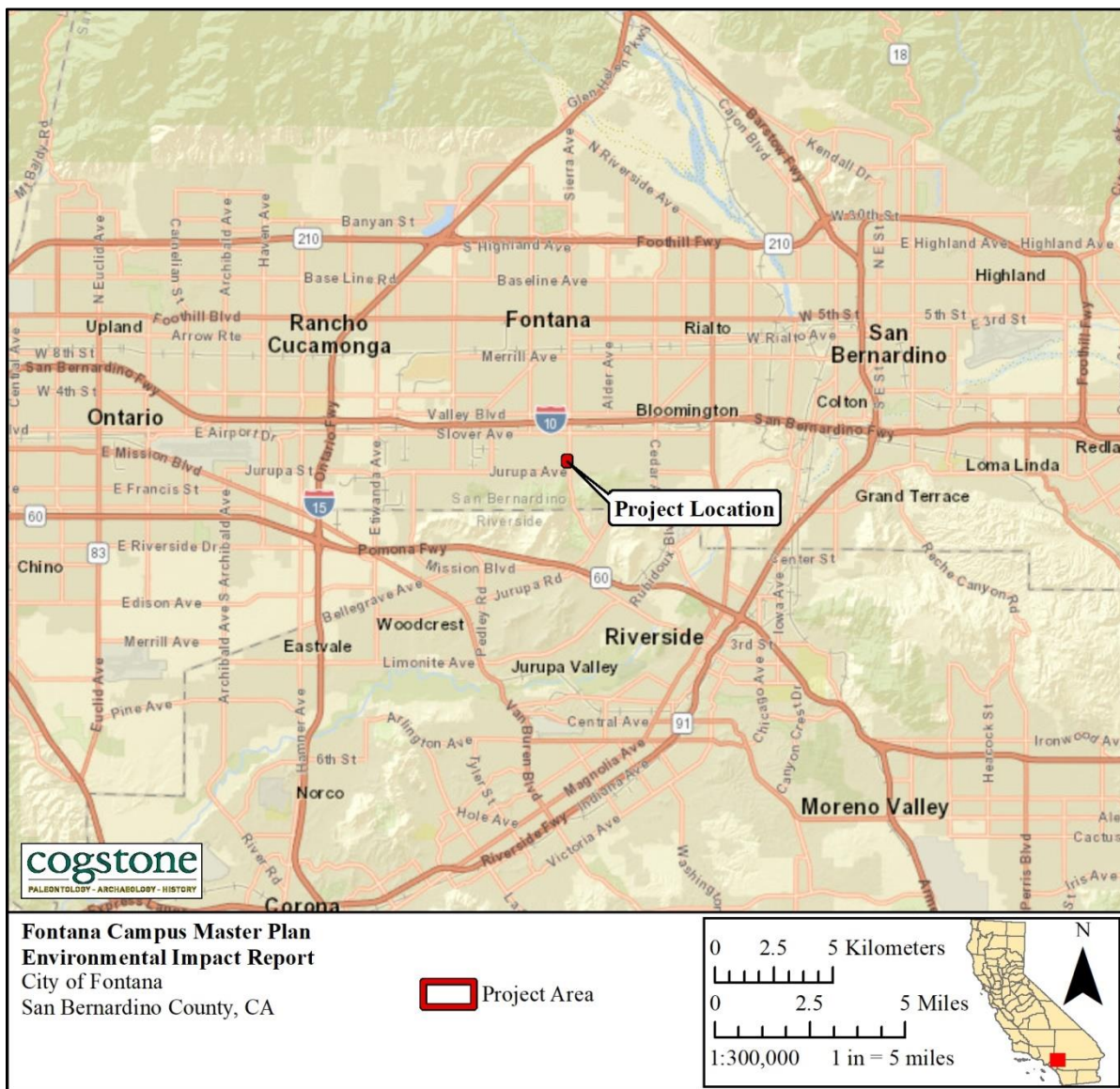


Figure 1. Project vicinity map

PROJECT LOCATION AND DESCRIPTION

The Project involves the construction of a new community college campus for the Chaffey Community College District consisting of a Welcome Center/Library, Instructional Buildings I and II, Automotive Technology Building, CTE Building, Operations and Maintenance Building, and Student and Community Center with associated parking and landscaped space.

The Project Area is located on approximately 14.3 acres along Sierra Avenue, north of Jurupa Avenue, and south of Santa Ana Avenue, in the City of Fontana, San Bernardino County, California (Figures 2 and 3). Specifically, the Project is located within Township 1 South, Range 5 West, Section 30, San Bernardino Baseline and Meridian on the United States Geological Survey (USGS) 7.5-minute Fontana topographic quadrangle map. Anticipated maximum depth of excavation is six feet.

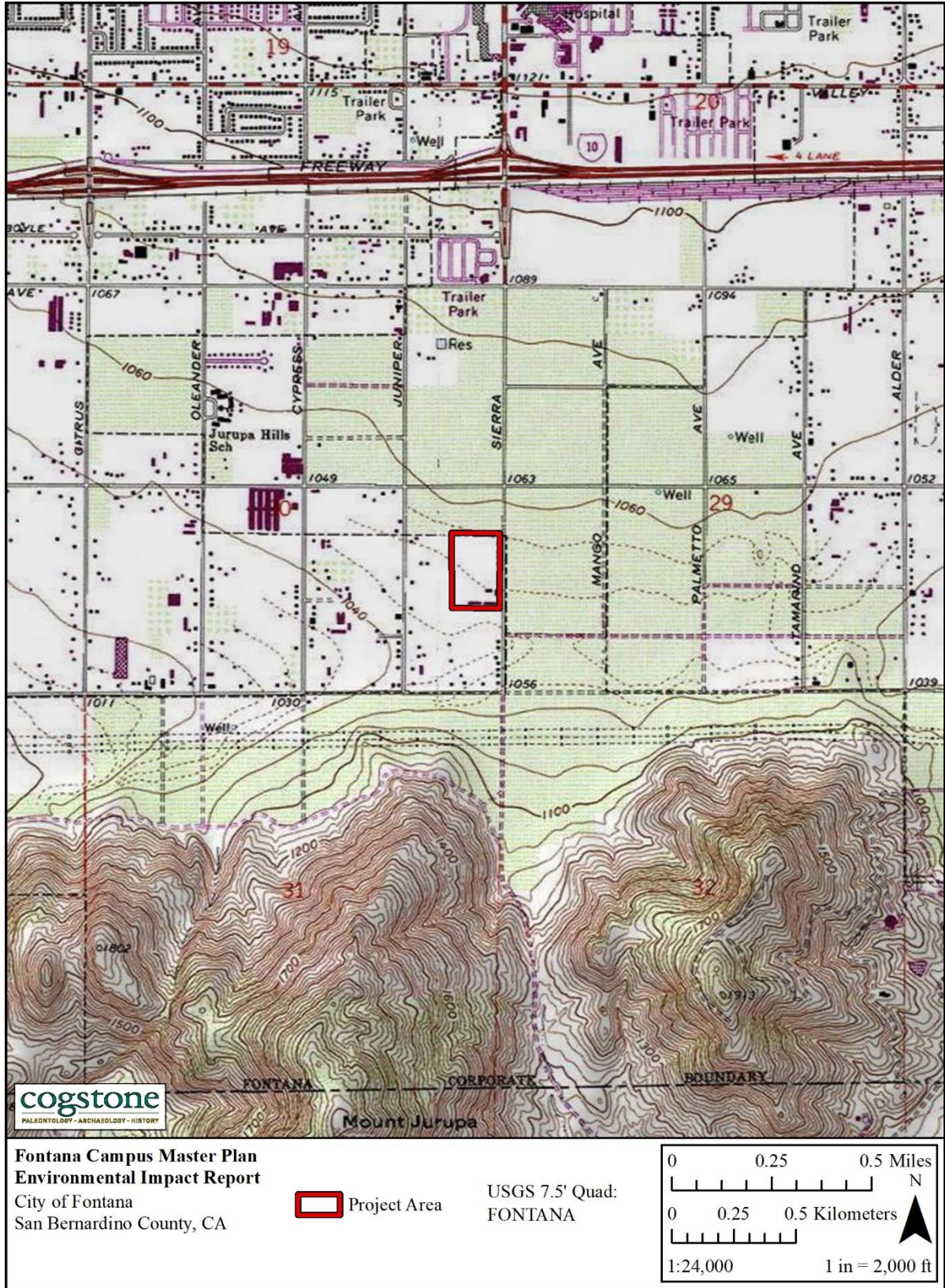


Figure 2. Project location map

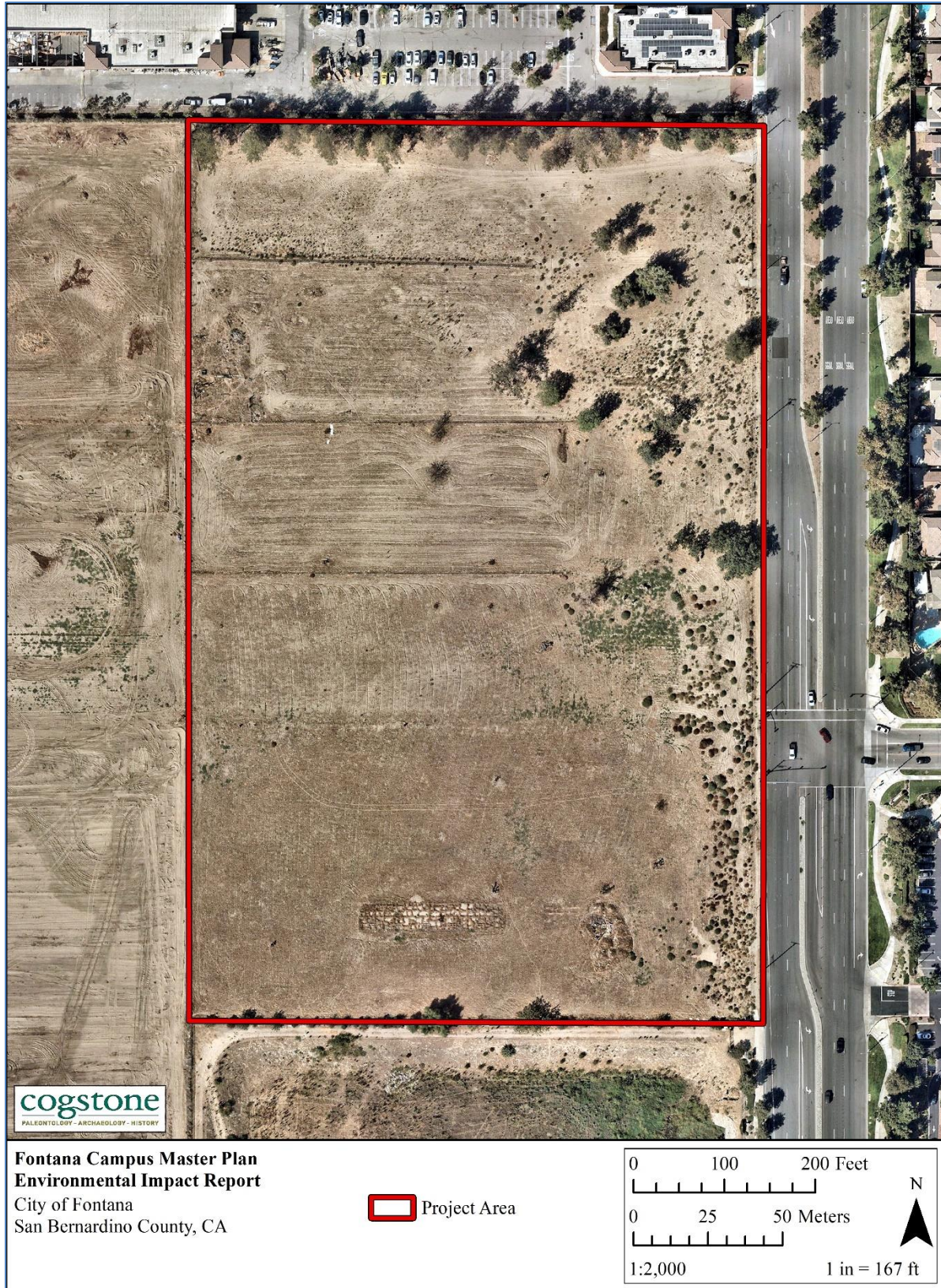


Figure 3. Project area map

PROJECT PERSONNEL

Cogstone conducted a cultural and paleontological resources assessment and prepared this report. Resumes of key personnel are provided in Appendix A.

- Kanak Somani, RPA, co-authored report. Ms. Somani holds an M.A. in Anthropology from Yale University and has over four years of experience in California archaeology.
- Kelly Vreeland co-authored this report. Ms. Vreeland has an M.S. in Geology, with an emphasis in paleontology, from California State University (CSU), Fullerton, as well as 10 years of experience in California paleontology and geology.
- John Gust, PhD, Registered Professional Archaeologist (RPA), served as the Task Manager and Principal Investigator for Archaeology for the Project, and reviewed this report. Dr. Gust has a PhD in Anthropology from the University of California (UC), Riverside, and over 10 years of experience in archaeology.
- Kim Scott served as the Principal Investigator for Paleontology for the Project. Ms. Scott has an M.S. in Biology with paleontology emphasis from CSU San Bernardino, a B.S. in Geology with paleontology emphasis from the University of California, Los Angeles, and over 25 years of experience in California paleontology and geology.
- Sandy Duarte conducted the field survey and authored portions of this report. Mrs. Duarte holds a B.A. in Anthropology from UC Santa Barbara, and more than 18 years of experience in southern California archaeology.
- Logan Freeberg conducted the paleontological record search and prepared the maps for the report. Mr. Freeberg holds a B.A. in Anthropology from UC Santa Barbara, a Geographic Information Systems (GIS) certificate from CSU Fullerton, and has more than 18 years of experience in southern California archaeology.
- Molly Valasik provided overall QA/QC for the Project. Ms. Valasik has an M.A. in Anthropology from Kent State University in Ohio and 12 years of experience in southern California archaeology.
- Eric Scott provided QA/QC of the paleontology and geology sections of this report. Mr. Scott has an M.A. in Anthropology, with an emphasis in biological paleoanthropology, from UCLA, and more than 37 years of experience in California paleontology.

REGULATORY ENVIRONMENT

STATE LAWS AND REGULATIONS

CALIFORNIA ENVIRONMENTAL QUALITY ACT

CEQA states that: It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required are intended to assist public agencies in systematically identifying both the significant effects of proposed project and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

CEQA declares that it is state policy to: “take all action necessary to provide the people of this state with...historic environmental qualities.” It further states that public or private projects financed or approved by the state are subject to environmental review by the state. All such projects, unless entitled to an exemption, may proceed only after this requirement has been satisfied. CEQA requires detailed studies that analyze the environmental effects of a proposed project. In the event that a project is determined to have a potential significant environmental effect, the act requires that alternative plans and mitigation measures be considered.

TRIBAL CULTURAL RESOURCES

As of 2015, CEQA established that “[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Pub. Resources Code, § 21084.2). In order to be considered a “tribal cultural resource,” a resource must be either:

- (1) listed, or determined to be eligible for listing, on the national, state, or local register of historic resources, or
- (2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource.

To help determine whether a project may have such an effect, the lead agency must consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. If a lead agency determines that a project may cause a substantial adverse change to tribal cultural resources, the lead agency must consider measures to mitigate that impact. Public Resources Code §20184.3 (b)(2) provides examples of mitigation measures that lead agencies may consider to avoid or minimize impacts to tribal cultural resources.

PUBLIC RESOURCES CODE

Section 5097.5: No person shall 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, or any other archaeological, paleontological or historical feature, situated on public lands (lands under state, county, city, district or public authority jurisdiction, or the jurisdiction of a public corporation), except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor. 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.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a listing of all properties considered to be significant historical resources in the state. The California Register includes all properties listed or determined eligible for listing on the National Register, including properties evaluated under Section 106, and State Historical Landmarks No. 770 and above. The California Register statute specifically provides that historical resources listed, determined eligible for listing on the California Register by the State Historical Resources Commission, or resources that meet the California Register criteria are resources which must be given consideration under CEQA (see above). Other resources, such as resources listed on local registers of historic resources or in local surveys, may be listed if they are determined by the State Historic Resources Commission to be significant in accordance with criteria and procedures to be adopted by the Commission and are nominated; their listing in the California Register is not automatic.

Resources eligible for listing include buildings, sites, structures, objects, or historic districts that retain historical integrity and are historically significant at the local, state or national level under one or more of the following four criteria:

- 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- 4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition to having significance, resources must have integrity for the period of significance. The period of significance is the date or span of time within which significant events transpired, or significant individuals made their important contributions. Integrity is the authenticity of a

historical resource's physical identity as evidenced by the survival of characteristics or historic fabric that existed during the resource's period of significance.

Alterations to a resource or changes in its use over time may have historical, cultural, or architectural significance. Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the California Register, if, under Criterion 4, it maintains the potential to yield significant scientific or historical information or specific data.

NATIVE AMERICAN HUMAN REMAINS

Sites that may contain human remains important to Native Americans must be identified and treated in a sensitive manner, consistent with state law (i.e., Health and Safety Code §7050.5 and Public Resources Code §5097.98), as reviewed below:

In the event that human remains are encountered during project development and in accordance with the Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods.

CALIFORNIA ADMINISTRATIVE CODE, TITLE 14, SECTION 4307

This section states that "No person shall remove, injure, deface or destroy any object of paleontological, archeological or historical interest or value."

PALEONTOLOGICAL RESOURCES SIGNIFICANCE CRITERIA

Only qualified, trained paleontologists with specific expertise in the type of fossils being evaluated can determine the scientific significance of paleontological resources. Fossils are considered to be significant if one or more of the following criteria apply:

1. The fossils provide information on the evolutionary relationships and developmental trends among organisms, living or extinct;

2. The fossils provide data useful in determining the age(s) of the rock unit or sedimentary stratum, including data important in determining the depositional history of the region and the timing of geologic events therein;
3. The fossils provide data regarding the development of biological communities or interaction between paleobotanical and paleozoological biotas;
4. The fossils demonstrate unusual or spectacular circumstances in the history of life;
5. The fossils are in short supply and/or in danger of being depleted or destroyed by the elements, vandalism, or commercial exploitation, and are not found in other geographic locations.

As so defined, significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology are also critically important (Scott and Springer 2003; Scott et al. 2004).

BACKGROUND

GEOLOGICAL SETTING

This Project is located within the Peninsular Range Geomorphic Province, which extends from Mount San Jacinto in the north to Baja, California in the south. The province covers the Peninsular Range and all land to the west including the western Inland Empire, Los Angeles, Orange County, and San Diego areas of California. The Peninsular Ranges Geomorphic Province is located in the southwestern corner of California and is bounded by the Transverse Ranges Geomorphic Province to the north and the Colorado Desert Geomorphic Province to the east. This geomorphic province is characterized by elongated northwest-trending mountain ridges separated by sediment-floored valleys. Many faults to the west of the Salton Trough section of the San Andreas Fault Zone, parallel this northwest-south east trending fault zone and have taken up some of the strain of the San Andreas. The San Jacinto Fault Zone to the east and the Lake Elsinore Fault Zone to the west of the Project are part of this system.

To the north of the Project, the San Andreas Fault Zone travels up Cajon Pass where it forms the boundary between the Pacific Plate and the North American Plate. The Transverse Ranges include the San Bernardino and San Gabriel Mountains along with paralleling ranges, and result from these two plates grinding past each other and “catching” along the bend in the San Andreas. The Project is located on the Pacific Plate which is composed of numerous blocks that can move independently (Wagner 2002).

STRATIGRAPHY

The Project is mapped as late Pleistocene (less than 126,000 years old) to Holocene young alluvial fan deposits (Morton and Miller 2006). Additionally, modern artificial fill is also common in some previously developed areas, although not labeled by Morton and Miller (2006).

ARTIFICIAL FILL, MODERN

In California, most artificial fill is less than 100 years old and is associated with construction activities. The Project Area has been previously developed and likely contains various amounts of artificial fill placed during prior development.

YOUNG ALLUVIAL FAN DEPOSITS, LATE PLEISTOCENE TO HOLOCENE

Late Pleistocene to Holocene alluvial fan flood plain deposits consist of unconsolidated to moderately consolidated, poorly sorted, permeable clays to sands. Deposits are poorly consolidated and may be capped by poorly to moderately developed soils. These sediments were deposited by streams and rivers on canyon floors and in the flat flood plains of the area (Morton and Miller 2006).

ENVIRONMENTAL SETTING

The City of Fontana is situated approximately 50 miles east of Los Angeles and is close to the Santa Ana River to the east. Fontana is a vital hub for the supply chain, due to its location at the crossroads of major transportation routes (Interstate Highways 10 and 15, and California State Route 210) and the Union Pacific Railroad.

The City is frequently affected by the strong, hot and dry Santa Ana winds as they blow through the nearby Cajon Pass of the San Gabriel mountains, from the Mojave Desert. Fontana can also be extremely hot in the summer.

Prior to development, Fontana was an agricultural town of citrus orchards, vineyards, and chicken ranches. The current vegetation within the Project Area is dominated by non-native plants including Russian thistle and eucalyptus. Other vegetation includes low grasses and ornamental pine trees.

PREHISTORIC SETTING

Approaches to prehistoric frameworks have changed over the past half century from being based on material attributes to radiocarbon chronologies to association with cultural traditions. Archaeologists defined a material complex consisting of an abundance of milling stones (for grinding food items) with few projectile points or vertebrate faunal remains dating from about 7 to 3 thousand years before the present as the “Millingstone Horizon” (Wallace 1955). Later, the “Millingstone Horizon” was redefined as a cultural tradition named the Encinitas Tradition (Warren 1968) with various regional expressions including Topanga and La Jolla. Use by archaeologists varied as some adopted a generalized Encinitas Tradition without regional variations, some continued to use “Millingstone Horizon” and some used Middle Holocene (the time period) to indicate this observed pattern (Sutton and Gardner 2010:1-2).

Recently, it was recognized that generalized terminology is suppressing the identification of cultural, spatial, and temporal variation and the movement of peoples throughout space and time. These factors are critical to understanding adaptation and change (Sutton and Gardner 2010:1-2). The Encinitas Tradition characteristics are abundant metates and manos, crudely made core and flake tools, bone tools, shell ornaments, very few projectile points with subsistence focusing on collecting (plants, shellfish, etc.; Sutton and Gardner 2010:7). Faunal remains vary by location but include shellfish, land animals, marine mammals, and fish.

The Encinitas Tradition is currently redefined as comprising four geographical patterns (Sutton and Gardner 2010:8-25). These are (1) Topanga in coastal Los Angeles and Orange counties, (2) La Jolla in coastal San Diego County, (3) Greven Knoll in inland San Bernardino, Riverside,

Orange, and Los Angeles counties, and (4) Pauma in inland San Diego County.

About 3,500 years before present the Encinitas Tradition was replaced in the greater Los Angeles Basin by the Del Rey Tradition (Sutton 2010). This tradition has been generally assigned to the Intermediate and Late Prehistoric periods. The changes that initiated the beginning of the Intermediate Period include new settlement patterns, economic foci, and artifact types that coincided with the arrival of a biologically distinctive population. The Intermediate and Late Prehistoric periods have not been well-defined. Many archaeologists have proposed, however, that the beginning of the Intermediate marked the arrival of Takic-speaking groups (from the Mojave Desert, southern Sierra Nevada, and San Joaquin Valley) and that the Late Prehistoric Period reflected Shoshonean groups (from the Great Basin). Related cultural and biological changes occurred on the southern Channel Islands about 300 years later.

As defined by Sutton (2010), the Del Rey Tradition replaces usage of the Intermediate and Late Prehistoric designations for both the southern California mainland and the southern Channel Islands. Within the Del Rey Tradition are two regional patterns named Angeles and Island. The Del Rey Tradition represents the arrival, divergence, and development of the Gabrielino in southern California.

PREHISTORIC CHRONOLOGY

The latest cultural revisions for the Project Area define traits for time phases of the Topanga pattern of the Encinitas Tradition applicable to coastal Los Angeles and Orange counties (Sutton and Gardner 2010; Table 1). This pattern is replaced in the Project Area by the Angeles pattern of the Del Rey Tradition later in time (Sutton 2010).

Table 1. Cultural patterns and phases

Phase	Dates BP	Material Culture	Other Traits
Topanga I	8,500 to 5,000	Abundant manos and metates, many core tools and scrapers, few but large points, charmstones, cogged stones, early discoidals, faunal remains rare	Shellfish and hunting important, secondary burials under metate cairns (some with long bones only), some extended inhumations, no cremations
Topanga II	5,000 to 3,500	Abundant but decreasing manos and metates, adoption of mortars and pestles, smaller points, cogged stones, late discoidals, fewer scraper planes and core tools, some stone balls and charmstones	Shellfish important, addition of acorns, reburial of long bones only, addition of flexed inhumations (some beneath metate cairns), cremations rare
Topanga III	3,500 to 1,000	Abundant but decreasing manos and metates, increasing use of mortars and pestles, wider variety of small projectile points, stone-lined ovens	Hunting and gathering important, flexed inhumations (some under rock cairns), cremations rare, possible subsistence focus on yucca/agave

Phase	Dates BP	Material Culture	Other Traits
Angeles IV	1,000 to 800	Cottonwood arrow points for arrows appear, <i>Olivella</i> cupped beads and <i>Mytilus</i> shell disks appear, some imported pottery appears, possible appearance of ceramic pipes	Changes in settlement pattern to fewer but larger permanent villages, flexed primary inhumations, cremations uncommon
Angeles V	800 to 450	Artifact abundance and size increases, steatite trade from islands increases, larger and more elaborate effigies	Development of mainland dialect of Gabrielino, settlement in open grasslands, exploitation of marine resources declined and use of small seeds increased, flexed primary inhumations, cremations uncommon
Angeles VI	450 to 150	Addition of locally made pottery, metal needle-drilled <i>Olivella</i> beads, addition of Euro-American material culture (glass beads and metal tools)	Use of domesticated animals, flexed primary inhumations continue, some cremations

Topanga Pattern groups were relatively small and highly mobile. Sites known are temporary campsites, not villages and tend to be along the coast in wetlands, bays, coastal plains, near-coastal valleys, marine terraces, and mountains. The Topanga toolkit is dominated by manos and metates with projectile points scarce (Sutton and Gardner 2010:9).

In Topanga Phase I other typical characteristics were a few mortars and pestles, abundant core tools (scraper planes, choppers, and hammerstones), relatively few large, leaf-shaped projectile points, cogged stones, and early discoidals. Secondary inhumation under cairns was the common mortuary practice. In Orange County as many as 600 flexed burials were present at one site and dated 6,435 radiocarbon years before present (Sutton and Gardner 2010:9, 13).

In Topanga Phase II, flexed burials and secondary burial under cairns continued. Adoption of the mortar and pestle is a marker of this phase. Other typical artifacts include manos, metates, scrapers, core tools, discoidals, charmstones, cogged stones, and an increase in the number of projectile points. In Orange County stabilization of sea level during this time period resulted in increased use of estuary, near shore, and local terrestrial food sources (Sutton and Gardner 2010:14-16).

In Topanga Phase III, there was continuing abundance of metates, manos, and core tools plus increasing amounts of mortars and pestles. More numerous and varied types of projectile points are observed along with the introduction of stone-line earthen ovens. Cooking features such as these were possibly used to bake yucca or agave. Both flexed and extended burials are known (Sutton and Gardner 2010:17).

The Angeles pattern generally is restricted to the mainland and appears to have been less technologically conservative and more ecologically diverse, with a largely terrestrial focus and greater emphases on hunting and nearshore fishing (Sutton 2010).

The Angeles IV phase is marked by new material items including Cottonwood points for arrows, *Olivella* cupped beads, *Mytilus* shell disks, birdstones (zoomorphic effigies with magico-religious properties), and trade items from the Southwest including pottery. It appears that populations increased and that there was a change in the settlement pattern to fewer but larger, permanent villages. Presence and utility of steatite vessels may have impeded the diffusion of pottery into the Los Angeles Basin. The settlement pattern altered to one of fewer and larger permanent villages. Smaller special-purpose sites continued to be used (Sutton 2010).

Angeles V components contain more and larger steatite artifacts, including larger vessels, more elaborate effigies, and comals. Settlement locations shifted from woodland to open grasslands. The exploitation of marine resources seems to have declined and use of small seeds increased. Many Gabrielino inhumations contained grave goods while cremations did not (Sutton 2010).

The Angeles VI phase reflects the ethnographic mainland Gabrielino of the post-contact period (i.e., after A.D. 1542; Sutton 2010). One of the first changes in Gabrielino culture after contact was undoubtedly population loss due to disease, coupled with resulting social and political disruption. Angeles VI material culture is essentially Angeles V augmented by a number of Euro-American tools and materials, including glass beads and metal tools such as knives and needles (used in bead manufacture). The frequency of Euro-American material culture increased through time until it constituted the vast majority of materials used. Locally produced brownware pottery appears along with metal needle-drilled *Olivella* disk beads.

The ethnographic mainland Gabrielino subsistence system was based primarily on terrestrial hunting and gathering, although nearshore fish and shellfish played important roles. Sea mammals, especially whales (likely from beached carcasses), were prized. In addition, a number of European plant and animal domesticates were obtained and exploited. Ethnographically, the mainland Gabrielino practiced interment and some cremation.

ETHNOGRAPHY

The Project Area is near the eastern edge of the northeastern portion the Gabrielino (Tongva) traditional use area and would likely have also been frequented by Cahuilla Groups.

GABRIELINO (TONGVA)

The Gabrielino speak a language that is part of the Takic language family. Their territory encompassed a vast area stretching from Topanga Canyon in the northwest, to the base of Mount Wilson in the north, to San Bernardino in the east, Aliso Creek in the southeast and the Southern Channel Islands, in all an area of more than 2,500 square miles (Bean and Smith 1978; McCawley 1996; Figure 4). At European contact, the tribe consisted of more than 5,000 people living in various settlements throughout the area. Some of the villages could be quite large, housing up to 150 people.

The Gabrielino are considered to have been one of the wealthiest tribes and to have greatly influenced tribes they traded with (Kroeber 1976:621). Houses were domed, circular structures thatched with tule or similar materials (Bean and Smith 1978:542). The best-known artifacts were made of steatite and were highly prized. Many common everyday items were decorated with inlaid shell or carvings reflecting an elaborately developed artisanship (Bean and Smith 1978:542).

The main food zones utilized were marine, woodland, and grassland (Bean and Smith 1978). Plant foods were, by far, the greatest part of the traditional diet at contact. Acorns were the most important single food source. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. Grass seeds were the next most abundant plant food used along with chia. Seeds were parched, ground, and cooked as mush in various combinations according to taste and availability. Greens and fruits were eaten raw or cooked or sometimes dried for storage. Bulbs, roots, and tubers were dug in the spring and summer and usually eaten fresh. Mushrooms and tree fungus were prized as delicacies. Various teas were made from flowers, fruits, stems, and roots for medicinal cures as well as beverages (Bean and Smith 1978:538-540).

The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Most predators were avoided as food, as were tree squirrels and most reptiles. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Marine foods were extensively utilized. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes. Shellfish were the most common resource, including abalone, turbans, mussels, clams, scallops, bubble shells, and others (Bean and Smith 1978:538-540).

The nearest recorded Tongva village, *Horuuvnga*, is located approximately 4.6 miles south-southwest of the center of the Project.

CAHUILLA

The Cahuilla occupied the San Geronio Pass (referred to as the Pass Cahuilla), San Jacinto and Santa Rosa Mountains (Mountain Cahuilla), and the Coachella Valley and the northern end of Imperial Valley (Desert Cahuilla). The Cahuilla are linked to other Takic language family groups such as the Serrano and Luiseño, and share many aspects of culture and religion with those tribes.

Although various bands spoke the Cahuilla language, each person's primary identity was linked to clan lineage and moiety, rather than tribal affiliation. The two moieties of the Cahuilla were *Istam* (coyote) and *Tuktum* (wild cat). Affiliation was inherited from the father's moiety and

members of one moiety had to marry into the other group. Each clan was an independent, politically autonomous land-holding unit (Bean and Saubel 1972; Bean 1978; Strong 1929).

In addition to lineage residence areas and clan territory owned in common with other clan members, each lineage had ownership rights to various food collecting and hunting areas. Individuals also “owned” specific areas rich in plant resources, as well as hunting grounds, rock quarry locations, and sacred spots used only by shamans, healers, and ritual practitioners.

Cahuilla clans varied in size from several family groups to those composed of several thousand people. Clans were generally situated so that each lineage or community was located near a reliable water source and in proximity to significant food resources. Within each community, house structures were spatially placed at some distance from each other. Often a community would spread over a mile or two in distance with each nuclear and extended family having homes and associated structures for food storage and shaded work places (ramadas) for tool manufacture and food processing. Each community also contained a house clan leader.

In more recent times, a ceremonial house (*kishumnawat*) was placed within each community, and most major religious ceremonies of the clan were held there. In addition, house and ceremonial structures, storage granaries, sweat houses, and song houses (for recreational music) were present. Usually an area within one to three miles contained the bulk of materials needed for daily subsistence, although territories of a given clan might be larger, and longer distances were traveled to get precious exotic resources, usually found in the higher elevations of the surrounding mountains.

While most daily secular and religious activities took place within the community, there were locations at some distance from the community where people camped for extended periods to harvest acorns or piñon nuts. Throughout the area, there were sacred places used primarily for rituals, intergroup or inter-clan meetings, caches for sacred materials, and locations for use by shamans or medicine men. Generally, hilly, rocky areas, cave sites, or walled cave sites were used for temporary camping, storage of foods, fasting by shamans, and as hunting blinds. Between the mid-1500s and the 1800s, the Cahuilla were variously contacted by Spanish explorers, then Mexican ranchers, and later American settlers. By the mid-1800s, the Cahuilla were fully exposed to new peoples with new cultural ways, opportunities, and constraints. In the 1860s, several epidemics devastated the Cahuilla population and the increasing contact with Europeans continued to have a major impact on their traditional lifeway. Survivors of decimated Cahuilla clans joined villages that were able to maintain their ceremonial, cultural, and economic institutions (Bean 1978).

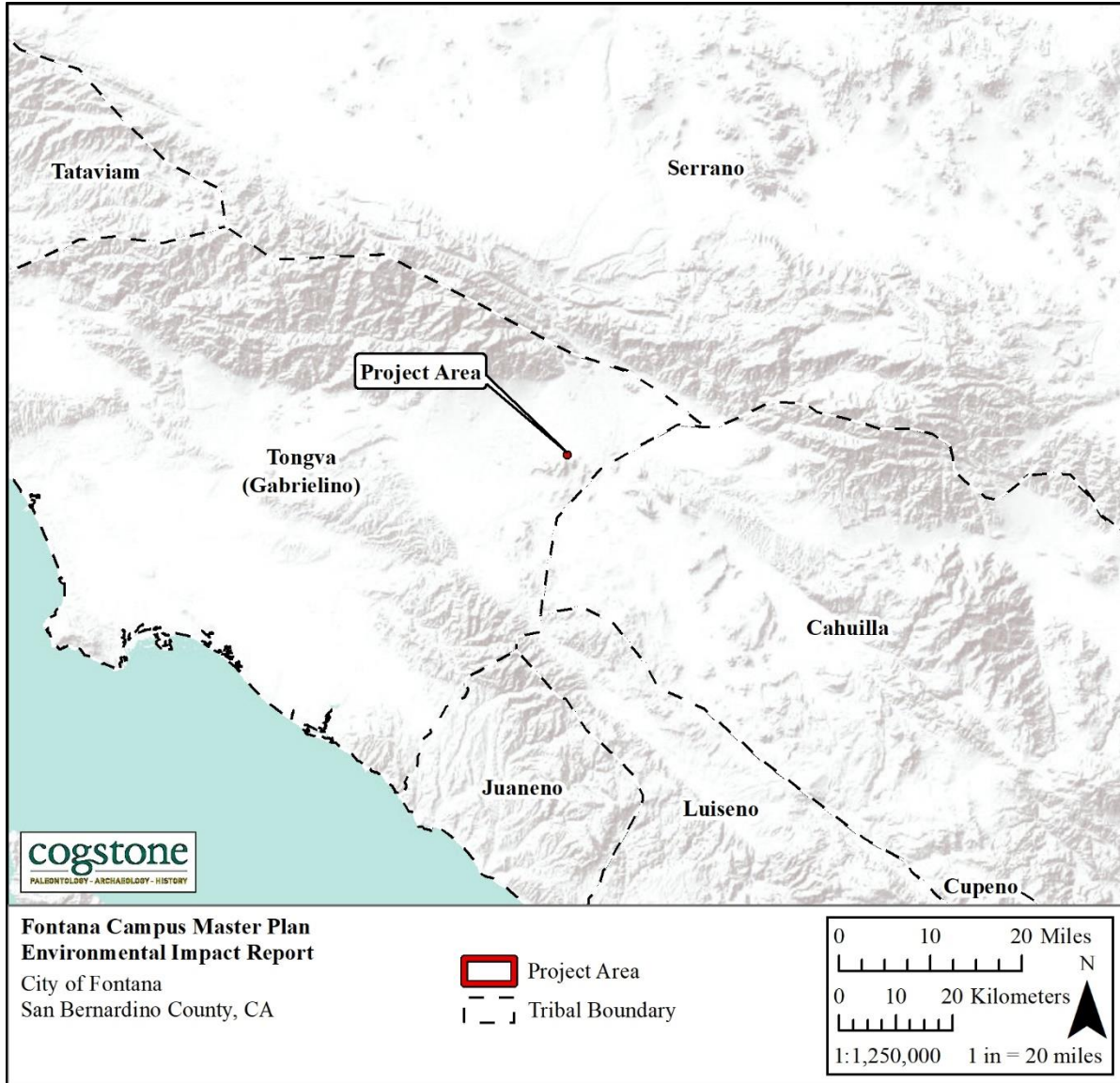


Figure 3. Tribal boundary map

HISTORIC SETTING

Juan Cabrillo was the first European to sail along the coast of California in 1542 and was followed in 1602 by Sebastian Vizcaino (Bean and Rawls 1993). During the Spanish colonial period between 1769 and 1822, the Spanish established missions, presidios and pueblos (McCawley 1996).

In 1821, Mexico won its independence from Spain and worked to lessen the wealth and power held by the missions. The Secularization Act was passed in 1833, giving the vast mission lands to the Mexican governor and downgrading the missions' status to that of parish churches. The governor then redistributed the former mission lands in the form of grants, to private owners.

Ranchos in California numbered over 500 by 1846, all but approximately 30 of which resulted from land grants (Bean and Rawls 1993).

CITY OF FONTANA HISTORY

In 1875, the Southern Pacific Railroad arrived in the San Bernardino Valley, however, active development would not occur in what was to become the City of Fontana until the early 1900s. In 1901, the Fontana Development Company purchased the land and between 1905 and 1909 approximately 25 families lived in the area. By this time, the town site was organized and the local populous engaged in various forms of agriculture including, but not limited to grains, citrus, grapes, cattle, poultry, and pigs (Anicic Jr. 2005).

On June 7, 1913, the town site of Fontana was officially founded and celebrated with a land sale and a barbeque. The development of farmland grew exponentially leading to the organization of the Fontana Farms Company in 1918. The population increased as well with 399 families residing in Fontana by 1927 (Anicic Jr. 2005). Fontana began to shift towards more industrial pursuits with the opening of the Kaiser Steel plant in 1942. The plant served as a major source of employment for Fontana until its closure in 1984 (City of Fontana ca. 2021).

On June 25, 1952, the City of Fontana incorporated and consisted of a population of 213,000. Following the closure of the Kaiser Steel plant, from 1995-1997, the Auto Club Speedway was constructed on the site of the old mill. Since its completion in 1997, the speedway has been consistently used by the National Association for Stock Car Auto Racing (NASCAR) to host races. As of ca. 2021, the City of Fontana maintains a population of 213,000 (City of Fontana ca. 2021).

PROJECT AREA HISTORY

The earliest available USGS topographic quadrangle map (San Bernardino 1:62,500) dates to 1896 and shows no development within the Project Area. The 1953 USGS topographic quadrangle map (Fontana 1:24,000) shows one structure present in the northeastern portion of the Project Area and the United States Department of Agriculture (USDA) historic aerial photo from that year (FrameFinder 1953) shows four large slabs in the southern portion of the Project Area. The 1959 USDA historical aerial photograph shows numerous structures to the south and southeast of the Project Area (NETROnline 1959). Two more buildings are present in the eastern portion of the Project Area in the 1966 USDA historic aerial photograph (NETROnline 1966). USDA aerial photographs from 1967 and 1980 (NETROnline 1967 and 1980) depict several more small structures to the west and northwest of the Project Area. The 1994 USDA aerial photograph (NETROnline 1994) shows additional development along the western boundary of the site. Development within the Project Area is similar throughout the 2000s, with little change in the built environment (NETROnline 2002, 2005, 2009, 2010). The current residential and commercial development is in place surrounding the Project Area in the 2018

USDA aerial photograph (NETROnline 2018).

The Project Area consists of five parcels:

11016 Sierra Avenue (APN: 0255-101-05-0000)

Earliest known owner(s)	Acquisition Date	Inactive Date
Mizysak, Henry C.	Unknown	9/25/1990
Mizysak, Dorothy L.	Unknown	9/25/1990

Henry Mizyak was a detective sergeant of the local sheriff’s department. He and his wife, Dorothy, lived at 11016 Sierra Avenue since at least 1955 (*The San Bernardino County Sun* 1955).

11040 Sierra Avenue (APN: 0255-101-06-0000)

Earliest known owner(s)	Acquisition Date	Inactive Date
Gene S. Mulkey	Unknown	2/27/1978
Arline J. Mulkey	Unknown	2/27/1978

No further information regarding Gene S. Mulkey or Arline J. Mulkey could be found at present.

11056 Sierra Avenue (APN: 0255-101-07-0000)

Earliest known owner(s)	Acquisition Date	Inactive Date
Greco, Robert N.	Unknown	04/03/1977
Greco, Nola T.	Unknown	04/03/1977

No further information regarding Robert N. Greco or Nola T. Greco could be found at present.

APN: 0255-101-08-0000

Earliest known owner(s)	Acquisition Date	Inactive Date
Kobal, Marjorie M.	Unknown	05/14/2000
Kobal, Arthur L.	Unknown	05/14/2000

Dr. Arthur L. Kobal served as the elected president of the Inter Community Hospital in Covina, CA. Dr. Kobal also served from 1959-1960 as committee chairman for surgery (*Progress-Bulletin* 1959).

11110 Sierra Avenue (APN: 0255-101-09-0000)

Earliest known owner	Acquisition Date	Inactive Date
Wurgaft, Robert B.	Unknown	03/09/1980

Robert B. Wurgaft may be the same individual who was president of the Orange County Food Co. Inc; however, the association is not clear at this time (*The Tustin News* 1952).

RECORD SEARCHES

PALEONTOLOGICAL RECORD SEARCH

A museum records search was performed by the Western Science Center (McDonald 2021; Appendix B). Additional searches were conducted in online databases of the University of California Museum of Paleontology (UCMP 2021), the PaleoBiology database (PBDB 2021), and in published literature (Jefferson 1991a, 1991b). The results of the record search showed that no fossils were recovered from the proposed Project Area, or within a one-mile radius. However, late Pleistocene sediments have produced fossils nearby. A mammoth (†*Mammuthus* sp.) was reported from the city of Riverside (UCMP 2021). Cogstone recovered a horse (†*Equus occidentalis*) from desert loess-like deposits on Pachappa Hill (Scott et al. 2014). A saber-toothed cat (†*Smilodon* sp.) was recovered from the south end of Fontana (Scott 2008). Finally, a mastodon (†*Mammut* sp.), bison (†*Bison* sp.), and camel (†*Camelops* sp.) were recovered from western Fontana (Scott 2008; Table 2).

Table 2. Fossils from Pleistocene sediments near the vicinity of the project

Common Name	Taxon	Depth below original surface	Age/ dates	Locality	Location	Reference
mammoth	† <i>Mammuthus</i> sp.	unknown	Pleistocene	UCMP V65248	Riverside	UCMP 2021
horse	† <i>Equus occidentalis</i>	11 feet	Pleistocene	Riverside Museum	Pachappa Hill, along westbound SR91, just east of the Central Ave. offramp, Riverside	Scott et al. 2014
saber-toothed cat	† <i>Smilodon</i> sp.	~5 feet	Pleistocene	SBCM 5.1.11	Near the intersection of Citrus Ave. or Jurupa Ave., southern Fontana	Scott 2008
mastodon	† <i>Mammut</i> sp.	>5 feet	Pleistocene	SBCM 5.1.14-5.1.21	Near the intersection of Valley Blvd. or Commerce Dr., Fontana	Scott 2008
bison	† <i>Bison</i> sp.					
camel	† <i>Camelops</i> sp.					

Notes and Abbreviations:

† = the taxon is extinct, although there may be living relatives in same genus or family

sp. = genus certain but species uncertain

CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

Cogstone archaeologist Logan Freeberg requested a search of the California Historical Resources Information System (CHRIS) from the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton on August 9, 2021 which included the entire proposed Project Area as well as a half-mile radius. Results of the record search indicate that no previous studies have been completed within the Project Area while 17 studies have been completed previously within a half-mile radius of the Project Area (Table 3).

Table 3. Previous cultural resource studies within a half-mile radius of the Project Area

Report No. (SB-)	Author(s)	Title	Year	Distance (miles) from Project Area
00548	Hearn, Joseph E.	Archaeological - Historical Resources Assessment of Proposed Jurupa Hills Fontana Park Site	1977	0.25 - 0.5
01087	Schroth, Adella	Archaeological Assessment of the Southridge Village Project, City of Fontana, San Bernardino County	1981	0 - 0.25
01088	Drummy-Chapel, Vada	Historical Assessment of Southridge Village	1981	0 - 0.25
01089	Drummy-Chapel, Vada	Addendum to Historical Assessment of the Southridge Village Project, City of Fontana, California	1981	0 - 0.25
01443	Del Chario, Kathleen C., and Marie G. Cottrell	Archaeological Resources Assessment Conducted for the Southern Pacific Business Park, City of Fontana, San Bernardino County, California	1984	0 - 0.25
01510	De Munck, Victor	Environmental Impact Evaluation: An Archaeological Assessment of Approximately 130 Acres of Land Located in the City of Fontana, San Bernardino County, California	1985	0 - 0.25
03767	Mckenna, Jeanette A.	A Phase I Cultural Resources Inventory of the Fontana Unified School District Jurupa Hills Middle School Site in the City of Fontana, San Bernardino County, Ca.	2002	0.25 - 0.5
04247	White, Laurie S.	Cultural Resources Assessment for Sprint PCS Assets Facility Sb54xc415a (Communications Facility), City of Fontana, San Bernardino County, CA	2002	0 - 0.25
04862	Aislin-Kay, Marnie	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate Sb-506-04 (Martin Tudor Park), 11660 Sierra Avenue, Fontana, San Bernardino County, California	2004	0.25 - 0.5
05402	Aislin-Kay, Marnie	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate Sb-317-01 (Richard Street), Outer Hwy 18 and Richard Street, Lucerne Valley, San Bernardino County, California	2004	0.25 - 0.5
05973	Encarnacion, Deirdre, Harry M. Quinn, Daniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historic Properties: Fontana-3 Pipeline Laterals Recycled Water Pipeline Project, City of Fontana, San Bernardino County, California	2008	0 - 0.25
06129	Unknown	Title not provided by SCCIC	Unknown	0.25 - 0.5
06787	Tang, Bai "Tom," Deirdre Encarnacion, and Daniel Ballester	Historical/Archaeological Resources Survey Report: Chino Groundwater Basin Dry-Year Yield Program Expansion, Los Angeles, Riverside and San Bernardino Counties, California	2008	0 - 0.25

Report No. (SB-)	Author(s)	Title	Year	Distance (miles) from Project Area
07123	Panich, Lee, and John Holson	Supplemental Archaeological Survey Report, 66kv Transmission Lines Access Roads, Tehachapi Renewable Transmission Project Segments 7 and 8, Los Angeles and San Bernardino Counties, California	2010	0 – 0.25
07128	Williams, Sarah A., and Wayne H. Bonner	Cultural Resources Records Search Results for Towerco Candidate CA2991 (Communications Facility), 11464 Sierra Avenue, Fontana, San Bernardino County, California	2012	0.25 – 0.5
07129	Supernowicz, Dana E.	Cultural Resources Study of the Jurupa Hills Project, AT&T Mobility Site No. Es0341, 11464 Sierra Avenue, Fontana, San Bernardino County, California 92335	2011	0.25 – 0.5
07514	Supernowicz, Dana E.	(Revised) Cultural Resources Study of the Jurupa Hills Project, AT&T Mobility Site No. Es0341, 11464 Sierra Avenue, Fontana, San Bernardino County, California	2013	0.25 – 0.5
00548	Hearn, Joseph E.	Archaeological – Historical Resources Assessment of Proposed Jurupa Hills Fontana Park Site	1977	0.25 – 0.5
01087	Schroth, Adella	Archaeological Assessment of the Southridge Village Project, City of Fontana, San Bernardino County	1981	0 – 0.25

No cultural resources have been recorded within Project Area (Table 4). Outside of the Project Area a total of six cultural resources have been previously documented within the half-mile search radius (Table 4). These consist of one historic built environment resource, one prehistoric archaeological site, and four prehistoric archaeological isolates, all of which are located one quarter to one half mile from the Project Area (Table 4).

Table 4. Previously recorded cultural resources within a half-mile radius of the Project Area

Primary No. (P-36-)	Trinomial No. (CA-SBR-)	Resource Type	Resource Description	Year Recorded	Distance (miles) from Project Area	NRHP/CRHR Status
005443	005443	Prehistoric Archaeological Site	Campsite with numerous quartz and metavolcanic flakes, scraper planes, manos, and flake scrapers	1984	0.25 – 0.5	unevaluated

Primary No. (P-36-)	Trinomial No. (CA-SBR-)	Resource Type	Resource Description	Year Recorded	Distance (miles) from Project Area	NRHP/CRHR Status
026051		Historic Built Environment	Segment of the Chino-Hayfield 220kV transmission line	2012, 2013, 2014, 2018, 2019	0.25 – 0.5	recommended not eligible
060228		Prehistoric Archaeological Isolate	One schist metate fragment and two flakes from meta-sedimentary lithic material	1981	0.25 – 0.5	not eligible
060229		Prehistoric Archaeological Isolate	Two flakes, one meta-volcanic and one crystalline quartz	1981	0.25 – 0.5	not eligible
060230		Prehistoric Archaeological Isolate	Clear crystalline quartz flake-unifacially retouched along two edges	1981	0.25 – 0.5	not eligible
060231		Prehistoric Archaeological Isolate	Unifacial schist mano fragment	1981	0.25 – 0.5	not eligible

OTHER SOURCES

In addition to the SCCIC records search, a variety of sources were consulted in October 2021 to obtain information regarding the cultural context of the Project vicinity (Table 5). Sources included the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Specific information about the Project Area, obtained from historic-era maps and aerial photographs, is presented in the Project Area History section.

Table 5. Additional sources consulted

Source	Results
National Register of Historic Places (NRHP)	Negative
Historic USGS Topographic Maps	See Project area history section
Historic US Department of Agriculture Aerial Photographs	See Project area history section
California Register of Historical Resources (CRHR)	Negative
Built Environment Resource Directory (BERD)	Negative
California Historical Landmarks (CHL)	Negative
California Points of Historical Interest (CPHI)	Negative

Source	Results
Caltrans Historic Bridge Inventory (2016)	Negative
Bureau of Land Management (BLM) General Land Office Records	Negative
Local Registers (Historical Societies/Archives)	Cogstone contacted the Fontana Historical Society/Research Library via United States Postal Service mail on October 1, 2021 requesting information about the Project Area. Follow up contacts were made October 25, 2021 and November 22, 2021. No response was received. The request letter is found in Appendix C.

NATIVE AMERICAN CONSULTATION

Cogstone archaeologist Logan Freeberg submitted a Sacred Lands File (SLF) search request to the Native American Heritage Commission (NAHC) on August 9, 2021. The NAHC responded on September 2, 2021 and indicated that there are no sacred lands or resources known within the same USGS Quadrangle, Township, Range, and Section as the Project Area (Appendix D). The NAHC also provided a list of Native American individuals/organizations that may have knowledge of cultural resources and/or sacred lands within or near the Project. The Chaffey Community College District will be responsible for conducting Native American consultation, if warranted, in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18.

SURVEY

METHODS

The survey stage is important in a Project's environmental assessment phase to verify the exact location of each identified cultural resource, the condition or integrity of the resource, and the proximity of the resource to areas of cultural resources sensitivity. All undeveloped ground surface areas within the ground disturbance portion of the Project Area were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. Photographs of the Project Area, including ground surface visibility and items of interest, were taken with a digital camera.

RESULTS

Cogstone archaeologist Sandy Duarte and architectural historian Shannon Lopez surveyed the Project Area on October 5, 2021 using one- to three-meter transects. Ground visibility within the Project Area was approximately 85 percent. The vegetation consisted of eucalyptus trees, Russian thistle, various low weeds, and pine trees. The intensive pedestrian survey revealed that the Project Area has been heavily disturbed for agricultural purposes. Sediments in the Project Area consist of dark brown sandy silt alluvium, consistent with geologic mapping by Morton and Miller (2006). One historic archaeological resource, 20211005.SD.001, was identified (Figures 5 and 6).

20211005.SD.001 consists of a 150-foot by 25-foot by 5-inch thick concrete slab foundation that contained five troughs, each 6 feet long by 2 feet wide by 9 inches deep. The USDA 1953 and 1966 historical aerial photograph shows a second slab aligned parallel to the east with an approximately 35 feet gap in between, and another pair of similar slabs 20 feet directly to the south (FrameFinder 1953; NETROnline 1967; Figures 7 and 8).

All four slabs appear to have flat-roofed or domed superstructures on top of them in a 1959 USDA historic aerial photograph (NETROnline 1959). A story in *The San Bernardino County Sun* from that same year indicates that the property was associated with the rearing of livestock such as poultry (*The San Bernardino County Sun* 1959). The size of the troughs is also consistent with raising larger animals such as pigs, goats or sheep.

An approximately 75-foot diameter mound of mixed concrete and wood refuse is currently located east of 20211005.SD.001. This pile is not visible in a USGS aerial photograph accessed using Google Earth (Google Earth, November 30, 2003) and is therefore not historic in age (see Figures 6 and 7).

A pile of concrete and an area containing a pile of partially decayed wood surrounded by mixed building materials were also identified, but neither contained temporal diagnostic artifacts and are not apparent in any historic aerial photographs. Similarly, a number of partially decayed wood fences sections are present throughout the Project area but do not appear in any historic aerial photographs. These materials were not recorded as resources (Figures 9 and 10).

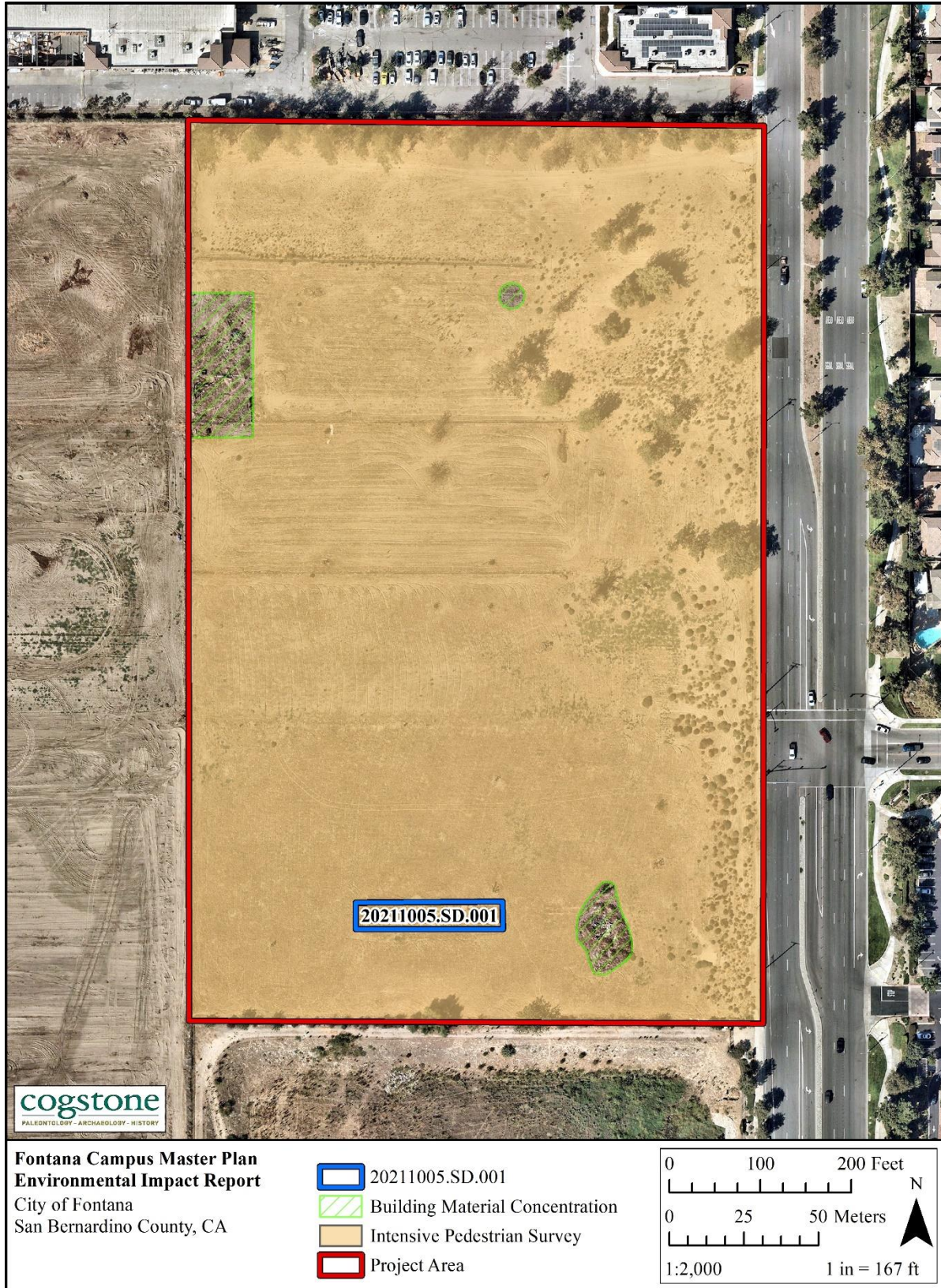


Figure 5. Survey results map



Figure 6. Overview of 20211005.SD.001, view south



Figure 7. 1953 USDA aerial photograph of concrete slab foundations, Extant slab 20211005.SD.001 marked with red box (FrameFinder 1953)



Figure 8. Concrete trough from 20211005.SD.001, view west



Figure 9. Modern fenceline with modern refuse pile at left, view northeast



Figure 10. Concrete pile with modern fence remnants in background, view south

NRHP/CRHR EVALUATION

20211005.SD.001 FOUNDATION SLAB

Historic Context: Agriculture ca. 1959 to 1971

Criteria A/1. Is this resource associated with events that have made a significant contribution to the broad patterns of our history?

Despite extensive research of the property, including but not limited to historic newspaper articles, census records, birth, marriage and death certificates, it does not appear that this foundation is associated with events that have made a significant contribution to the broad patterns of our history. Therefore, this foundation pad is not recommended eligible for listing in the National Register of Historic Places (NRHP) under Criterion 1 or the California Register of Historical Resources (CRHR) under Criterion A.

Criteria B/2. Is this resource associated with the lives of significant persons in our past?

Following extensive research of the property, including but not limited to historic newspaper articles, census records, birth, marriage and death certificates, this foundation pad was constructed while under the ownership of Robert B. Wurgaft. Little information regarding this individual could be located. Due to a lack of information, this foundation pad is recommended not eligible for listing in the NRHP under Criterion B or the CRHR under Criterion 2.

Criteria C/3. Does this resource embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction?

This foundation does not embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values. Therefore, this foundation is recommended not eligible for listing in the NRHP under Criterion C or the CRHR under Criterion 3.

Criteria D/4. Has this building yielded or is it likely to yield, information important to history or prehistory?

No historic-age artifacts were found in association with the foundation nor were there any depressions that may be indicative of a dugout home or trash pit. 20211005.SD.001 was sitting on the ground and there were no other indications that the resource continued below the surface

Therefore, this resource has not nor is it likely to yield, information important to history or prehistory. Therefore, this foundation is recommended not eligible for listing in the NRHP under Criterion D or the CRHR under Criterion 4.

Integrity. The foundation retains its integrity of Location. All that remains of this resource are the concrete foundations and five matching concrete troughs. Therefore, this resource no longer retains its integrity of Design, Materials, Feeling, Workmanship, or Association. The demolition of the historic aged resources on the property ca. 1980 and the development of the residential and commercial area to the east and south has substantially reduced its integrity of Setting.

STUDY FINDINGS AND CONCLUSIONS

PALEONTOLOGICAL SENSITIVITY

A multilevel ranking system was developed by professional resource managers within the

Bureau of Land Management (BLM) as a practical tool to assess the sensitivity of sediments for fossils. The Potential Fossil Yield Classification (PFYC) system (BLM 2016; Appendix E) has a multi-level scale based on demonstrated yield of fossils. The PFYC system provides additional guidance regarding assessment and management for different fossil yield rankings.

Fossil resources occur in geologic units (e.g., formations or members). The probability for finding significant fossils in a project area can be broadly predicted from previous records of fossils recovered from the geologic units present in and/or adjacent to the study area. The geological setting and the number of known fossil localities help determine the paleontological sensitivity according to PFYC criteria.

Sediments that are close to their basement rock source are typically coarse; those farther from the basement rock source are finer. The chance of fossils being preserved greatly increases once the average size of the sediment particles is reduced to 5 millimeters in diameter or less. Moreover, fossil preservation also greatly increases after natural burial in rivers, lakes, or oceans. Remains left on the ground surface become weathered by the sun or consumed by scavengers and bacterial activity, usually within 20 years or less. So the sands, silts, and clays of rivers, lakes, and oceans are the most likely sediments to contain fossils.

Using the PFYC system, geologic units are classified according to the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts within the known extent of the geological unit. Although significant localities may occasionally occur in a geologic unit, a few widely scattered important fossils or localities do not necessarily indicate a higher PFYC value; instead, the relative abundance of localities is intended to be the major determinant for the value assignment.

Based on other recorded localities, Pleistocene fossils typically begin appearing about 8 to 10 feet deep in California valleys. Shallower sediments in the valleys usually do not contain the remains of extinct animals, although Holocene (less than 11,700 years old) remains may be present. Late Pleistocene to Holocene young alluvial fan deposits less than eight feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. More than eight feet below the modern surface these sediments are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. Artificial fill has very low potential for scientifically significant paleontological resources (PFYC 1).

CULTURAL SENSITIVITY

Based on the history of ground disturbance, results of the pedestrian survey and the cultural records search, and the negative sacred lands file search, the Project Area has low sensitivity for

prehistoric cultural resources. Based on review of the historic USDA aerial photographs the three foundation slabs that have been previous removed appear identical in construction to 20211005.SD.001 are were also likely surficial. Analysis of these data indicate that the Project Area has low to low-moderate sensitivity for buried historical archaeological features such as additional foundations or trash pits.

RECOMMENDATIONS

PALEONTOLOGICAL RESOURCES

The Project is mapped entirely as late Pleistocene to Holocene young alluvial fan deposits. The record search revealed no fossil localities from within the Project or immediate vicinity, however localities are known from the same sediments as found within the study area near to the Project.

Late Pleistocene to Holocene young alluvial fan deposits less than eight feet below the modern surface are assigned a low potential for fossils (PFYC 2) due to the lack of fossils in these deposits. More than eight feet below the modern surface these sediments are assigned a moderate potential for fossils (PFYC 3) due to similar deposits producing fossils at that depth near to the study area. Additionally, various amounts of artificial fill may be present. Artificial fill has very low potential for scientifically significant paleontological resources (PFYC 1).

Excavation for the Project is only expected to reach six feet below the original surface, therefore the potential for adverse impacts to scientifically significant paleontological resources is low. Because there is a low potential for impacts to scientifically significant paleontological resources, no mitigation measures are currently recommended. No mitigation is required for any excavation into the young alluvial fan deposits and artificial fill. No further paleontological resources work is recommended for the proposed Project.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified paleontologist evaluates it.

CULTURAL RESOURCES

The CHRIS record search conducted in support of the Project indicates that no cultural resources have been previously recorded within the Project Area and the SLF search was negative for tribal cultural resources within the Project Area and vicinity. The historic archaeological resource 20211005.SD.001 was fully documented using DPR 523 series forms (Appendix F). The

resource is not significant and all important data has been collected. No further cultural resources work is necessary and the Project should proceed as planned.

In the event of an unanticipated discovery, all work must be suspended within 50 feet of the find until a qualified archaeologist evaluates it. In the unlikely event that human remains are encountered during project development, all work must cease near the find immediately.

In accordance with California Health and Safety Code Section 7050.5, the County Coroner must be notified if potentially human bone is discovered. The Coroner will then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours, in accordance with Public Resources Code Section 5097.98. The NAHC will then designate a Most Likely Descendant (MLD) with respect to the human remains. The MLD then has the opportunity to recommend to the property owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and associated grave goods. Work may not resume in the vicinity of the find until all requirements of the health and safety code have been met.

REFERENCES CITED

- Anicic Jr., John Charles
2005 *Images of America: Fontana*. Arcadia Publishing, Charleston.
- Bean, L.
1978 Cahuilla. In *The Handbook of North American Indians, Vol 8: California*. R. Heizer, (ed.). pp. 575-587. Smithsonian Institution, Washington D.C.
- Bean, W., and J. J. Rawls
1993 *California: An Interpretive History*. 4th Edition. McGraw Hill, New York.
- Bean, L. J., and K. S. Saubel
1972 *Temalpkh, Cahuilla Indian Knowledge and Usage of Plants*. Malki Museum Press, Banning, California.
- Bean, L., and C. Smith
1978 Gabrielino. In *Handbook of North American Indians, Volume 8: California*, R. Heizer, (ed.), pp. 538-549. The Smithsonian Institution, Washington, D.C.
- BLM GLO (Bureau of Land Management Government Land Office)
2021 Land Grant Records Search Tool. Online at <http://www.glorerecords.blm.gov/PatentSearch/Default.asp>, last accessed October 2021.
- BLM (Bureau of Land Management)
2016 Potential Fossil Yield Classification (PFYC) System. <https://www.blm.gov/policy/im-2016-124>.
- City of Fontana
n.d. "About the City of Fontana." Available at <https://www.fontana.org/31/About-Us>, accessed October 25, 2021.
- FrameFinder
1953 "Flight AXM_1953B, Frame 6K-57". January 1, 1953. Available at: https://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed: October 25, 2021.
- Google Earth
2003 Aerial photograph of Fontana, California, dated November 30, 2003.
- Jefferson, G. T.
1991a A Catalogue of late Quaternary Vertebrates from California: Part one, nonmarine lower vertebrate and avian taxa. Natural History Museum of Los Angeles, Technical Report #5.
1991b A Catalogue of late Quaternary Vertebrates from California: Part two, Mammals. Natural History Museum of Los Angeles, Technical Report #7.

Kroeber, A. L.

1976 *Handbook of the Indians of California*. Reprint of 1925 book. Dover Publications, Inc., New York.

McCawley, William

1996 *First Angelinos: the Gabrielino Indians of Los Angeles*. Malki Museum Press/Ballena Press, Banning, California.

McDonald, A.

2021 Paleontological Results from the Western Science Center. See Appendix B.

Morton, D. M., and F. K. Miller

2006 Geology map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California; Geology and description of map units, version 1.0. Digital preparation by Cossette, P. M. and K. R. Bovard. USGS Open File Report 2006-1217, scale 1:100,000. Online at https://ngmdb.usgs.gov/Prodesc/proddesc_78686.htm

NETROnline

1959 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

1966 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

1967 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

1980 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

1994 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

2002 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

2005 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

2009 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

2010 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

2018 Historic Aerials. <http://www.historicaerials.com>, accessed October 2021.

PBDB – PaleoBiology Database

2021 Online records search of the Paleobiology Database. Available at http://ip.nhm.org/ipdatabase/lot_show.

Progress-Bulletin

1959 “Magan Heads Hospital Staff.” *Progress-Bulletin* (Pomona, California). Published September 30, 1959. Available at <https://www.newspapers.com/image/624119081/>, accessed October 26, 2021.

San Bernardino County Sun

1959 “Poultry, Eggs & Rabbits & Equipment.” *The San Bernardino County Sun* (San Bernardino, California). September 15, 1959. Page 28. Available at <https://www.newspapers.com/image/53953823>, accessed October 25, 2021.

Scott, E. (San Bernardino County Museum Department of Geological Sciences)

2008 Paleontological literature or records review, Interstate 10 high occupancy vehicle lane project, Haven Ave to Ford St, San Bernardino County, California. On file with Cogstone, Orange, California.

Scott, E., and K. Springer

2003 CEQA and fossil preservation in southern California. *The Environmental Monitor*, Winter: 4-10, 17.

Scott, E., K. Springer, and J. C. Sagebiel

2004 Vertebrate paleontology in the Mojave Desert: The continuing importance of “Follow-Through” in preserving paleontological resources *in* M. W. Allen and Reed, J. editors *The Human Journey and ancient life in California’s deserts*, proceedings from the 2001 Millennium Conference, 65-70.

Scott, K., S. Gust, and C. Richards

2014 Paleontological Mitigation Report for the State Route 91 High Occupancy Vehicle Lane Addition Between Adams Street and the 60/91/215 Interchange in the City of Riverside, Riverside County, California. On file with Cogstone, Orange County, California.

Strong, W. D.

1929 Aboriginal Society in Southern California. *University of California Publications in American Archaeology and Ethnology* 26. Berkeley, California.

Sutton, M.

2010 The Del Rey Tradition and its Place in the Prehistory of Southern California. *Pacific Coast Archaeological Society Quarterly* 44(2):1-54.

Sutton, M., and J. Gardner

2010 Reconceptualizing the Encinitas Tradition of Southern California. *Pacific Coast Archaeological Society Quarterly* 42(4):1-64.

Tustin News

1952 “Lemon Packing Plant Sold to Food Processor.” *The Tustin News* (Tustin, California). Published: January 11, 1952. Page 1. Available at <https://www.newspapers.com/image/105404947>, accessed October 26, 2021.

UCMP

2021 Online records search of the University of California Museum of Paleontology database.

U.S. Geological Survey

1896 San Bernardino. Topographic Quadrangle Map. 1:62500. Reston, Virginia.

1953 Fontana. Topographic Quadrangle Map. 1:24000. Reston, Virginia.

Wagner, D. L.

2002 California Geomorphic Provinces. *California Geologic Survey Note 36*. Online at:
<https://www.conservation.ca.gov/cgs/Documents/Publications/CGS-Notes/CGS-Note-36.pdf>

Wallace, W. J.

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

Warren, C. N.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. *Eastern New Mexico University Contributions in Archaeology* 1(3):1–15.

APPENDIX A. QUALIFICATIONS

EDUCATION

2019 M.A., Archaeological Studies, Yale University, New Haven, Connecticut

2016 B.A. (dual), History & Anthropology, San Jose State University

SUMMARY QUALIFICATIONS

Ms. Somani is a Registered Professional Archaeologist (RPA) and cross-trained paleontologist with three years of experience in archaeological and paleontological monitoring, surveying, and excavation. Additionally, Ms. Somani is skilled at excavating, handling, and analyzing material culture as well as skeletal remains. She is proficient in laboratory techniques such as non-metric and metric analysis of identifying age at death and sex, as well as biomechanics, and pathological analysis of skeletal remains, and analytical techniques. From 2015 to 2016, she served as an intern at the Rosicrucian Egyptian Museum where she lead daily tours, researched and took care of artifacts displayed, and catalogued artifacts in storage as well as those in display. Ms. Somani also recently organized a colloquium at Yale University covering the Archaeology of Sudan & Nubia.

SELECTED EXPERIENCE

Japantown Square Mixed-Use Development, City of San Jose, Santa Clara County, CA. In compliance with mitigation measures, Cogstone developed an archaeological and paleontological monitoring plan for the construction of a mixed-use development project. The 5.25-acre project consists of two sections, Area A to the northwest encompassing 2.1 acres of multi-family residential units, and Area B to the southeast encompassing 3.1 acres of multi-use commercial residential space. It will involve the construction of two separate buildings containing 518 multi-family residential units and 19,191 square feet of commercial and community space. Subsequently, Cogstone is currently conducting monitoring during all construction. To date, thousands of artifacts have been collected in preparation for cataloging. Cogstone has also assisted with public outreach on the project. Sub to Shea Properties, LLC. Monitor. 2020-ongoing

Pacific Gas and Electric (PG&E) Environmental Clearance On-Call Program, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various PG&E projects throughout California. Cogstone conducted archaeological monitoring, GIS mapping, and prepared technical reports for multiple sites. Sub to Cardno. Monitor. 2019-ongoing

Southern California Edison (SCE) Environmental Clearance On-Call Program, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various SCE projects throughout California. Cogstone conducted archaeological monitoring, GIS mapping, and prepared technical reports for nearly 70 different sites. Sub to Cardno. Report Author. 2019-ongoing

State Route 132 West Freeway/Expressway – Phase I, Caltrans District 10, City of Modesto, Stanislaus County, CA. Cogstone prepared the Paleontological Mitigation Plan (PMP) for the project and is now conducting paleontological monitoring during the construction of approximately four miles of a four-lane freeway/expressway connecting SR-132 with the City of Modesto on a new alignment south of Kansas Avenue from Dakota Avenue to east of Needham Street. Weekly and Monthly reports are prepared. Upon completion of monitoring, a Paleontological Monitoring Compliance Report will be prepared. Sub to WSP. Monitor. 2019-present

Cross-cultural comparison of two mummified sub-adults from Peru and Egypt, Yale University. Analyzed mummies using non-invasive technology such as computed tomographic scans and digital radiography, to detect soft-tissue and possible pathology, and trauma. Cross-referenced skeletal indicators of pathology with nutritional deficiencies using information regarding diet gained from stable isotope analysis. Conducted radiocarbon dating on the skeletons, as well as the textile wrappings. Studied mortuary treatment of mummies using textile, other materials such as beads and artifacts, in order to gain a deeper understanding of mortuary rituals and customs followed. Archaeologist. 2018-2019

KELLY VREELAND
Paleontologist and Report Co-Author

EDUCATION

2014 M.S., Geology, California State University, Fullerton (CSUF)
2010 B.S., Geology, CSUF

SUMMARY OF QUALIFICATIONS

Ms. Vreeland is a skilled paleontologist with over 10 years of experience in field paleontology. Her field and laboratory experience includes fieldwork and research projects throughout California and Nevada, as well as conducting fieldwork and surficial geologic mapping in Montana. Ms. Vreeland has expertise in invertebrate paleontology and paleoecology. Ms. Vreeland is a member of the Geological Society of America and the Paleontological Society.

SELECTED EXPERIENCE

Los Angeles County Museum of Art (LACMA) Building for the Permanent Collection Project, City of Los Angeles, Los Angeles County, CA. Cogstone is currently conducting cultural and paleontological resources monitoring during construction of a 347,500 gross square foot Museum Building which will replace four buildings (Ahmanson Building, Hammer Building, the Art of Americas Building, and the Bing Center) within LACMA East. The new building will be approximately 45,371 square feet smaller and the outdoor experience would be enhanced by including new outdoor landscaped plazas, public programming and educational spaces, sculpture gardens, and native and drought-tolerant plants would be integrated with the Museum Building and within Hancock Park. Upon completion of monitoring, Cogstone will prepare a Cultural and Paleontological Resources Monitoring Compliance Report. Paleontology Supervisor. 2020-*present*

State Route 60 Truck Lanes Project, RCTC, Caltrans District 8, City of Banning, Riverside County, CA. RCTC in cooperation with Caltrans proposed to construct an eastbound truck-climbing lane and westbound truck-descending lane – along with inside and outside standard shoulders in both directions. The total length of the project is 4.51 miles. A combined Paleontological Identification Report and Paleontological Evaluation Report (PIR/PER) found a high likelihood for this project to impact paleontological resources. Mitigation measures included a Paleontological Mitigation Plan (PMP) which included requiring a paleontological Worker Environmental Awareness Program (WEAP) training, signed repository agreement with the San Bernardino County Museum, monitoring by a principal paleontologist, and defined standard field and laboratory methods. Cogstone is providing paleontological monitoring. At the end of construction, Cogstone will prepare a Paleontological Monitoring Report (PMR). Caltrans is the lead agency under NEPA and CEQA. Sub to ECORP. Supervisor. 2020-*ongoing*

Purple Line Extension (Westside Subway), Sections 1 and 2, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Manages all paleontological services for Sections 1 and 2 of the subway project including budgets, WEAP training, monitoring, fossil recovery, lab work, analysis, and reporting. Sub to JV West (Stantec/Jacobs JV) (Section 1), AECOM (Section 2). Supervisor. 2020-*ongoing*

Hilltop and Euclid Mixed-Use Project, City of San Diego, San Diego County, CA. Cogstone conducted paleontological resources monitoring during excavations for the proposed construction of 20 single-family residences, 27 two-story townhome residences, 113 affordable apartment units, a parking garage, and approximately 8,300 square feet of commercial space. No paleontological resources were identified during excavation. Sub to Birdseye Planning Group, LLC. Supervisor. 2020-2021

EDUCATION

- 2016 Ph.D., Anthropology, University of California, Riverside (UCR)
- 2011 M.A., Anthropology, UCR
- 2007 M.A., Applied Geography, University of Colorado, Colorado Springs (UCCS)
- 2002 B.A., Anthropology, minor in Geography/Environmental Studies, UCCS

SUMMARY OF QUALIFICATIONS

Dr. Gust is a Registered Professional Archaeologist (RPA) with 10 years of experience in field archaeology. He meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* and his field expertise includes pedestrian surveys, excavation monitoring, resource recording, and historic artifact analysis. Dr. Gust has managed a variety of projects at Cogstone in the water, development, residential, transportation, telecommunications, and public works sectors. Dr. Gust is a member of the Society for California Archaeology, Society for American Archaeology, and the American Anthropological Association.

SELECTED EXPERIENCE

Southern California Edison (SCE) Environmental Clearance On-Call Program, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various SCE projects throughout California. Cogstone has conducted archaeological monitoring, GIS mapping, and prepared technical reports for over 80 task orders. Sub to Cardno. Principal Investigator for Archaeology. 2019-ongoing

Pacific Gas and Electric (PG&E) Master Services Agreement, Statewide, CA. Cogstone was sub-contracted to provide on-call cultural resource monitoring services for various PG&E projects throughout California. Cogstone conducted archaeological monitoring for over 18 task orders. Sub to Cardno. Principal Investigator for Archaeology. 2019-ongoing

The Groves Senior Affordable Apartments, City of San Juan Capistrano, Orange County, CA. Cogstone is currently providing archaeological, paleontological, and Native American monitoring and documentation services for ground-disturbing activities that may include clearing and grubbing, soil remediation, site excavation and grading, footing excavations, street widening, utility trenching, and any other tasks as required. Cogstone has provided an archaeologist who is cross-trained in paleontology to provide substantial cost-savings for the developer. Cogstone is also managing Native American monitoring and scheduling. Sub to C&C Development. Task Manager & Principal Investigator for Archaeology. 2020-ongoing

Japantown Square Mixed-Use Development, City of San Jose, Santa Clara County, CA. In compliance with mitigation measures, Cogstone developed an archaeological and paleontological monitoring plan for the construction of a mixed-use development project. The 5.25-acre project consists of two sections, Area A to the northwest encompassing 2.1 acres of multi-family residential units, and Area B to the southeast encompassing 3.1 acres of multi-use commercial residential space. It will involve the construction of two separate buildings containing 518 multi-family residential units and 19,191 square feet of commercial and community space. Subsequently, Cogstone is currently conducting monitoring during all construction. To date, thousands of artifacts have been collected in preparation for cataloging. Cogstone has also assisted with public outreach on the project. Sub to Shea Properties, LLC. Principal Investigator for Archaeology. 2018-present

Casas de Bryn Mawr Community Housing Project, City of Loma Linda, San Bernardino County, CA. Cogstone conducted full-time cultural resources monitoring during the construction of four detached 1,400-square-foot, single-story, single-family homes to be built for sale with a preference to low income U.S. Veterans. No mitigation measures were required by the Cultural Resources Inventory Report for the project but recommended mitigation measures from the report were followed. Through the course of monitoring, one historic refuse deposit site consisting of approximately 50 artifacts was found slightly beyond the eastern edge of the project area. The lab analysis determined the artifacts were not significant. The City of Loma Linda acted as the lead agency under CEQA. Principal Investigator for Archaeology & Report Author. 2019-2020

KIM SCOTT

Principal Investigator for Paleontology

EDUCATION

2013 M.S., Biology with paleontology emphasis, California State University San Bernardino
2000 B.S., Geology with paleontology emphasis, University of California, Los Angeles

TRAINING AND CERTIFICATIONS

2015 Trained and certified in geomorphology techniques, National Park Service, National Center for Preservation Technology and Training
2015 Certified 40-hour OSHA HAZWOPER

SUMMARY QUALIFICATIONS

Ms. Scott has over 20 of experience in California as a paleontologist and sedimentary geologist. Scott has worked extensively in the field surveying, monitoring, and salvaging fossils on hundreds of projects. In addition, she has special skills in jacketing large fossils, fossil preparation (cleaning and stabilization) and in the preparation of stratigraphic sections and other documentation for fossil localities. She frequently authors paleontological assessments, paleontological mitigation plans, and monitoring compliance reports to all agency requirements. She authors and conducts crew sensitivity training, serves as company safety officer, and has authored both the company safety and paleontology manuals. She is a Member of the Society of Vertebrate Paleontology and the Geological Society of America.

SELECTED EXPERIENCE

As-Needed Environmental Documentation and Regulatory Permit Consultant Support Services, Los Angeles Department of Public Works, Los Angeles County, CA. Since 2014, Cogstone is providing paleontological, archaeological, and architectural history services in support of various task orders to fulfill CEQA/NEPA requirements. Services have included records searches, surveys, Native American consultation, assistance with permitting, monitoring, and reporting. Task orders have included Eastern Ave Hill Complex Improvements, Gates Canyon Project, Camp 8 Waterline, Camp 8 Survey, Ladera Park Stormwater Capture, Gates Canyon Stormwater Project, Ladera Park Monitoring, Gates Canyon Monitoring, and East LA Stormwater. Sub to Aspen Environmental Group. Principal Investigator for Paleontology. 2014-*present*

Donnell Basin Flood Control Improvement Project, City of Twentynine Palms, San Bernardino County, CA. As part of an on-call contract with the San Bernardino County Flood Control District, Cogstone prepared a paleontological resources mitigation and monitoring plan (PRMMP) for proposed improvements to Donnell Basin that would reduce downstream hazards associated with flooding, sedimentation, and debris. The PRMMP recommended paleontological awareness training for project personnel which included procedures for communication and coordination, data required for documenting fossil localities, minimum laboratory and identification work, and analysis, curation, and reporting requirements. Principal Investigator for Paleontology. 2018

Long Beach Municipal Urban Stormwater Treatment (MUST) Project, Los Angeles County, CA. Cogstone prepared a cultural and paleontological resources assessment for the proposed construction of a stormwater facility. The project intended to improve the water quality of existing urban runoff to the Los Angeles River, and ultimately to the Long Beach Harbor. Services included pedestrian surveys, records searches, background research, Native American consultation, and reporting. Sub to Michael Baker. Principal Investigator for Paleontology. 2017

Laguna Beach Village Entrance Project, City of Laguna Beach, Orange County, CA. Cogstone conducted an assessment of both cultural and paleontological resource constraints for the proposed beautification of downtown Laguna Beach. Tasks included a literature search to determine the existence of previously recorded cultural resources (archaeological and built environment resources), a paleontological records search, Native American Consultation, a Phase I pedestrian survey, and technical reports with appropriate recommendations to avoid or minimize any potentially significant impacts. Sub to Michael Baker. Principal Investigator Paleontology. 2017

EDUCATION

2002 B.A., Cultural Anthropology, University of California, Santa Barbara

TRAINING AND CERTIFICATIONS

HAZWOPER Certified - Certified American Red Cross CPR; Certified American Red Cross Standard First Aid
Applied Archaeology of Southern California, USDA Forest Service, San Bernardino National Forest
Railroad Security Certified

SUMMARY OF QUALIFICATIONS

Ms. Duarte is a skilled archaeologist with 18 years of experience in monitoring, surveying, and excavation in California. Duarte has experience with Native American consultation as required by Section 106 of the National Historic Preservation Act (NHPA) and under Senate Bill 18 for the protection and management of cultural resources. Beginning in 2006, Duarte worked for the U.S. Forest Service in the Biology, Timber, and Geology Department as an archaeologist, including serving as a trained wild-land firefighter to preserve archaeological sites in forest fires. Additional skills include paleontological identification, fossil preparation, artifact identification and preparation, and final report preparation.

SELECTED EXPERIENCE

State Route 132 West Freeway/Expressway – Phase I, Caltrans District 10, City of Modesto, Stanislaus County, CA. The project involves the construction of approximately four miles of a four-lane freeway/expressway connecting SR-132 with the City of Modesto on a new alignment south of Kansas Avenue from Dakota Avenue to east of Needham Street. Cogstone is providing paleontological monitoring during excavation and grading for the Project. Weekly and Monthly reports are also prepared. Sub to WSP. Supervisor. 2019-*present*

Los Angeles County Museum of Art (LACMA) Building for the Permanent Collection Project, City of Los Angeles, Los Angeles County, CA. Cogstone is currently conducting cultural and paleontological resources monitoring during construction of a 347,500 gross square foot Museum Building which will replace four buildings (Ahmanson Building, Hammer Building, the Art of Americas Building, and the Bing Center) within LACMA East. The new building will be approximately 45,371 square feet smaller and the outdoor experience would be enhanced by including new outdoor landscaped plazas, public programming and educational spaces, sculpture gardens, and native and drought-tolerant plants would be integrated with the Museum Building and within Hancock Park. Upon completion of monitoring, Cogstone will prepare a Cultural and Paleontological Resources Monitoring Compliance Report. Supervisor. 2020-*present*

San Gabriel River Commuter Bikeway and Big Dalton Wash Commuter Bikeway, City of Baldwin Park, Los Angeles County, CA. Cogstone conducted a cultural and historic built environment resources assessment to determine the potential impacts to cultural and historical resources for the proposed construction of approximately five miles of new bikeway/pedestrian pathway. Services included pedestrian surveys, records searches, a Sacred Lands File search from the NAHC, preparation of DPR 523 forms, NRHP eligibility assessments, and reporting. The project required a Section 408 permit from the USACE due to the proximity of the federally managed San Gabriel River and tributaries. All work performed complied with Section 106 of the NHPA. The City of Baldwin Park acted as lead agency under CEQA. Sub to Infrastructure Engineering Corporation. Archaeologist. 2020-2021

Casas de Bryn Mawr Community Housing Project, City of Loma Linda, San Bernardino County, CA. Cogstone conducted full-time cultural resources monitoring during the construction of four detached 1,400-square-foot, single-story, single-family homes to be built for sale with a preference to low income U.S. Veterans. No mitigation measures were required by the Cultural Resources Inventory Report for the project but recommended mitigation measures from the report were followed. One historic refuse deposit site consisting of approximately 50 artifacts was found slightly beyond the eastern edge of the project area. The lab analysis determined the artifacts were not significant. The City of Loma Linda acted as the lead agency under CEQA. Archaeologist. 2019-2020

EDUCATION

2018 M.A., History (with an emphasis in architecture), California State University, Fullerton
2012 B.A., History, Minor in Asian-Pacific Studies, California State University, Dominguez Hills

SUMMARY OF QUALIFICATIONS

Ms. Lopez is a qualified historian and she meets the Secretary of the Interior's *Standards and Guidelines for Architectural History*. Ms. Lopez is experienced in architectural history research and surveys along with photo documentation and recording of built environment resources for local and federal projects.

SELECTED EXPERIENCE

San Gabriel River Commuter Bikeway and Big Dalton Wash Commuter Bikeway, City of Baldwin Park, Los Angeles County, CA. Cogstone conducted a cultural and historic built environment resources assessment to determine the potential impacts to cultural and historical resources for the proposed construction of approximately five miles of new bikeway/pedestrian pathway. Services included pedestrian surveys, records searches, a Sacred Lands File search from the NAHC, preparation of DPR 523 forms, NRHP eligibility assessments, and reporting. The project required a Section 408 permit from the USACE due to the proximity of the federally managed San Gabriel River and tributaries. All work performed complied with Section 106 of the NHPA. The City of Baldwin Park acted as lead agency under CEQA. Sub to Infrastructure Engineering Corporation. Architectural Historian. 2020-2021

Development of Management Plans for Historic Properties at Marine Corps Recruit Depot (MCRD) Parris Island, Beaufort County, SC. Cogstone prepared multiple management plans for historic properties located at MCRD Parris Island in order to assist in the day-to-day management of numerous and diverse cultural resources within its installation boundaries including key resources such as the Santa Elena National Historic Landmark, the Mainside Historic District, and four historic African American cemeteries and to fulfill the U.S. Marine Corp's Section 110 of the NHPA requirements. Specific deliverables included an Integrated Cultural Resources Management Plan (ICRMP) Update for 2020-2025, Character Defining Features Assessment of Historic Properties, Management and Treatment Plan for Historic Buildings and Structures, and a Determination of Eligibility for Four Historic Cemeteries. The management plans were met with praise from MCRD Parris Island and the South Carolina State Historic Preservation Office (SHPO) for their usefulness in the day-to-day management of their cultural resources. Deliverables were completed on time and within budget. All were reviewed and accepted by South Carolina SHPO. Architectural Historian. 2017-2021

New Cuyama Dump Sites 1, 2, and 3, BLM Bakersfield Office, Santa Barbara County, CA. The Project involved identifying archaeological and historical resources present within three illegal dump sites on BLM land. This study included an assessment of the historic potential of dump refuse and NRHP eligibility recommendations for debris demonstrating affirmative evidence for an age of greater than 45 years. A Class III Cultural Resources survey was conducted and included an intensive-level pedestrian survey of the APE and a total of three historic trash scatters were identified during the survey and a total of four historic isolates were identified. These resources were recorded on Department of Parks and Recreation 523 (DPR 523) forms. No archaeological sites or isolates were identified. No artifacts were collected. The deliverables were accepted by the BLM without revisions. Historian. 2020-2021

Well 28 Project, City of Orange, Orange County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources for the proposed construction of a new well and pumping station. Cogstone conducted records searches, a built environment survey, background research, and prepared a final report supporting the IS/MND. The study was completed in compliance with CEQA and the Secretary of the Interior's *Standards for Treatment of Historic Properties*. The City of Orange acted as lead agency under CEQA. Sub to EDP Solutions, Inc. Architectural Historian. 2020

EDUCATION

2018 Geographic Information Systems (GIS) Certificate, California State University, Fullerton
 2003 B.A., Anthropology, University of California, Santa Barbara

SUMMARY OF QUALIFICATIONS

Mr. Freeberg has over 18 years of experience in cultural resource management and has extensive experience in field surveying, data recovery, monitoring, and excavation of archaeological and paleontological resources associated with land development projects in the private and public sectors. He has conducted all phases of archaeological work, including fieldwork, laboratory analysis, research, and reporting. Mr. Freeberg also has a strong grounding in conventional field and laboratory methods and is skilled in the use of ArcGIS.

SELECTED EXPERIENCE

Culver Boulevard Realignment and Stormwater Treatment Project, Culver City, Los Angeles County, CA.

Cogstone prepared a Cultural and Paleontological Resources Management Plan in compliance with the mitigation measures in the Final Mitigated Negative Declaration approved by the City of Culver City, Los Angeles County, Cultural and Paleontological Resources Services for the Culver Boulevard Realignment and Stormwater Treatment Project. The plan was also developed in consultation with the Gabrieleño Band of Mission Indians – Kizh Nation. The plan summarizes the organization and responsibilities of the monitors, the responsibilities of the construction contractor and the Inadvertent Discovery Plan to be implemented should cultural or paleontological resources be encountered during the project. The City of Culver City is the project proponent and is the lead agency under CEQA. Cogstone is currently providing cultural and paleontological resources monitoring. Upon completion of monitoring, Cogstone will prepare a Cultural and Paleontological Monitoring Compliance Report. Sub to Aurora Development. Sub to Michael Baker. GIS Supervisor. 2020-present

State Route 60 Truck Lanes Project, RCTC, Caltrans District 8, City of Banning, Riverside County, CA. RCTC

in cooperation with Caltrans proposed to construct an eastbound truck-climbing lane and westbound truck-descending lane – along with inside and outside standard shoulders in both directions. The total length of the project is 4.51 miles. A combined Paleontological Identification Report and Paleontological Evaluation Report (PIR/PER) found a high likelihood for this project to impact paleontological resources. Mitigation measures included a Paleontological Mitigation Plan (PMP) which included requiring a paleontological Worker Environmental Awareness Program (WEAP) training, signed repository agreement with the San Bernardino County Museum, monitoring by a principal paleontologist, and defined standard field and laboratory methods. Cogstone is providing paleontological monitoring. At the end of construction, Cogstone will prepare a Paleontological Monitoring Report (PMR). Caltrans is the lead agency under NEPA and CEQA. Sub to ECORP. GIS Supervisor. 2020-ongoing

Del Mar Heights School Rebuild Project, City of Del Mar, San Diego County, CA. Cogstone conducted a study

to determine the eligibility of the built environment resources for listing on the California Register of Historical Resources (CRHR) for the proposed demolition of an existing building. Services included a pedestrian survey, records search, background research, and the preparation of a historical review report. GIS Supervisor. 2020

141st and Normandie Townhomes Project, City of Gardena, Los Angeles County, CA. Cogstone identified and

evaluated the potential impacts to cultural, historic built environment, and paleontological resources for the proposed construction of 50 new, three-story townhomes, which will range in size from 1,252 to 1,689 square feet. Services included pedestrian survey, built environment evaluation, records searches, Sacred Lands File search from the NAHC, background research, and reporting. The assessment report was in compliance with the requirements of the California Environmental Quality Act (CEQA) with the City of Gardena acting as the lead agency under CEQA. Sub to De Novo Planning. GIS Supervisor. 2020

EDUCATION

- 2009 M.A., Anthropology, Kent State University, Kent, Ohio
2006 B.A., Anthropology, Ohio State University, Columbus, Ohio

SUMMARY OF QUALIFICATIONS

Ms. Valasik is a Registered Professional Archaeologist (RPA) with more than 10 years of experience. She is a skilled professional who is well-versed in the compliance procedures of CEQA and Section 106 of the NHPA and regularly prepares cultural resources assessment reports for a variety of federal, state, and local agencies throughout California. Ms. Valasik has managed a variety of projects at Cogstone in the water, transportation, energy, development, and federal sectors. She meets the qualifications required by the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation*. She is accepted as a principal investigator for prehistoric archaeology by the State Office of Historic Preservation.

SELECTED EXPERIENCE

Creekside Specific Plan, City of San Juan Capistrano, Orange County, CA. Cogstone conducted a study to determine the potential impacts to cultural and paleontological resources for the proposed demolition of an existing 123,000 square-foot building and construction of 188 residential units on 15.3 acres. Services included records searches, background research, and an intensive-level pedestrian survey. Based on the results of the record search and ethnographic data, it was found likely that substantive archaeological deposits exist. The project area was considered moderately sensitive for cultural and paleontological resources and archaeological and paleontological monitoring during all ground-disturbing activities was recommended. The City of San Juan Capistrano acted as lead CEQA agency. Sub to PlaceWorks. Principal Investigator for Archaeology. 2019-2020

Rancho Calera Specific Plan Update, City of Chowchilla, Madera County, CA. Cogstone conducted a cultural and paleontological resources assessment to determine the potential impacts to cultural and paleontological resources during excavations. Proposed updates to the specific plan included adding two large retention basins, increasing the acreage dedicated to residential use, decreasing the collective acreage of parkland and open space, decreasing the square footage dedicated to commercial use, removal of the East Robertson Bridge, added landscape and water conservation requirements, and discouraging use of straight streets and encouraging construction of cul-de-sacs. Services included records searches, background research, literature review, and reporting. Sub to QK, Inc. Task Manager. 2020

Irvine General Plan Phase II, City of Irvine, Orange County, CA. Cogstone conducted a study to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the City of Irvine to support the Phase II update of the City's General Plan. Services included records searches, extensive background research, a Sacred Lands File search request from the Native American Heritage Commission (NAHC), and reporting. The City sent information and consultation to 15 tribal organizations to meet the requirements of Senate Bill 18 and Assembly Bill 52. A general analysis of impacts of future projects within the City of Irvine that may adversely affect paleontological, archaeological, or historic resources was provided along with programmatic mitigation measures. Sub to PlaceWorks. Principal Investigator for Archaeology. 208-2019

Brea 265 Specific Plan, City of Brea, Orange County, CA. The objective of this study was to review and summarize available information regarding known paleontological, archaeological, and historical resources within the boundaries of the proposed Specific Plan. This study provided environmental documentation as required by CEQA. A Paleontological Resource Impact Mitigation Program and full-time monitoring was recommended. Due to the high sensitivity for subsurface archaeological resources, a cultural resources mitigation plan and monitoring was also recommended. Sub to PlaceWorks. Project Manager & Principal Investigator for Archaeology. 2018-2019

EDUCATION

1990 M.A., Anthropology (Biological), University of California, Los Angeles
1985 B.A., Anthropology (Physical), California State University, Northridge

SUMMARY QUALIFICATIONS

Mr. Scott is a professional vertebrate paleontologist with over four decades of experience in paleontological mitigation, fieldwork, curation, and research. He is emeritus paleontology curator at the San Bernardino County Museum, an adjunct instructor at California State University, San Bernardino, and a research associate of the Natural History Museum of Los Angeles County and the La Brea Tar Pits and Museum. He is a 30+ year member of the Society of Vertebrate Paleontology, an international society of professional scientists where he currently serves on the Government Affairs Committee, and also holds membership in the Geological Society of America and other professional societies. Eric currently serves as an editor for the Journal of Vertebrate Paleontology. He has published over 40 research articles in professional scientific journals.

SELECTED PROJECTS

Purple Line Extension (Westside Subway), Section 1, Metropolitan Transit Authority (METRO), Los Angeles, CA. The project involves construction of seven stations from the existing Purple Line at Wilshire/Western Avenue along Wilshire Boulevard to the Veterans Administration Hospital in Westwood for 8.6 miles. Supervises paleontological monitoring, fossil recovery, and fossil preparation in the lab. Contributes to monthly reporting. Sub to JV West. Paleontologist. 2017-ongoing

Highway 111 Street Improvement Project, City of Indio, Riverside County, CA. In compliance with mitigation measures, Cogstone provided paleontological resources monitoring during the excavation and grading of a ~1.7 mile stretch of highway on a full-time basis for sediments five feet or more below the original ground surface. This project received Federal funding and this report has been produced in compliance with the National Environmental Policy Act (NEPA). Sub to ECORP Consulting. Project Manager & Report Author. 2018

Camino de la Cumbre Project, City of Sherman Oaks, Los Angeles County, CA. The purpose of this Paleontological Resources Assessment is to determine the potential for impacting fossil resources during excavations of the Camino de la Cumbre residential development project. Managed survey and prepared Paleontological Resources Assessment Report. Sub to Ridge, Inc. Qualified Principal Paleontologist & Author. 2018

Charcot Avenue Extension Over I-880 Project, Caltrans District 4, City of San Jose, Santa Clara County, CA. Cogstone produced a Paleontological Identification Report (PIR) to assess the potential for impacting fossil resources during the proposed construction of a two-lane extension. Cogstone consulted published literature and records for fossil localities within a one mile radius of the project. Non-auguring excavations into native sediments were expected to be fairly minimal for embankments, utilities, and signal and lighting pole foundations. Due to the limited amount of excavations more than 10 feet deep, it was considered unlikely that fossils meeting significance criteria will be encountered on this project; therefore, no mitigation was recommended. Sub to David J. Powers. Qualified Principal Paleontologist & Author. 2018

Ava Hollywood Mixed Use High-Rise Project, City of Los Angeles, Los Angeles County, CA. This project was conducted in compliance with the Mitigation Measure as defined by the Los Angeles Department of City Planning. Cogstone provided paleontological monitoring during the excavation and grading for a seven story building with two levels of underground parking on a full-time basis for sediments five feet or more below the original ground surface. Project Manager & Author. 2018

APPENDIX B. PALEONTOLOGICAL RECORD SEARCH



Cogstone Resource Management Inc.
Logan Freeberg
1518 W. Taft Ave.
Orange, CA 92865

August 25, 2021

Dear Mr. Freeberg,

This letter presents the results of a record search conducted for Cogstone Resource Management Inc. Fontana Campus Master Plan EIR Project (4910-01) in San Bernardino County, California. The project site is located in Section 30 of Township 1 South and Range 5 West.

The geologic unit underlying the project area is mapped entirely as Quaternary alluvium dating to the Pliocene-Holocene, with smaller areas of Mesozoic granitic rocks and undivided pre-Cenozoic metasedimentary and metavolcanic rocks within the one-mile radius of the project area. Quaternary alluvial units are considered to be of high paleontological sensitivity. The Western Science Center does not have localities within the project area, but does have numerous localities within similarly mapped alluvial sediments throughout the region. Pleistocene alluvial deposits in southern California are well documented and known to contain abundant fossil resources including those associated with Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), sabertooth cat (*Smilodon fatalis*), ancient horse (*Equus* sp.), and many other Pleistocene megafauna.

Any fossils recovered from the Fontana Campus Project area would be scientifically significant. Excavation activity associated with development of the area has the potential to impact the paleontologically sensitive Quaternary alluvial units and it is the recommendation of the Western Science Center that a paleontological resource mitigation plan be put in place to monitor, salvage, and curate any recovered fossils associated with the current study area.

If you have any questions, or would like further information, please feel free to contact me at amcdonald@westerncentermuseum.org

Sincerely,

A handwritten signature in dark ink, appearing to read "Andrew McDonald", is written over a light grey rectangular background.

Andrew McDonald
Curator

APPENDIX C. HISTORICAL SOCIETIES CONSULTATION



October 25, 2021 (1st attempt: October 1, 2021)

Fontana Historical Society/Research Library
16830 Spring St.
Fontana, California 92335

RE: Request for Information regarding the Cultural and Paleontological Resources Assessment for the Fontana Campus Master Plan Environmental Impact Report Project, City of Fontana, San Bernardino County, California

To Whom It May Concern:

As a sub-consultant to Placeworks, Cogstone Resource Management, Inc. (Cogstone) is conducting a cultural and paleontological resources assessment for the Fontana Campus Master Plan Environmental Impact Report (EIR) Project (Project) located on approximately 14.3 acres at the south of Santa Ana Avenue adjacent to Sierra Avenue in the City of Fontana, San Bernardino County, California.

The Project involves the construction of a new community college for the Chaffey College District. Based on a preliminary review of the Project Area, three buildings located at 11040 Sierra Avenue and one building at 11016 Sierra Avenue are historic in age (constructed ca. 1959).

We are contacting you because we would like to invite members of the Fontana Historical Society/ Research Library to provide input regarding the redevelopment of the Project Area. We appreciate any information regarding the history of the Project Area that you may have as well as any comments, issues, and/or concerns relating to the history of the Project Area. Please contact me at slopez@cogstone.com or at (714) 974-8300. Thank you for your attention to this matter.

Sincerely,

Shannon Lopez, M.A.
Architectural Historian
(714) 974-8300 x.108
slopez@cogstone.com

1518 West Taft Avenue
Orange, CA 92865
Office (714) 974-8300

Branch Offices
San Diego – Riverside – Morro Bay – Sacramento – Arizona

cogstone.com
Toll free (888) 333-3212

Federal Certifications EDWOSB , SDB
State Certifications DBE, WBE, SBE, UDBE

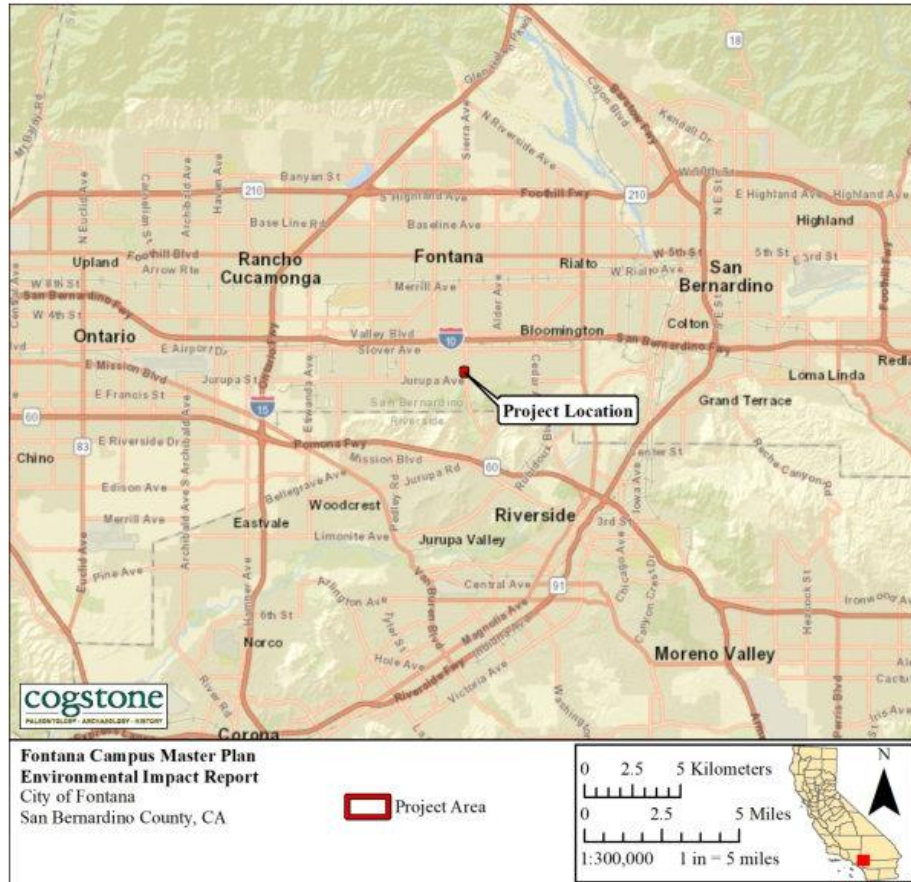


Figure 1. Project Vicinity Map

cogstone.com

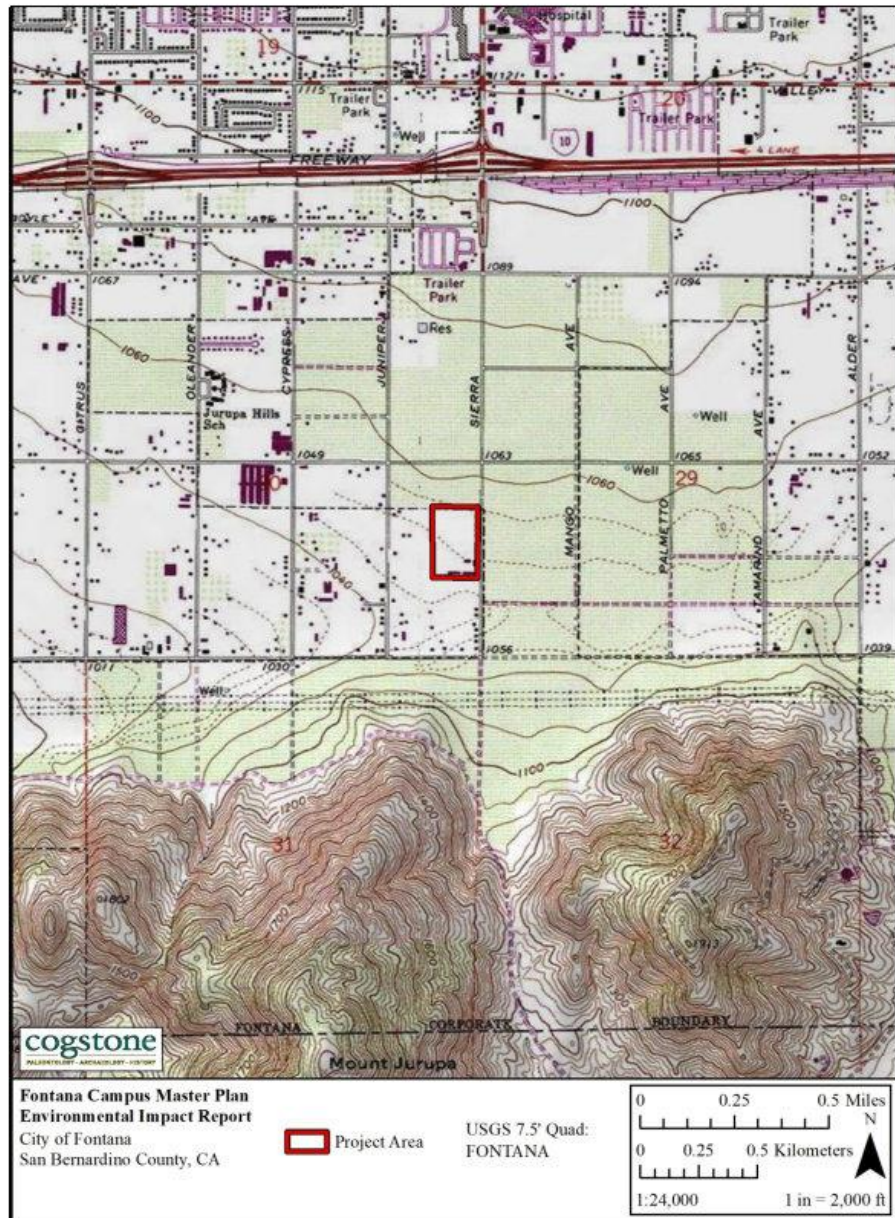


Figure 2. Project Location Map

cogstone.com



Figure 3. Project Aerial Map

cogstone.com

APPENDIX D. NATIVE AMERICAN CONSULTATION

Sacred Lands File & Native American Contacts List Request

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691
916-373-3710
916-373-5471 – Fax
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: Fontana Campus Master Plan Environmental Impact Report

County: San Bernardino

USGS Quadrangle Name: Fontana 7.5'

Township: 1S **Range:** 5W **Section(s):** 30

Company/Firm/Agency: Cogstone Resource Management

Street Address: 1518 W. Taft Ave.

City: Orange **Zip:** 92865

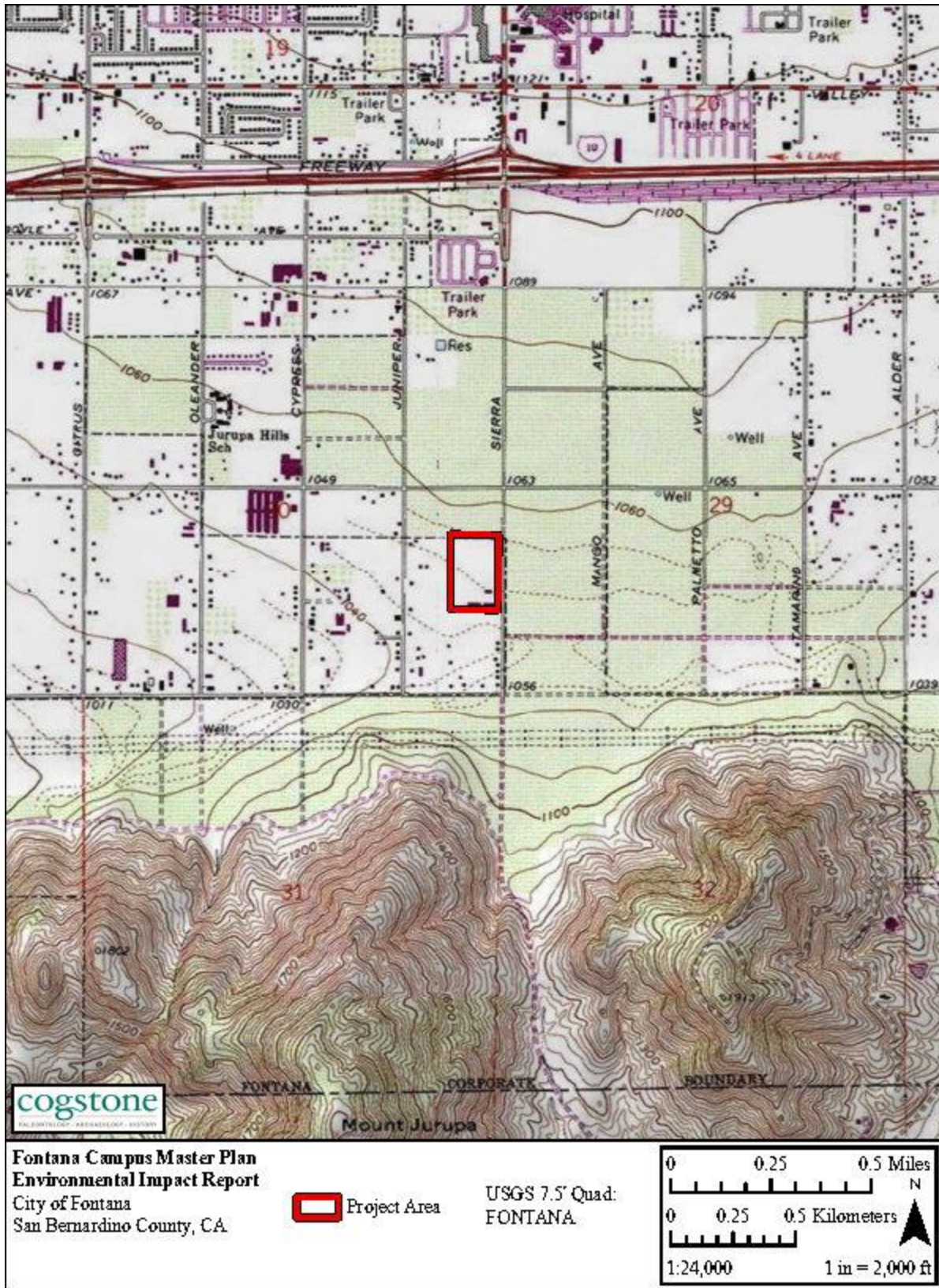
Phone: 714-974-8300

Fax: 714-974-8303

Email: cogstoneconsult@cogstone.com

Project Description:

The Project involves the construction of a new community college for the Chaffey College District.





**Native American Heritage Commission
Native American Contact List
San Bernardino County
9/2/2021**

Agua Caliente Band of Cahuilla Indians

Jeff Grubbe, Chairperson
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Gabrielino Tongva Indians of California Tribal Council

Christina Conley, Tribal Consultant and Administrator
P.O. Box 941078 Gabrielino
Simi Valley, CA, 93094
Phone: (626) 407 - 8761
christina.marsden@alumni.usc.edu

Agua Caliente Band of Cahuilla Indians

Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@agua caliente.net

Gabrielino-Tongva Tribe

Charles Alvarez,
23454 Vanowen Street Gabrielino
West Hills, CA, 91307
Phone: (310) 403 - 6048
roadkingcharles@aol.com

Gabrieleno Band of Mission Indians - Kizh Nation

Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Morongo Band of Mission Indians

Robert Martin, Chairperson
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 755 - 5110
Fax: (951) 755-5177
abrierty@morongo-nsn.gov

Gabrieleno/Tongva San Gabriel Band of Mission Indians

Anthony Morales, Chairperson
P.O. Box 693 Gabrielino
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

Morongo Band of Mission Indians

Ann Brierty, THPO
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 755 - 5259
Fax: (951) 572-6004
abrierty@morongo-nsn.gov

Gabrielino /Tongva Nation

Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., Gabrielino
#231
Los Angeles, CA, 90012
Phone: (951) 807 - 0479
sgoad@gabrielino-tongva.com

Quechan Tribe of the Fort Yuma Reservation

Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

Gabrielino Tongva Indians of California Tribal Council

Robert Dorame, Chairperson
P.O. Box 490 Gabrielino
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fontana Campus Master Plan Environmental Impact Report Project, San Bernardino County.

**Native American Heritage Commission
Native American Contact List
San Bernardino County
9/2/2021**

**Quechan Tribe of the Fort Yuma
Reservation**

Jill McCormick, Historic
Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantrib
e.com

**Soboba Band of Luiseno
Indians**

Joseph Ontiveros, Cultural
Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

**San Manuel Band of Mission
Indians**

Jessica Mauck, Director of
Cultural Resources
26569 Community Center Drive Serrano
Highland, CA, 92346
Phone: (909) 864 - 8933
Jessica.Mauck@sanmanuel-
nsn.gov

**Soboba Band of Luiseno
Indians**

Isaiah Vivanco, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 654 - 5544
Fax: (951) 654-4198
ivivanco@soboba-nsn.gov

**Santa Rosa Band of Cahuilla
Indians**

Lovina Redner, Tribal Chair
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosa-nsn.gov

**Serrano Nation of Mission
Indians**

Wayne Walker, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (253) 370 - 0167
serranonation1@gmail.com

**Serrano Nation of Mission
Indians**

Mark Cochrane, Co-Chairperson
P. O. Box 343 Serrano
Patton, CA, 92369
Phone: (909) 528 - 9032
serranonation1@gmail.com

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This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Fontana Campus Master Plan Environmental Impact Report Project, San Bernardino County.

**APPENDIX E. PALEONTOLOGICAL SENSITIVITY RANKING
CRITERIA**

PFYC Description Summary (BLM 2016)	PFYC Rank
<p>Very Low. The occurrence of significant fossils is non-existent or extremely rare. Includes igneous (excluding air-fall and reworked volcanic ash units), metamorphic, or Precambrian rocks. Assessment or mitigation of paleontological resources is usually unnecessary except in very rare or isolated circumstances that result in the unanticipated presence of fossils.</p>	1
<p>Low. Sedimentary geologic units that are unlikely to contain vertebrate or scientifically significant nonvertebrate fossils. Includes rock units less than 10,000 years old and sediments with significant physical and chemical changes (e.g., diagenetic alteration) which decrease the potential for fossil preservation. Assessment or mitigation of paleontological resources is not likely to be necessary.</p>	2
<p>Moderate. Units are known to contain vertebrate or scientifically significant nonvertebrate fossils, but these occurrences are widely scattered and/or of low abundance. Common invertebrate or plant fossils may be found and opportunities may exist for casual collecting. Paleontological mitigation strategies will be based on the nature of the proposed activity.</p> <p>Management considerations cover a broad range of options that may include record searches, pre-disturbance surveys, monitoring, mitigation, or avoidance. Surface-disturbing activities may require assessment by a qualified paleontologist to determine whether significant paleontological resources occur in the area of a proposed action, and whether the action could affect the paleontological resources.</p>	3
<p>High. Geologic units containing a high occurrence of significant fossils. Fossils must be abundant per locality. Vertebrates or scientifically significant invertebrate or plant fossils are known to occur and have been documented, but may vary in occurrence and predictability.</p> <p>Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.</p>	4
<p>Very High. Highly fossiliferous geologic units that consistently and predictably produce vertebrate or scientifically significant invertebrate or plant fossils. Vertebrate fossils or scientifically significant invertebrate fossils are known or can reasonably be expected to occur in the impacted area. Paleontological resources are highly susceptible to adverse impacts from surface disturbing activities.</p> <p>Paleontological mitigation may be necessary before or during surface disturbing activities. The area should be assessed prior to land tenure adjustments. Pre-work surveys are usually needed and on-site monitoring may be necessary during land use activities. Avoidance or resource preservation through controlled access, designation of areas of avoidance, or special management designations should be considered.</p>	5
<p>Unknown. An assignment of “Unknown” may indicate the unit or area is poorly studied and field studies are needed to verify the presence or absence of paleontological resources. The unit may exhibit features or preservational conditions that suggest significant fossils could be present, but little information about the actual unit or area is known.</p> <p>Literature searches or consultation with professional colleagues may allow an unknown unit to be provisionally assigned to another Class, but the geological unit should be formally assigned to a Class after adequate survey and research is performed to make an informed determination.</p>	U
<p>Water or Ice. Typically used only for areas which have been covered thus preventing an examination of the underlying geology.</p>	W, I

APPENDIX F. DPRS

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 8

*Resource Name or #: 20211005.SD.001

P1. Other Identifier:

P2. Location: Not for Publication Unrestricted

a. County: San Bernardino County

b. USGS 7.5' Quad: Fontana T1S; R5W; NE ¼ of SE ¼ of Sec 30; S.B.B.M

c. Address: 11110 Sierra Avenue City: Fontana Zip: 92337

d. UTM: Zone: 11N; 459681mE; 3769963mN

e. Other Locational Data: APN: 0255-101-09-0000; Approximate elevation 1045-1050 feet amsl

P3a. Description:

This resource consists of five concrete troughs within a long narrow concrete slab foundation. The slab foundation is 150 feet long by 25 feet wide by 5 inches thick. The 5 concrete troughs measure 6 feet long by 2 feet wide and 9 inches deep.

P3b. Resource Attributes: AH2. Foundations/structure pads

P4. Resources Present: Building Structure Object Site District Element of District Other



P5b. Description of Photo:

P6. Date Constructed/Age and Sources:

Historic Prehistoric Both

P7. Owner and Address:

Chaffey Community College District
5885 Haven Ave.
Rancho Cucamonga, CA,

P8. Recorded by:

Shannon Lopez; Cogstone Resource
Management, Inc.; 1518 W. Taft Ave.,
Orange, CA 92865

P9. Date Recorded: October 5, 2021

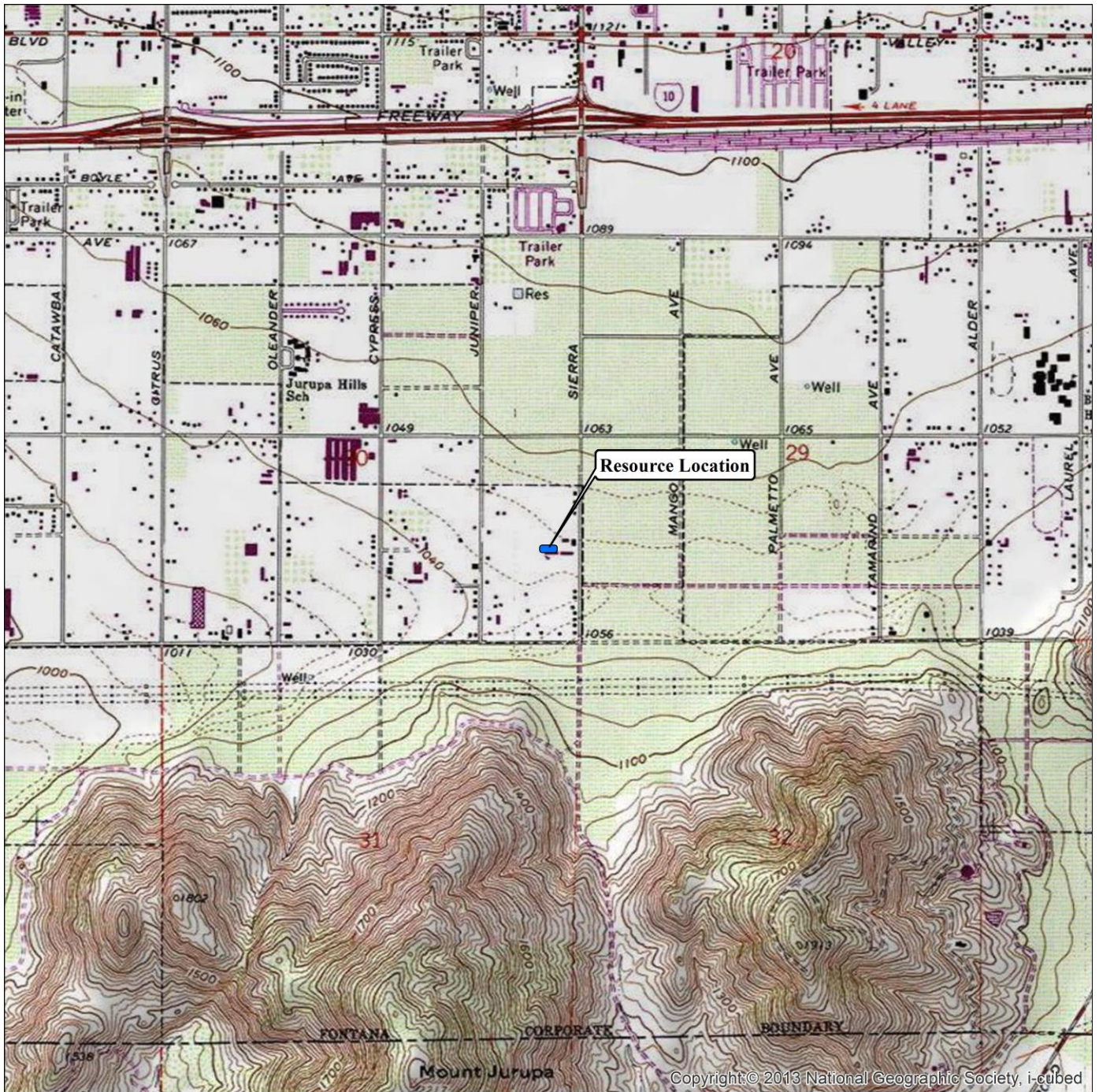
P10. Survey Type: Intensive Pedestrian
survey

P11. Report Citation: Somani, Kanak, Kelly Vreeland, Sandy Duarte, and Shannon Lopez. 2021. Cultural and Paleontological Resources Assessment for the Fontana Campus Master Plan Environmental Impact Report Project, City of Fontana, San Bernardino County, California

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


- A1. Dimensions:** a. Length: m. × b. Width: m.
Method of Measurement: Paced Taped Visual estimate Other:
Method of Determination: Artifacts Features Soil Vegetation Topography
 Cut bank Animal burrow Excavation Property boundary Other
Reliability of Determination: High Medium Low Explain: Area is consistently mowed/rilled for weed control. Any debris is removed. Cleared nature of area made it easy to see that there were no associated depressions of other features.
Limitations: Restricted access Paved/built over Site limits incompletely defined
 Disturbances Vegetation Other: Will be destroyed by construction associated with construction of new college campus.
- A2. Depth:** None Unknown **Method of Determination:** Surficial nature of slant, lack of artifacts, lack of cultural material in ant mounds
- A3. Human Remains:** Present Absent Possible Unknown: No excavation
- A4. Features:**
This resource consists of five concrete troughs within a long narrow concrete slab foundation. The slab foundation is 150 feet long by 25 feet wide by 5 inches thick. The 5 concrete troughs measure 6 feet long by 2 feet wide and 9 inches deep.
- A5. Cultural Constituents:** None
- A6. Were Specimens Collected?** No Yes
- A7. Site Condition:** Good Fair Poor
- A8. Nearest Water:** unnamed intermittent draubage approximately 0.43 miles south-southwest of site
- A9. Elevation:** 1045-1050 feet amsl (approximate)
- A10. Environmental Setting:** Area is characterized by hot, dry summers with cooler winter when almost all of the approximate yearly rainfall of up 15 inches occurs. Prior to development area around resource would have supported a mix of desert and prairie species. Today on-site vegetation is a mix of mostly non-native bushes and grasses
- A11. Historical Information:**
A long large structure first appears in a 1953 USDA historic aerial and is one of a total of four similar structures (FrameFinder 1953). The building is demolished by ca. 1980 (NETR Online 1980). The property was associated with the rearing of livestock such as poultry (San Bernardino County Sun 1959). Based on the presence of the concrete troughs within the footprint of the foundation, this structure may have been used to house livestock. An advertisement for the property the foundation is located on (11110 Sierra Ave.) lists the property for sale. At the time the property is described as a Ranch home with a pool and "room for horses" (San Bernardino County 1963).
- A12. Age:** Prehistoric Protohistoric 1542-1769 1769-1848 1848-1880 1880-1914 1914-1945 Post 1945 Undetermined
- A13. Interpretations:**
Associated with livestock especially poultry but size of troughs implies presence of medium to large size mammals as well.
- A14. Remarks:** Not significant
- A15. References:** see page 8
- A16. Photographs:** See pages 6 through 8; **Original Media/Negatives Kept at:** All pertinent photographs are included in this site record
- A17. Form Prepared by:** John Gust **Date:** October 25, 2021
Affiliation and Address: Cogstone Resource Management, Inc; 1518 W Taft Ave, Orange, CA 92865

LOCATION MAP

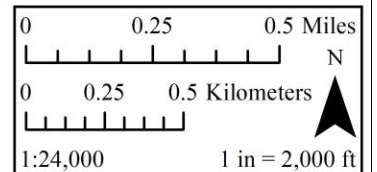


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20211005.SD.001
City of Fontana
San Bernardino County, CA

 20211005.SD.001

USGS 7.5' Quad:
FONTANA




*Drawn By: John Gust

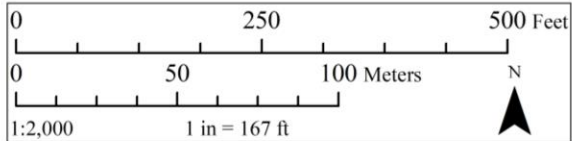
*Date of Map: 10/25/2021



Service Layer Credits: © 2021 Microsoft Corporation © 2021 Maxar © CNES (2021) Distribution Airbus DS

20211005.SD.001
City of Fontana
San Bernardino County, CA

 Archaeological Resource



CONTINUATION SHEET

*Resource Name or # 20211005.SD.001

Continuation Update

Ownership History

(Information provided by the San Bernardino County Assessors' office)

Name	Ownership Relationship	Acquisition Date	Inactive Date
Wurgaft, Robert B.	Sole Owner	None	03/09/1980
Van Ronkel, Joy	Sole Owner	None	09/30/1996
Blinn, Annelie Tr.	Tenancy in Common	None	03/05/2000
Arim Inc Defined Benefit Pension Pl.	Tenancy in Common	None	03/05/2000
(Rescission) Schultz, Gerhard L.	Sole Owner	05/02/2000	05/01/2000
Wiener Family Rev Trust (5-3-88)	Partnership	03/06/2000	01/02/2002
Jacobs Development Co Ltd	Partnership	06/01/2005	07/27/2005
South Fontana Development Lp	Partnership	07/28/2005	04/23/2015
Skyview Group Llc	Sole Owner	04/24/2015	04/07/2020
Chaffey Community College District	Sole Owner	04/08/2020	None

Upon review of county assessors' records, it is believed that Robert B. Wurgaft is the owner of the property during the foundation's period of significance (ca. 1953-ca. 1980). Despite a search of historic newspapers, census records, birth, marriage & death certificates, little information regarding Mr. Wurgaft could be found. This Robert B. Wurgaft may be the same individual who was the president of the Orange County Food Co. Inc. in 1952, however, this can not be confirmed at this time (*Tustin News* 1952).

Historic Resource Evaluation

Criteria A/1

Is this resource associated with events that have made a significant contribution to the broad patterns of our history?

Despite extensive research of the property, including but not limited to historic newspaper articles, census records, birth, marriage & death certificates, it does not appear that this foundation is associated with events that have made a significant contribution to the broad patterns of our history. Therefore, this foundation pad is not recommended eligible for listing in the National Register of Historic Places (NRHP) under Criterion 1 or the California Register of Historical Resources (CRHR) under Criterion A.

Criteria B/2

Is this resource associated with the lives of significant persons in our past?

Following extensive research of the property, including but not limited to historic newspaper articles, census records, birth, marriage & death certificates, this foundation pad was constructed while under the ownership of Robert B. Wurgaft. Little information regarding this individual could be located. Due to a lack of information, this foundation pad is recommended not eligible for listing in the NRHP under Criterion B or the CRHR under Criterion 2.

Criteria C/3

Does this resource embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction?

This foundation does not embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values. Therefore, this foundation is recommended not eligible for listing in the NRHP under Criterion C or the CRHR under Criterion 3.

Criteria D/4

Has this building yielded or is it likely to yield, information important to history or prehistory?

This resource has not nor is it likely to yield, information important to history or prehistory. Therefore, this foundation is

CONTINUATION SHEET

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recommended not eligible for listing in the NRHP under Criterion D or the CRHR under Criterion 4.

Integrity: The foundation retains its integrity of Location. All that remains of this resource are the concrete foundations and five matching concrete troughs. Therefore, this resource no longer retains its integrity of Design, Materials, Feeling, Workmanship, or Association. Due to the demolition of the historic aged resources on the property ca. 1980 and the development of the residential and commercial area to the east and south has substantially reduced its integrity of Setting.



Overview of 1 of 5 concrete trough



Size context of concrete trough

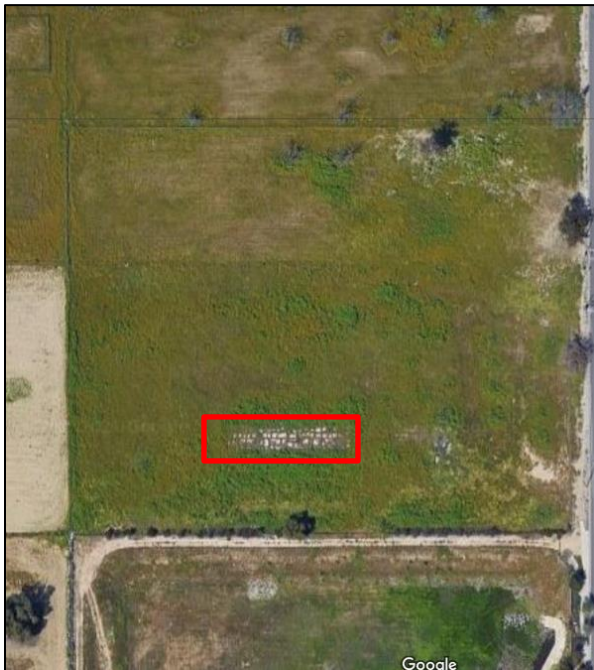
CONTINUATION SHEET

*Resource Name or # 20211005.SD.001

Continuation Update



1953 aerial of structure (FrameFinder 1953)



Ca. 2020 aerial photograph of remaining foundation pad (Google maps 2020)

CONTINUATION SHEET

*Resource Name or # 20211005.SD.001

Continuation Update

References:

FrameFinder

1953 "Flight AXM_1953B, Frame 6K-57". January 1, 1953. Available at:
https://mil.library.ucsb.edu/ap_indexes/FrameFinder/. Accessed: October 25, 2021.

Google Maps

Ca. 2020 "11110 Sierra Ave, Fontana, CA". Available at: <https://www.google.com/maps>. Accessed: October 25, 2021.

NETROnline

1980 *Historic Aerials*. Available at: <https://www.historicaerials.com/viewer#>. Accessed: October 25, 2021.

San Bernardino County Sun

1959 "Poultry, Eggs & Rabbits & Equipment". San Bernardino County Sun (San Bernardino, California). September 15, 1959. Page 28. Available at: <https://www.newspapers.com/image/53953823>. Accessed: October 25, 2021.

1963 "Fontana: Trade or No down". San Bernardino County Sun (San Bernardino, California). April 21, 1963. Page 80. Available at: <https://www.newspapers.com/image/51568589>. Accessed: October 25, 2021.

Tustin News

1952 "Lemon Packing Plant Sold to Food Processor". Tustin News (Tustin, California). January 11, 1952. Page 1. Available at: <https://www.newspapers.com/image/105404947>. Accessed: October 25, 2021.