APPENDIX D

CULTURAL RESOURCES INVENTORY

PHASE I
CULTURAL RESOURCES INVENTORY

FOR THE

ICB MULTI-USE BARRANCA CREEK TRAIL PROJECT
CITY OF IRVINE,
ORANGE COUNTY, CALIFORNIA

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September 2024

Key Words: City of Irvine; *Tustin, Calif.* USGS 7.5' topo map; Gabrielino/Tongva tribe; Juaneño/Acjachemen tribe; survey; negative findings.

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September 9, 2024

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1.0 Introduction

1.1 Overview

This Phase I Cultural Resource Inventory report was prepared by UltraSystems Environmental (UltraSystems) at the request of the Arcadis for the City of Irvine in support of the IBC Multi-Use Trail Along Barranca Channel Project (Project). The Project consists of the development and right-of-way permitting of a multi-use paved trail along the Barranca Channel in the City of Irvine, Orange County, California. UltraSystems conducted this cultural resources inventory to evaluate the potential presence of precontact and historic resources within the project boundary.

The proposed Project would develop the Trail along Barranca Channel extending between Barranca Parkway and Jamboree Road. The segment is approximately 1.35 miles long. The Trail will be bi-directional 11 feet wide with 2 feet wide shoulder on each side for a total paved width of 15 feet. A safety fence between the Trail and the channel will protect the users. The City proposes to have lighting, wayfinding signs and other amenities to enhance the experience of the Trail users. Due to space constraints, landscaping may not be feasible.

Starting from Jamboree Road, the trail will commence northwards along the east side of the channel, crossing an existing Burlington Northern & Santa Fe (BNSF) Railway Industry Spur track at a perpendicular configuration and then proceed along the west side of the channel. The trail continues along the west side of the channel, crossing McGaw Avenue. North of the McGaw Avenue crossing, the trail continues along the west side of the Channel before crossing Alton Parkway. About 110 feet south of Alton Parkway the trail will use an existing bridge owned by B. Braun that crosses over the Channel. North of Alton Parkway, the trail continues along the west side of the channel for about 1,160 feet before terminating at Barranca Parkway. The project site consists of approximately 13.79 acres.

The Project will entail the following improvements: an 11-foot wide paved trail with two foot wide shoulders on each side; install safety fencing between the paved trail and the channel; install safety lighting per City standards; install Wayfinding signage; street crossings and associated improvements for paved trail at Alton Parkway and McGaw Avenue; at-grade crossing/coordination for a private driveway serving B. Braun Medical, Inc. (south of Alton Parkway) and at the BNSF railway; create a connection with the Kelvin Court Apartments bicycle-pedestrian bridge and the driveway near the Main Street Village apartments; and other potential improvements for consideration and approval by the City and Orange County Flood Control District/Orange County Public Works which may include landscaping, benches, trash receptacles, and paved trail entrances.

The Project site is within the central area of Irvine, located along the Barranca Channel between Barranca Parkway and Jamboree Road in Irvine, Orange County, California (see **Attachment A, Map 1**). Commercial buildings and multifamily residences are located to the west of the project site. The northern terminus of the site is at Barranca Parkway. To the east of the project site is a mix of commercial and office land uses (see **Attachment A, Map 2**). The project site is depicted on the *Tustin, Calif.*, USGS topographical quadrangle, Range 9 West, Township 5 South, in the SW ¼ of the NW ¼ of projected Section 33 and in the SE ¼ of projected Section 32; and in Range 9 West, Township 6 South, in the W ½ of the NE ¼ of projected Section 5. The background research and archival study included a one-half mile buffer surrounding the project site's Area of Potential Effect (APE) zone (see **Attachment A, Map 3**).

Area of Potential Effect

The APE for the undertaking encompasses the project boundary which includes the maximum extent of ground disturbance required by the project design (see **Attachment A, Map 3**).

1.1.1 Methods

Stephen O'Neil, who qualifies as Principal Prehistoric Archaeologist and Historic Archaeologist per United States Secretary of the Interior Standards, served at the Principal Investigator (see **Attachment B**). A cultural resources records search, Native American outreach, and an intensive pedestrian cultural resources survey were undertaken by Mr. O'Neil, Assistant Project Archaeologist Megan. B. Doukakis, M.A., and Historian, Rodrigo Jacobo, M.A. (see **Attachment B**). The purpose of the records search was to identify previously recorded cultural resources (precontact and historic archaeological sites/isolates, historic buildings, structures, objects, or districts) within the project area and a one-half-mile buffer zone. The records search included a review of previously recorded precontact and historic archaeological resources within the proposed project area and a 0.5 mile buffer, and a review of listed cultural resource survey reports within that same geographical area. The research was conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, which is the local California Historic Resources Information System (CHRIS) facility.

Mr. O'Neil contacted the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search as well as a list of interested local Native American tribal organizations and potentially affiliated Native American individuals. Outreach to the identified parties was contacted requesting cultural resource information. The cultural resources record search was requested by Ms. Doukakis, and an intensive pedestrian cultural resources survey was conducted by Mr. O'Neil and Mr. Jacobo on April 11, 2024 and April 30, 2024. A Built Environmental Resource Directory (BERD) records search was prepared by Mr. Jacobo on April 9, 2024.

1.1.2 Disposition of Data

This report will be filed with the SCCIC, California State University, Fullerton; the City of Irvine; Arcadis; and UltraSystems Environmental, Inc., Irvine, California. All field notes and other documentation related to the study will remain on file at the Irvine office of UltraSystems.

2.0 Background Settings

2.1 Natural Setting

The City of Irvine is located in the central portion of Orange County, California. The city covers a total area of 65.92 square miles. Irvine shares borders with several cities: it is to the south of Tustin, southeast of Santa Ana, northwest of Lake Forest, Laguna Hills and Laguna Woods, northeast of Costa Mesa, and north of Newport Beach. Additionally, Irvine is adjacent to open lands along SR-261 to the north. The primary watercourse in Irvine is San Diego Creek, which flows southwest through Irvine into the Upper Newport Bay. The city is predominantly located in a wide, flat valley known as the Tustin Plain between Lomas de Santiago to the north and San Joaquin Hills to the south, with several hills, plateaus, and canyons in the extreme northern and southern. The City is at an elevation of 56 feet Above Mean Sea Level (AMSL)while the project site has an elevation that ranges from 10 to 20 feet AMSL. The City of Irvine has an area of 65.92 square miles and a population of 307,670 in 2020, and estimated at 314,621 in July 2023 (U.S. Census 2024).

The sediment beneath the Tustin Plain is categorized into two main units: younger unconsolidated alluvium on top of older semi-consolidated alluvium, both resting on consolidated sedimentary bedrock. In the western part of the Tustin Plain, the combined thickness of these alluvial layers ranges from 1,100 to 1,400 feet (ESA 2010:17). The geological composition beneath the site primarily consists of recent alluvium. The soil type within the designated area (APE) is classified as Chino series, characterized as somewhat poorly drained soils found on alluvial fans. Specifically, the soil type in the APE is Chino silty clay loam with adequate drainage (ESA 2010:17).

The Project site was originally historic marshland called the Cienega de las Ranas that was filled more than 60 years ago for agricultural purposes. The vegetation in the area, prior to urbanization when occupied by outlying areas of the Tustin Marine Corps Air Station (MCAS) and agricultural land, was mainly characterized as non-native grassland, with only isolated remnants of native plant species remaining. The agricultural fields that once existed on the MCAS were regularly cultivated for row crops. Due to extensive soil disturbance, the area is now mostly populated by ruderal plant species. Wildlife in the area includes ground squirrels, rabbits, gophers, coyotes and various water birds (ESA 2010:17). Since commercial development of the area there is now only ornamental landscaping and non-native weeds.

Orange County's climate is characterized by warm temperatures and gentle winds. In January, coastal areas experience average monthly temperatures around 52 degrees (°) Fahrenheit (F), while inland areas of the coastal plain see temperatures around 72° F in August. The county receives an average of 14 inches of rainfall annually, mainly during the winter months (ESA 2010:18).

2.2 Cultural Setting

2.2.1 Precontact Context

The term "precontact period" refers to the period of pre-historic Native California lifeways and traditions prior to the arrival of Euro-Americans.

While it is widely acknowledged that human occupation in the Americas began about 13,000 or more years ago, recent discoveries in areas outside of California have pushed that age back to about 15,000 or even perhaps up to nearly 20,000 years ago. (Smith and Barker, 2017).

Archaeologists have developed a number of chronological frameworks to correlate technological and cultural changes in the archaeological record. There are several models for the sub-regions of Southern California (cf. Grayson, 2011; Warren, 1984; Jones and Klar, 2007). Many archaeologists follow the regional syntheses developed by William J. Wallace in 1955 and modified by others (Wallace, 1978; Warren and Crabtree 1986; Moratto 1984; Sutton et al., 2007 and others). While the beginning and ending dates may vary, the general framework of prehistory in the Southern California area consists of the following four periods:

- **Paleoindian and Lake Mojave Periods** [Pleistocene and Early Holocene] (ca. 11000 B.C. to 6000 B.C.). This period is characterized by highly mobile foraging strategies and a broad spectrum of subsistence pursuits and marked by the use of large dart or spear points. Following a change in climate, large bodies of water existed and lakeside aboriginal adaptations were common. Large stemmed points were accompanied by a wide variety of formalized stone tools and employed with the aid of atlatls (dart throwing boards).

- **Millingstone Horizon** [Middle Holocene] (ca. 6000 B.C. to A.D. 1000). During this period mobile hunter-gatherers evolved and became more sedentary. Certain plant foods and small game animals became the focus of subsistence strategies. This precontact cultural expression is often notable for its large assemblage of millingstones. Additionally, the precontact cultural assemblage of this time period is dominated by an abundance of scraping tools with only a slight representation of dart tipped - projectile points.

- **Late Prehistoric Period** (ca. A.D. 1000 to 1500). Following the Millingstone Horizon were cultures that have a much more complex sociopolitical organization, more diversified subsistence base and exhibited an extensive use of the bow and arrow. Small arrow points and, later, pottery mark this period along with the development of regional cultures and tribal territories.

- **Protohistoric Period** (ca. A.D. 1500 to 1700s). This final cultural period ushered in long-distance contacts with Europeans, and thereby led to the Historic Period (ca. A.D. 1700 to contemporary times). Small arrow points such as the Desert Side-notched and Cottonwood forms are a hallmark of this period.

2.2.2 Ethnohistoric Context

The region surrounding Irvine was inhabited by the Gabrielino/Tongva peoples and was also utilized by the Juaneño/Acjachemen. Both tribes are discussed below.

<u>The Gabrielino /Tongva</u>

The Gabrielino language is classified as within the Northern Takic Branch of the Uto-Aztecan language family. Alongside the Chumash, the Tongva exerted dominance over much of Southern California, including the present-day Los Angeles metropolitan area (Bean and Smith 1978:538). The Gabrielino were considered the most populous, wealthiest, and therefore most powerful ethnic nationality in aboriginal southern California (Bean and Smith 1978:538). Today, the leading sources on Gabrielino traditional culture are Bean and Smith (1978), Johnston (1962) and McCawley (1996). While often referred to as the Gabrielino, a name derived from their association with Mission San Gabriel Mission' they have generally adopted the more traditional name of *Tongva* in recent decades.

Gabrielino territory included the southern Channel Islands and the Los Angeles Basin reaching east into the present-day San Bernardino-Riverside area, north to Malibu on the Pacific coast and south to the Santa Ana River and the San Juaquin Hills in central Orange County.

Different communities of the Gabrielino adopted varied subsistence styles, based on differing combinations of gathering, hunting, and/or fishing of the local environment. Coastal Gabrielino material culture in particular reflected an elaborately developed artisanship most recognized through the medium of steatite, which was rivaled by few other groups in southern California (Kroeber 1925). The intricacies of Gabrielino traditional social organization are not well known. There appear to have been at least three hierarchically ordered social classes, topped with an elite consisting of the chiefs, their immediate families, and the very rich (Bean and Smith 1978). Clans and even some individuals owned land. Villages were politically autonomous, composed of non-localized lineages, each with its own leader. The dominant lineage's leader was usually the village chief, whose office was generally hereditary through the male line. Often several villages were allied under the leadership of a single chief.

As early as 1542 the Gabrielino were in contact with the Spanish during the historic expedition of Juan Rodríguez Cabrillo. It was not until 1769 that the Spaniards took steps to colonize Gabrielino territory with the Portolá Expedition that passed through their territory and camped at several of their villages. Shortly afterwards, most of the Gabrielino people were incorporated into Mission San Gabriel and other missions in southern California (Engelhardt 1931). The first Franciscan establishment in Gabrielino territory and the broader region was Mission San Gabriel, founded in 1772. Priests from here proselytized the Tongva throughout the Los Angeles Basin region. Due to introduced diseases, dietary deficiencies, and forceful *reducción* (removal of non-agrarian Native populations to the mission compound), Gabrielino population dwindled rapidly from these impacts. By 1900, the Gabrielino Native community had almost ceased to exist as a culturally identifiable group. In the late 20th century, however, a renaissance of Native American activism and cultural revitalization among a number of groups of Gabrielino descendants took place. Among the results of this movement has been a return to a traditional name for the tribe, the *Tongva*, which is employed by several of the current bands. Many of the bands work to maintain and teach traditional knowledge, with special focus on language, place names and natural resources. All of the Tongva bands place special emphasis on preservation of traditional habitation and use sites throughout their territory.

The Acjachemen / Juaneño

The project site also lies within the northern extant of Acjachemen use lands (also known as the Juaneño) (Bean and Shipek 1978:551). They spoke a language of the Uto-Aztecan language family, (a distinct dialect of Luiseño) of the southern, or Cupan, branch of Takic. Acjachemen villages and territory extended from Las Pulgas Creek in northern San Diego County north into the San Joaquin Hills of Orange County's central coast, and from the Pacific Ocean into the Santa Ana Mountains. Many contemporary Juaneño have adopted the indigenous term *Acjachemen*.

The Acjachemen resided in permanent, well-defined villages and associated seasonal camps. Each village contained 35 to 300 persons; these consisted of a single lineage in the smaller villages, and of a dominant clan joined with other families in the larger towns. As Boscana said of the Acjachemen, "all the rancherias were composed of a single relationship" (Boscana 1933:33). Each clan/village had its own resource territory and was politically independent, yet maintained ties to others through economic, religious, and social networks in the immediate region. There were three hierarchical social classes: the elite class consisting of chiefly families, lineage heads, and other ceremonial

specialists; a "middle class" of established and successful families; and finally, there were people of disconnected or wandering families and captives of war (Bean 1976:109–111). Leadership consisted of the *Nota*, or clan chief, who conducted community rites and regulated ceremonial life in conjunction with the council of elders, or *puuplem*, which was made up of lineage heads and ceremonial specialists in their own right.

As summarized by Bean and Shipek (Bean and Shipek 1978:552), plant foods were, by far, the greatest part of the traditional diet. Acorns were the most important single food source; two species were used locally. Villages were located near water sources necessary for the leaching of acorns, which was a daily occurrence. As an almost daily staple, the acorn mush, or *weewish*, could be fixed in various ways and was served as gruel, cakes, or fried. Grass seeds were the next most abundant plant food used. Other important seeds were manzanita, sunflower, sage, chia, lemonade berry, wild rose and pine nuts. The principal game animals were deer, rabbit, jackrabbit, woodrat, mice, ground squirrels, antelope, quail, dove, ducks, and other birds. Trout and other fish were caught in the streams, while salmon were available when they ran in the larger creeks. Predominantly a coastal people, the Acjachemen made extensive use of marine foods in their diet; shellfish were the most heavily used resource. Sea mammals, fish, and crustaceans were hunted and gathered from both the shoreline and the open ocean, using reed and dugout canoes.

By 1873, a government report (Ames 1873) recorded about 40 Juaneño associated with Mission San Juan Capistrano. A wave of migration by Juaneño out of San Juan occurred in 1880–1900 as towns in northern Orange County started to form and needed laborers. Today a number of Indians whose ancestors were associated with Mission San Juan Capistrano still reside in the local area.

2.2.2.1 Local Settlements and Features

The coast of Orange County is known to have been heavily populated during the Late Prehistoric and Contact Period by Native American settlement. Following are villages in the area of and immediately surrounding the City of Irvine.

Genga: Located southwest of the project site, atop the bluffs lining the eastern bank of the Santa Ana River, adjacent to the Estancia Adobe in Costa Mesa, a mission outpost strategically positioned near a significant village. McCawley (1996: Fig. 14) shows a map of the Rancho Santiago de Santa Ana, identifying the Upper Newport Bay at Newport as the "Bolsa de Gengara" (Bolsa de Kengaa).

Lukupa: Scholars hold varying opinions regarding the location of this expansive village. Kroeber and Johnston place it on the western banks of the Santa Ana River within Rancho Las Bolsas, while McCawley (1996) proposes the vicinity near the Newland House, situated near Beach and Adams in Huntington Beach. However, Stephen O'Neil was able to determine that Lukupa lies along the southern Los Alisos Creek adjacent to the Aliso and Wood Canyons Wilderness Park area, southeast of the project site. The name Lukupa is purported to signify "a bent object" (Brigandi 2024).

Pasbenga: Situated in southwest Santa Ana and west of the project site, this location is referenced in Mission San Gabriel's records as "*cerca del Rio de Santa Ana*," indicating its proximity to the Santa Ana River. The Early California Cultural Atlas (ECCA) identifies it just west of Bristol Street and south of Seventh Street, although with a margin of error of about three miles. An 1830s map of the Rancho Santiago de Santa Ana depicts a "rancheria" or Indian village east of the Refugio adobe, near Raitt Avenue and Myrtle Street, which was the long-term residence of José Sepulveda. McCawley (1996:60) notes the presence of *Pasbengna* along the river in an 1864 map and adds that there were

"[t]hirteen baptisms from this settlement recorded at the mission [San Gabriel] between 1776 and 1807. . . ."

Totabit: Situated northwest of the project site along the Santa Ana River, the ECCA identifies its location on the west side close to Anaheim Stadium, albeit with a potential margin of error of two miles. The Portolá Expedition of 1769 established their camp here. Over 50 villagers met the Spaniards, arriving without arms. Father Crespí recorded the chief's eloquent address upon their arrival, during which gifts were exchanged—an exchange of shell beads and a net from the chief to Lt. Colonel Portolá who reciprocated with beads and a handkerchief (Brown 2001). Alternatively, it has been proposed that the village was near the old Rodriguez Crossing, situated just north of Chapman Avenue in Orange. Baptisms from this village are documented as late as 1819 (Brigandi 2024).

2.2.3 Historic Context

2.2.3.1 Spanish/Mexican Era

Spanish occupation of California began in 1769, in San Diego. The first Europeans to explore the area that would become the state of California were members of the A.D. 1542 expedition of Juan Rodríguez Cabrillo. Cabrillo sailed along the coast of California but did not explore the interior; this did not take place until 1769, when Lieutenant Colonel Gaspar de Portolá led an overland expedition from San Diego to Monterey. This expedition of 62 people passed north of the current study area in August (Brown 2001), and encountered the Tongva village of *Totpavit* along the Santa Ana River near its confluence with Santiago Creek (McCawley 1996:45). Mission San Gabriel was established in the Los Angeles Basin in 1771, the Mission San Juan Capistrano in 1776, and the Los Angeles pueblo was established as a civilian settlement on September 4, 1781 (Engelhardt 1931).

Mexico rebelled against Spain in 1810, and by 1821, Mexico, including California, achieved independence. The Mexican Republic began to grant private land to citizens to encourage emigration to California. Huge land grant ranchos took up large sections of land in California. Ranchos bordering the mission lands in the Tustin Plain included the Rancho Santiago de Santa Ana to the Peralta and Yorba families. In 1833, Mexico also secularized the Franciscan missions and opened lands previously held in trust for the Indian population to ownership by ranchers (Engelhardt 1931) such as the Rancho San Juaquin to José Andres Sepúlveda which includes the City of Irvine.

2.2.3.2 Early American Period

The Mexican-American War of 1846 saw the invasion of California from both land and sea. Following several skirmishes in the San Diego and Los Angeles area, and the capture of the territorial capital in Monterey, United States rule was established. Following the rapid influx of population to the north because of the Gold Rush of 1849, California was made a state in 1850. The economic and social order was slow to change in the southern portion of the state, however, and rancheros were left in control of their vast estates through the 1860s. Los Angeles was a part of the "Cow Counties" and had little representation in the state legislature because of the sparse population. This allowed the predominantly Anglo population of the north to pass laws aimed at breaking up the ranches for settlement by Eastern farmers and, coupled with devastating droughts that crippled many livestock raisers, their dismemberment soon came. This helped pave the way for the "Boom of the Eighties" which saw an influx of people from the rest of the United States and the beginning of many of the towns we see today (Dumke 1944). This was the first spurt of growth for Los Angeles, and satellite communities started around the city to the east, south and west, and south along the Santa Ana River

in what would become Orange County, and much the plains between came to be filled with farms and orchards. The Rancho San Juaquin/Irvine Ranch, however, remained used primarily for sheep and cattle raising.

2.2.3.3 Orange County

Anaheim was the first American town founded in what is now Orange County. In 1857, a group of German immigrants living in San Francisco bought a portion of the Rancho San Juan Cajon de Santa Ana to start a new community, built on winemaking and the first colonists moved to Anaheim in 1859 (Brigandi 2006).

In 1870, the first commercial vessel entered Newport Bay, which soon became a regular shipping point. The Southern Pacific built the first railroad in the area, extending its tracks south from Los Angeles to Anaheim in 1875. The Southern Pacific railroad held a monopoly in Southern California until 1885, when the Santa Fe pushed its tracks over the Cajon Pass (Masters 2013). Competition brought a boom to the area in the form of lowered cost of living and a real estate boom that created many small towns. Deemed "paper towns" these small enclaves disappeared as the boom faded and they were reabsorbed into larger towns such as Fullerton, Buena Park, San Clemente, and Irvine (Brigandi 2006).

This economic and population growth had led to the creation of the County of Orange in March 1889 out of the southern portion of Los Angeles County, occupying 780 square miles. Orange County remained primarily agricultural through most of the twentieth century (Brigandi 2006).

In the post-World War II period, the Interstate-5 freeway was completed in 1954 and connected many Orange County communities with Los Angeles, making Orange County a bedroom community for many who moved to Southern California to work in the new developing aerospace and manufacturing industries attracted to the area. Orange County received a further boost in 1955 with the opening of Disneyland (Galvin 2011).

By the 1980s the county was developed with numerous master planned communities and became the second most populous county in California as the population topped two million for the first time. Today Orange County is identified with amusement parks, including Disneyland, as well as its many miles of beaches (Masters 2013).

2.2.3.4 City of Irvine

In 1837, Don Jose Sepulveda was granted the western portion of Mission San Juan Capistrano's ranch lands, which was known as the Rancho San Joaquin. Rancho Lomas de Santiago was granted to Teodosio Yorba in 1846. With the Congressional Act of 1851, that mandated landholders to reapply to the Board of Land Commissioners for valid title to their ranchos, the Rancho Santiago de Santa Ana faced complications with tangled titles and in 1868, investor Abel Stearns successfully sued to dissolve the rancho and distribute the property among the claimants (cityofirvine.org 2024). Among them were four prosperous sheep ranchers: Benjamin and Thomas Flint, Llewellyn Bixby, and James Irvine. Simultaneously, Jose Sepulveda, the owner of Rancho San Joaquin, faced heavy debts. In 1864, during the Great Drought, Sepulveda sold his 50,000 acres to Irvine, Flint, and Bixby for $18,000. Two years later, they acquired the 47,000-acre Rancho Lomas de Santiago for $7,000. Although much of the rancho was unsuitable for cultivation, it bordered the Santa Ana River to the north, securing valuable water rights. The Irvine, Flint, and Bixby ranches primarily focused on sheep grazing, with tenant farming allowed in the 1870s. (Liebeck 1990). By 1878, James Irvine purchased his partners'

interests for $150,000. His 110,000-acre estate spanned 23 miles from the Pacific Ocean to the Santa Ana River. After his death in 1886, his son, James Irvine, Jr., gained full control of the ranch in 1893, which he then incorporated into The Irvine Company a year later. James Jr. shifted the ranch's focus to field crops, olive groves, and citrus orchards (cityofirvine.org 2024).

During World War I, agriculture saw significant intensification, with approximately 60,000 acres of lima beans cultivated on the Irvine Ranch by 1918. In World War II, The Irvine Company sold land to the government for the construction of two Marine Corps air facilities. James Irvine, Jr. passed away in 1947 at the age of 80, and leadership of the company passed to his son Myford. Myford initiated the gradual opening of small sections of the ranch for urban development until his death in 1959. In 1959, the University of California requested 1,000 acres from The Irvine Company for a new campus (Liebeck 1990). The company agreed, and the State also purchased an additional 500 acres. Plans were devised by the University's consulting architect, William Pereira, and Irvine Company planners for a city of 50,000 people surrounding the university, including industrial zones, residential and recreational areas, commercial centers, and green spaces.

On December 28, 1971, residents of these communities voted to incorporate a larger city than initially planned by the Pereira design, aiming to have greater control over the area's future and safeguard its tax base. As of May 2015, the population of Irvine had surpassed 250,000, ranking it among the top 75 or 80 most populous cities in America, with a total area of approximately 66 square miles. It is projected to reach about 318,000 residents by the completion of development, expected sometime after 2035 (cityofirvine.org 2024).

2.2.3.5 Project Site History

Topographic Maps (USGS)

The available U.S. Geological Survey topographic maps for the project area date from 1896 through 2020 (USGS). USGS maps from 1896 through 1932 are the same, showing open land in the project area with no features. The 1935 topo map shows several channels running through the area including the early Barranca Channel going north-east to southwest, meeting with the north/south channel that then runs to marshes at the head of the Upper Newport Bay. Delhi Road and Culver Road are dirt roads to the north and east but do not cross the channel; the Aliso Gun Club is to the southwest (suggesting the lands here are often flooded and so perhaps not all suitable for farming). The 1945 USGS map is unchanged. The 1950 topo map now names the channel Peters Canyon Wash and there is a dirt road running parallel a half mile to the east; Delhi Road to the north is now Barranca Road which forms the south border to the Tustin Marine Air Base; it does not cross the channel. The 1957 and 1962 USGS topo maps are unchanged from 1950.

The 1967 USGS map still shows open lands in the project area south of the air base and the channel unchanged; Barranca Road still ends west of the channel at San Joquin Road; the channel is still termed Peters Canyon Wash but now flows to a large set of duck ponds, not on to the natural marsh. By the time of the 1975 topo map, Barranca Road now crosses the channel and a smaller channel now enters it adjacent to the Barranca Road intersection, and the channel itself appears to have been improved; there is also commercial development to the west of the project site. The development of the area around the project site is greatly expanded by the time of the 1982 USGS map, up to the edge of the channel; the current configuration of paved roads exists throughout the area. Maps from 2012 through 2020 only indicate the presence of roads but not the land use.

Historic Aerial Photographs

Historic aerial photos are available for this area of Irvine from 1946 through 2020 (NETR Online 2024). The aerial photo of the project area taken in 1946 (NETR Online 2024) shows open land with the Barranca Channel running through it from the northeast to southwest; the Tustin Marine air base is present immediately north that also includes much open land. The next aerial photo, from 1952 (NETR Online 2024), shows little to no actual change except that the future Barranca Road is now present as a one-lane dirt agricultural road. Ten years later the 1963 (NETR Online 2024) photo still shows no change .

In 1972 (NETR Online 2024), however, the start of development of this part of Irvine is evident. The aerial photo shows the Barranca Channel is now in its present condition, with the current banks and wider channel; there is another channel coming into it from the southeast near where it crosses Barranca Road; Barranca Road is now present, paved and crosses the channel. There are several commercial buildings immediately west of the corner while the lands to the east of the channel remain in agricultural use.

By the time of the 1980 (NETR Online 2024) aerial photo all lands to the west of the project site are fully developed with commercial and industrial properties, while lands to the east remain agricultural. This is also the case in 1985 (NETR Online 2024). Suburban development of the project area is complete by the time of the 1992 aerial photo, with lands to the east of the channel now residential neighborhoods. This remains the case through the 1993 to 2020 (NETR Online 2024) aerial photos and into the present day.

3.0 Research Methods

This cultural resources inventory and related archival research included a background cultural resources records check (archival research) at the SCCIC, California State University, Fullerton. Additionally, a search of their SLF was requested from the NAHC, as well as a list of local Native American groups and individuals for outreach. Finally, a pedestrian cultural resource survey of the entire project site was conducted.

3.1 Records Search

A cultural resource records search to identify cultural resources on or near the project site was completed by Michelle Galaz Cornforth, Assistant Coordinator with the SCCIC on June 7, 2022. The local CHRIS facility for Orange County, maintained at the SCCIC, was reviewed to identify resources that have been previously evaluated for historic significance, as well as to identify any previous completed cultural resources survey reports for the area.

The records and maps were searched and reviewed for cultural resources and surveys in Orange County, National Register of Historic Places; Listed Properties and Determined Eligible Properties (2012); and the California Register of Historical Resources (2012).

For the current study, the scope of the records search included a 0.5-mile buffer zone from the project's footprint (see **Attachment A, Figure 3**). The research effort was completed to assess the sensitivity of the project site for both surface and subsurface cultural resources and to assist in determining the potential to encounter such resources, especially precontact —i.e., Native American cultural remains, during earth-moving activities associated with the proposed project.

3.2 Field Survey

On April 11 and April 30, 2024, Mr. O'Neil and Mr. Jacobo visited the project site to conduct a pedestrian survey, during which the project site was carefully inspected for any indication of human activities dating to the precontact or historic periods (i.e., 50 years or older).

3.3 Native American Outreach

On April 8, 2022, Mr. O'Neil contacted the NAHC via email notifying them of the project activities, requesting a search of their SLF, and requesting a list of local tribal organizations and individuals to contact for project outreach. The NAHC replied on May 19, 2022, with a letter dated the same day reporting on the SLF search finding of negative results, and a list of 12 tribal representatives to contact.

The 12 tribes and Native American individuals recommended by the NAHC were contacted by mail and email on May 19. 2022. Outreach contacts were made again on February 1, 2024 when the project was resumed (**Attachment C**).

4.0 Findings

4.1 Records Search

4.1.1 Recorded Archaeological Sites

Based on the cultural resources records search, it was determined that no precontact or historic cultural resources were previously recorded within the project site boundary. Within the half-mile buffer zone, there have been five precontact cultural resources consisting of four isolate lithic artifacts; and one small site containing marine shell and both chipped and ground stone. The five precontact sources are P-30-000195 (CA-ORA-000195), P-30-100194, P-30-100195, P-30-100197, and P-30-100200.

CA-ORA-0195 was situated on a large knoll slopping off toward flat bottom land along Jamboree Boulevard in Irvine covering an area of approximately 300 feet by 1000 feet. The site contained numerous fragments of marine shell including pecten, *Chione*, wavy top, moonshell and cockle there were flaked tools present consisting of a chert scrapper, a knife, two broken projectile points and chipping waste; also ground stone consisting of manos, a pestle, metate sections, hammer stones and a plummet fragment. The site was identified as possibly of the Early Horizon period. (McKinney et al. 1967: 1.) This site would have been demolished during subsequent road and development construction.

There are four isolates recorded in the half-mile buffer area, all in proximity to one another just north of Barranca Road and east of Red Hill Avenue on the Tustin Marine Corps Air Station and west of Barranca Creek; they range in elevation from 40 – 46 feet AMSL. P-30-100194, also known as TL Isol-07, is a bifacial mano fragment 9.5 cm x 7.0 cm x 1.0 cm thick. P-30-100195, also known as TL Isol-08, a bifacial mano one-quarter fragment of andesite material. P-30-100197, also known as TL Isol-10, is a bifacial mano fragment of approximately 70% of the original item. P-30-100200, also known as TL Isol-14, is an approximately 95% complete "shallow to medium basin metate composed of two fragments" 39 cm x 36.5 cm x 9 cm thick, is made of andesite; this artifact is well ground on its primary surface and slightly ground on its underside (Aron n.d.:1). All these isolates were found during grading for the Tustin Legacy Project immediately north of the project site across Barranca Parkway (OR-04000) (Brown, Deering, and Sawyer 2013). **Table 4.1-1** summarizes these site records.

Table 4.1-1
KNOWN CULTURAL RESOURCES WITHIN A 0.5-MILE RADIUS

Site Number	Author(s)	Date	Type	Description
P-30-000195 (CA-ORA-000195)	McKinney, Bekker and Hafner	1967	Precontact	Site Ora-195: Large knoll slopping off toward flat bottom land. The site contains many shell fragments and stones on the ground. Large areas east and south and west of former buildings show signs of aboriginal occupation. Possibly Early Horizon period.

Site Number	Author(s)	Date	Type	Description
P-30-100194	Armstrong, Scott	n.d. (2013)	Precontact	TL Isol-07: Constitutes 100% of the original item, a bifacial mano fragment. The item is of an undetermined lithic material type but closely resembles andesite. The artifact was assigned to the Cooper Center (T-001-2013).
P-30-100195	Armstrong, Scott	n.d. (2013)	Precontact	TL Isol-08: Constitutes 25% of the original item, a bifacial mano fragment. The item is of an undetermined lithic material type. The artifact was assigned to the Cooper Center (T-001-2013).
P-30-100197	Armstrong, Scott	n.d. (2013)	Precontact	TL Isol-10: Constitutes 70% of the original item, a bifacial mano fragment. The item is of an undetermined lithic material type. The artifact was assigned to the Cooper Center (T-001-2013).
P-30-100200	Aron, Geraldine	n.d. (2013)	Precontact	TL Isol-14: Constitutes 95% of the original item, an andesitic "shallow to medium basin metate in 2 fragments…." The artifact is well ground on its primary surface and slightly ground on its underside. The artifact was assigned to the Cooper Center (T-001-2013).

4.1.2 Previous Cultural Resource Investigations

The SCCIC records indicate there have been 40 previous cultural resource studies associated with project area (see **Table 4.1-2** and **Attachment D**). Of those 40 studies, eight intersect with the project site boundary while the remaining 32 included areas within the 0.5 mile buffer but outside the project APE.

The eight studies that do include a portion of the project APE are: OR-00246, OR-00305, OR-00847, OR-01099, OR-01784, OR-02225, OR-02534, and OR-03203. Of these, five identified and recorded cultural resources. None of the recorded resources were found within the project boundary.

The Archaeological Resources Assessment for the Irvine Industrial Complex (OR-00246) (Cottrell 1978) was conducted in 1978 consisting of an archeological resources assessment of the Irvine Industrial Complex area; it identified and recorded two cultural resources. A general history of archaeological research on the Irvine Ranch (OR-00305) (Schroth 1979) was prepared in 1979; it identified 30 cultural resources in its project area. A general Archaeological Resource Inventory – City of Irvine (OR-00847) (Padon and Breece 1985) was prepared in 1985 and inventoried cultural resources throughout the City of Irvine and its sphere of influence. The report documented 25 prior recorded precontact sites and identified seven newly found site precontact cultural resources. An Irvine Ranch Water District pipeline archaeological resources assessment (OR-01099) (Cooley 1979) was prepared in 1979; this study identified six prior recorded precontact sites in the project region and recorded six additional cultural resources several miles to the southeast. OR-01784 was

prepared in 1998 for Pacific Bell Telecommunications in the city of Irvine; it consisted of a literature review and a cultural records search; it did not identify or record any cultural resources (Brechbiel, 1998). A review of the Irvine Company's Planning Process in reference to archaeological resources (OR-02225) (Strozier 1978) was prepared in 1978; encompassing the whole of the City of Irvine, as a review it did not identify any cultural resources. OR-02534, prepared in 1976, is an annual archaeological assessment report provided to the Irvine Company; it identified and recorded a total of 13 cultural resources, including five in danger of destruction – none of these sites were in proximity to the project site (ARI 1976). OR-03203, prepared in 2005, is a cultural resource records search and site survey conducted for a telecommunications project at 17426 Von Karmen Avenue, a block from the project site in the city of Irvine – no cultural resources were identified in its project area (Bonner 2005).

The 32 studies outside the project boundary but within the 0.5 mile buffer are a variety of cultural resource reports and/or surveys or environmental reports/survey reports. Most of those reports are characterized as cultural resource surveys, both archeological or historical in nature, while a few are classified as environmental reports addressing impact, rehabilitation, or mitigation efforts. The earliest of these 32 reports dates to 1967 while the latest one dates to 2014. Of these 32 studies, 13 identified and recorded cultural resources, while the remaining 19 studies did not identify and/or record any cultural resources.

Table 4.1-2
KNOWN CULTURAL RESOURCE STUDIES WITHIN A 0.5-MILE RADIUS

Report Number	Author(s)	Date	Title	Resources
OR-00246	Cottrell, Marie G.	1978	Report of Archaeological Resources Assessment Conducted for the Irvine Industrial Complex-west	30-000121, 30-000287
OR-00252	Desautels, Roger J	1978	Cultural Resources Report-Preliminary Assessment on the Proposed San Diego Creek Watershed Erosion and Sedimentary Control System in Hicks Canyon, Hicks Canyon Wash, Rattlesnake Creek Wash, San Diego Creek, and the San Joaquin Marsh Located in Orange County	30-000115, 30-000116, 30-000121, 30-000195, 30-000196, 30-000197, 30-000284, 30-000478, 30-000511, 30-000513, 30-000719

Report Number	Author(s)	Date	Title	Resources
OR-00305	Schroth, Adella	1979	The History of Archaeological Research on Irvine Ranch Property: The Evolution of a Company Tradition	30-000002, 30-000044, 30-000047, 30-000048, 30-000051, 30-000053, 30-000059, 30-000060, 30-000061, 30-000062, 30-000063, 30-000064, 30-000065, 30-000066, 30-000067, 30-000068, 30-000069, 30-000070, 30-000071, 30-000072, 30-000073, 30-000077, 30-000091, 30-000099, 30-000100, 30-000104, 30-000106, 30-000107, 30-000109, 30-000111
OR-00314	Desautels, Roger J.	1978	Archaeological Survey Report on 2.875 Acres Located on Main Street, Irvine, County of Orange	NA
OR-00362	Desautels, Roger J.	1967	Archaeological Report: CA-ORA 195, Orange County, California	30-000195
OR-00440	Mabry, Theo N.	1979	Records Search and Reconnaissance Harvard Avenue Extension, City of Irvine, California	30-000111
OR-00441	Mabry, Theo N.	1979	Archaeological Records Search and Reconnaissance Survey Main Street/Jamboree Road, Irvine, California	NA
OR-00808	Unknown	1979	Final Environmental Impact Report Regional Domestic Water Storage and Transmission Facilities From Diemer/sac and Wellfield Systems to Existing Distribution Network	30-000344, 30-000349, 30-000382, 30-000383
OR-00847	Padon, Beth, and Bill Breece	1985	Archaeological Resource Inventory City of Irvine and its Sphere of Influence	30-000161, 30-000349, 30-000361, 30-000383, 30-000478, 30-000494, 30-000495, 30-000496, 30-000499, 30-000545, 30-000601, 30-000734, 30-000735, 30-000767, 30-000803, 30-000804, 30-000805, 30-000806, 30-000807, 30-000808

Report Number	Author(s)	Date	Title	Resources
OR-00863	Bissell, Ronald M.	1987	Cultural Resources Reconnaissance of Jamboree Center, Phase 2, Irvine, Orange County, California	NA
OR-00969	Jertberg, Patricia R.	1989	Cultural Resource Assessment Jamboree Road Widening	NA
OR-01099	Cooley, Theodore G.	1979	Archaeological Resources Assessment Conducted for Proposed Irvine Ranch Water District Pipeline Right of Ways	30-000344, 30-000349, 30-000382, 30-000383, 30-000556, 30-000647, 30-000806, 30-000807, 30-000808, 30-000809, 30-000810, 30-000811
OR-01170	Rosenthal, Jane	1991	Addendum to Cultural Resources Assessment Jamboree Road Widening, Irvine, California	19-000195
OR-01357	White, Robert S. and Laura S. White	1993	An Extended Literature and Records Search Addressing Prehistorical Archaeological Resources Located Within the Boundaries of the US Marine Corps Air Station (MCAS), Tustin, Orange County, California	30-000353, 30-000373, 30-000381
OR-01413	Whitney-Desautels, Nancy A. and David A. Kice	1993	Cultural Resources Assessment of the Irvine Ranch Water District Alternate Aqueous Waste Disposal Facility Sites, Orange County, California	NA
OR-01784	Brechbiel, Brant A.	1998	Cultural Resources Records Search and Literature Review Report for a Pacific Bell Mobile Services Telecommunications Facility: Cm 092-26 in the City of Irvine, California	NA
OR-02175	Duke, Curt	2000	Cultural Resource Assessment for AT&T Wireless Services Facility Number C940.1, County of Orange	NA
OR-02200	Atchley, Sara M.	2000	Cultural Resources Investigation for the Nextlink Fiber Optic Project, Los Angeles and Orange Counties, California	NA

Report Number	Author(s)	Date	Title	Resources
OR-02225	Strozier, Hardy	1978	The Irvine Company Planning Process and California Archaeology - A Review and Critique	NA
OR-02235	Duke, Curt	2000	Revised Cultural Resource Assessment for AT&T Wireless Services Facility Number C940.1, County of Orange, Ca	NA
OR-02247	Alcock, Gwyn	2000	Cultural Resources Investigation for the Nextlink Fiberoptic Project, Los Angeles and Orange Counties, California (first Addendum); Nextlink Project Number: 17033-2	NA
OR-02256	Demcak, Carol R.	1999	Cultural Resources Assessments for Orange County Sanitation Districts	30-000083, 30-000084, 30-000085, 30-000086, 30-000087, 30-000144, 30-000277, 30-000288, 30-000289, 30-000300, 30-000352, 30-000353, 30-000381, 30-001352
OR-02350	Crabtree, Robert H.	1974	Conclusion of Archaeological Investigations on a Portion of 105 Acres Located East of Jamboree Road, South of San Diego Freeway	30-000195
OR-02352	Unknown	1979	Records Search and Reconnaissance Harvard Avenue Extension City of Irvine, California	30-000111, 30-000112, 30-000119, 30-000120
OR-02470	Duke, Curt	2002	Cultural Resource Assessment Cingular Wireless Facility No. Sc 036-02 Orange County, California	NA
OR-02485	Chakurian, Anthony	2001	Site Id Number C940_Jamboree/Alton, Proposed AT&T Wireless Telecommunications Equipment Installation 17052 Jamboree Road, Irvine, California 92614	NA
OR-02534	N/A	1976	Annual Report to The Irvine Company from Archaeological Research, Inc.	30-000051, 30-000064, 30-000099, 30-000100, 30-000106, 30-000119, 30-000130, 30-000184, 30-000196, 30-000197, 30-000484, 30-000518, 30-000575

Report Number	Author(s)	Date	Title	Resources
OR-02600	Cottrell, Marie G.	1975	Archaeological Research, Inc. Quarterly Report	30-000064, 30-000111, 30-000119, 30-000120, 30-000195, 30-000196, 30-000202, 30-000203, 30-000228, 30-000373, 30-000378, 30-000475, 30-000508, 30-000511, 30-000575
OR-03198	Bonner, Wayne H.	2005	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate Oc-0053-02 (performance Equipment) 1902 McGaw, Avenue, Irvine, Orange County, California	NA
OR-03203	Bonner, Wayne H.	2005	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate Cm092-01 (oc-005-01) Schiffman Enterprises, 17462 Von Karman Avenue Irvine, Orange County, California	NA
OR-03373	Arrington, Cindy and Nancy Sikes	2006	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and II	NA
OR-03476	Bonner, Wayne H.	2007	Cultural Resource Records Search and Site Visit Results for Royal Street Communications, LLC Candidate La2512a (murphy & Corporate Park), 2802 Barranca Park Way, Irvine, Orange County, California	NA
OR-03486	Baker, Cindy and Mary L. Maniery	2007	Cultural Resource Inventory and Evaluation of United States Army Reserve 63d Regional Readiness Command Facilities	19-003659, 19-186589, 19-187950, 19-187951, 19-187952, 19-187953, 19-187954, 19-187955, 19-187956, 30-176836, 30-176837
OR-03559	Lorna Billat	2009	New Tower Submission Packet: Cartel Industries, LA2795C	NA

Report Number	Author(s)	Date	Title	Resources
OR-04000	Strauss, Monica, Ehringer, Candace, and Bray, Madeleine	2010	Irvine Ranch Water District Wells 21 and 22 and Tustin Legacy Well 1 (TL-1) Projects, Phase I Cultural Resources Assessment	30-000300, 30-000301, 30-000350, 30-000351, 30-000353, 30-000373, 30-000381, 30-001652
OR-04136	Weitze, Karen and Christy Dolan	2000	Historic American Building Survey for the Marine Corps Air Station, Tustin Lighter-Than Air Ship Hangars (HABS No. CA-2707), Orange County, California	NA
OR-04137	Unknown	2008	The Tustin Hangars: Titans of History - An Historical Account of the MCAS Tustin Hangars	NA
OR-04220	Helton, Clint	2012	Cultural Resources Analysis for the Tustin US Army Reserve Center Proposed Military Construction Project	NA
OR-04265	Brown, Joan, Deering, Mark, and Sawyer, William	2013	Archaeological Resource Monitoring During Excavation Activities for Tustin Legacy Expansion, City of Tustin, County of Orange, California	30-001725, 30-001726, 30-100190, 30-100191, 30-100192, 30-100193, 30-100194, 30-100195, 30-100196, 30-100197, 30-100198, 30-100199, 30-100200, 30-100201
OR-04488	Vader, Michael, Matt; Gonzalez, Madeleine Bray, and Chris Lockwood	2014	Archaeological Survey Report for the Peters Canyon Channel Water Capture and Reuse Pipeline Project, Irvine and Tustin, Orange County, California	NA

4.2 Native American Outreach

On April 8, 2022, Mr. O'Neil contacted the NAHC requesting a search of their SLF and asking for a list of local tribal organizations and individuals to contact for project outreach. The results of the search request were received May 19, 2022 from Mr. Cody Campagne, Cultural Resources Analyst. The NAHC letter stated that "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative [emphasis in the original]." The project was then put on hold and therefore the tribal outreach process was not completed at that time. The project was resumed in January 2024 and the letters and emails to the tribes were re-posted to each contact. (See **Attachment C**.)

At the initiation of the project in Spring 2022, UltraSystems prepared letters to each of the 12 tribal contacts representing nine tribes and bands provided by the NAHC (see **Attachment C**). On May 19, 2022, Mr. O'Neil mailed letters with accompanying maps to all 12 tribal contacts and also emailed identical letters and maps to each of those tribal contacts with the contact letter and map describing

the project and showing the project's location, requesting a reply if they have knowledge of cultural resources in the area, and asked if they had any questions or concerns regarding the project (see **Attachment C**). There was no response to those emails before the project was placed on hold. When the project resumed in 2024, on February 1, 2024, the outreach letters were updated, and mailed and emailed to the original 12 tribal contacts.

An email response was received from Joyce Perry, Tribal Manager for the Juaneño Band of Mission Indians Acjachemen Nation – Belardes (and on behalf of Chairperson Matias Belardes), on March 6, 2024, indicating that the tribe has no concerns and asked that we contact tribes closer to the project area.

Telephone calls were conducted on March 8, 2024, to complete the outreach process. These calls were to the ten tribal contacts representing the eight tribes who had not already responded to UltraSystems' mailing and email: Chairperson Salas with the Gabrielino – Kizh Nation, Chairperson Anthony Morales with the Gabrielino / Tongva San Gabriel Band of Mission Indians, Chairperson Sandonne Goad with the Gabrielino / Tongva Nation, Chairperson Robert Dorame and Christine Conley with the Gabrielino Tongva Indians of California, Chairperson Charles Alvarez with the Gabrielino – Tongva Nation, Shasta Gaughen, THPO with the Pala Band of Mission Indians, Tribal Chair Lovina Redner with the Santa Rosa Band of Cahuilla Indians, and Chairperson Isaiah Vivanco and Joseph Ontiveros with the Soboba Band of Luiseño Indians. There was no answer to any of the ten telephone calls and messages were left describing the project requesting a response. To date, there has been no response from these ten representatives of eight tribes. (See **Attachment C**.)

4.3 Pedestrian Survey Results

A pedestrian survey was conducted on April 11, 2024 and April 30, 2024 by Mr. O'Neil and Mr. Jacobo. The survey consisted of walking, visually inspecting, and photographing the exposed ground surface and landscaped areas of the project site using standard archaeological procedures and techniques. The survey was conducted in the afternoon; the temperature was in the low-70s° F and the sky was completely clear.

The northern segment of the project site was surveyed on April 11, 2024 extending from Barranca Parkway (**Figure 4.3-1**) south to Alton Parkway. The Barranca Channel has gated entrances at both ends of all street crossings. When visited, the north gate was open and it was seen that a company was setting rip-rap boulders along the west bank. Orange County Public Works inspector Mr. Tommy Nguyen was present who provided access to this portion of the Channel.

The west bank of the Channel is approximately 16 feet wide and consists of a flat gravel-covered maintenance road (**Figure 4.3-2**) that fully obscures the surface with no soil visible. The east bank of the Channel is approximately 7 feet wide and consists of open nature soil (**Figure 4.3-3**). There is no vegetation within the Channel boundary.

The pedestrian survey was continued April 30, 2024 by Mr. O'Neil and Mr. Jacobo when the remaining middle (Alton Parkway to McGaw Avenue) and southern (McGaw Avenue to Jamboree Road) segments of the project site were observed. The central segment has maintenance roads on both sides of the channel each approximately 18 feet wide and covered with gravel (**Figure 4.3-4**). Approximately 225 feet south of Alton Parkway there is a small road crossing the channel, the surface of which is utilized by bordering commercial businesses (**Figure 4.3-5**).

The south segment from McGaw Avenue to Jamboree Road is the longest stretch, and mid-way curves from the prior northeast to southwest run to a northwest to southeast direction. At the northern start of this curve railroad tracks enter from the west (**Figure 4.3-6**), cross the channel on a bridge and continue up the east side to McGaw Avenue where they cross that street. (On the north side of McGaw, the tracks run parallel to the east side of the channel but behind a fence separating it from the maintenance road.) The southern segment also has maintenance roads on both sides of the channel each approximately 18 feet wide and covered with gravel (**Figure 4.3-7**). There is a pedestrian bridge crossing the channel approximately 1,000 feet west of Jamboree Road connecting two apartment building complexes on either side of the channel (**Figure 4.3-8**).

There was no vegetation within the project site boundary, though occasional ornamental trees often hung over the fence from adjacent parcels. The channel itself contained patches of reeds and rushes; Pairs of Mallard ducks were occasionally observed in water in the channel. No other animals were observed.

The result of the pedestrian surveys was negative for both historic and precontact cultural resources. Approximately 40 percent of the current ground surface was visible (east bank) of the Barranca Parkway to Alton Parkway segment. Gravel covered the entire surface of both sides of the channel on the central, Alton Parkway to McGaw Avenue segment as well as the southern, McGaw to Jamboree Road segment with no ground visibility. Photographs of the project site were taken during the cultural resources survey to document the conditions.

Figure 4.3-1
BARRANCA PARKWAY ENTRANCE TO NORTH SEGMENT OF BARRANCA CHANNEL; VIEW TO SOUTH

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Figure 4.3-2
WEST BANK OF BARRANCA CHANNEL AND MAINTENANCE ROAD IN THE BARRANCA PARKWAY TO ALTON PARKWAY SEGMENT; VIEW TO THE SOUTH

Figure 4.3-3
EAST BANK OF BARRANCA CHANNEL IN THE BARRANCA PARKWAY TO ALTON PARKWAY SEGMENT - OPEN GROUND; VIEW TO THE NORTH

Figure 4.3-4
WEST BANK OF BARRANCA CHANNEL AND MAINTENANCE ROAD SOUTH OF MCGAW AVENUE; VIEW TO THE SOUTH

Figure 4.3-5
WEST BANK OF BARRANCA CHANNEL FROM SOUTH OF ALTON PARKWAK – TOWARD SMALL STREET CROSSING; VIEW TO THE SOUTHWEST

Figure 4.3-6
RAILROAD TRACKS AND BRIDGE CROSSING FROM WEST BANK OF BARRANCA CHANNEL IN THE MCGAW AVENUE TO JAMBOREE ROAD SEGMENT; VIEW TO THE NORTHEAST

Figure 4.3-7
WEST BANK OF BARRANCA CHANNEL AND MAINTENANCE ROAD FROM SOUTH OF MCGAW AVENUE; VIEW TO THE SOUTH

Figure 4.3-8
EAST (NORTH) BANK OF BARRANCA CHANNEL WITH PEDESTRIAN BRIDGE; VIEW TO THE SOUTHEAST TOWARD JAMBOREE ROAD

4.4 National Register of Historic Places

A search of the Built Environmental Resource Directory provided by the Office of Historic Preservation (2024) was conducted for this Project on April 9, 2024, by Mr. Jacobo, UEI Historian.

It was determined that the Project site APE does not contain any resources that have been evaluated under the National Register of Historic Places.

5.0 Management Considerations

5.1 Site Evaluation Criteria

Evaluation of significance under the California Environmental Quality Act (CEQA) uses criteria found in eligibility statements for the California Register of Historical Resources (CRHR). Generally, a resource is to be considered historically significant if it meets the criteria for listing in the California Register of Historical Resources in the state historic preservation law [California Code of Regulations § 4852]. This provides criteria for evaluating the significance of historical resources and listing it within the CRHR. It states the following:

> An historical resource must be 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 cultural heritage, of California or the United States.
>
> (2) It is associated with the lives of persons important to local, California or the United States.
>
> (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.
>
> (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.

No National Register of Historic Places or CRHR precontact or historic cultural resources were identified during this investigation. Therefore, an evaluation of significance under CEQA was not required for this study.

5.2 Potential Effects

There are no CRHR listed precontact or historic cultural resource sites within the project boundary. No cultural resources will be adversely affected by the project. However, the presence of buried cultural (precontact and/or historic archaeological) resources cannot be ruled out. If precontact and/or historic artifacts are observed during subsurface excavation, work should be stopped in that area and a qualified archaeologist monitor should be called to assess the finds.

6.0 Conclusions and Recommendations

No precontact or historic archaeological resources were identified during the pedestrian field survey of the project. No precontact or historic archaeological resources were identified within the project boundary by the SCCIC CHRIS records search. The potential for subsurface cultural deposits is also minimal.

There has been one Native American response to UltraSystems' tribal outreach been received to date (see **Section 4.2** and **Attachment C**). The Juaneño Band of Mission Indians Acjachemen Nation – Belardes stated that that the tribe has no concerns and asked that we contact tribes closer to the project area.

The cultural resources study findings suggest that there is a low potential for the presence of precontact cultural resources. The CHRIS records showed that while a previous report describing monitoring finds in the area recorded several isolate artifacts (OR-04000), none were located within the project boundary (see **Section 4.1.1** and **4.1.2**). There was extensive grading and other disturbance related to construction of the Barranca Wash Channel and its construction made use of fill up to 10 feet thick "consisting mainly of stiff lean clay and sandy lean clay" (Leighton Construction 2022:4). In addition, the road and pedestrian bridges over the channel, and railroad track construction, have thoroughly disturbed all surface native soil. However, if precontact and/or historic items are observed during subsurface construction activities, work should be stopped in that area and a qualified archaeologist and Native American monitor should be called to assess the findings and retrieve the material.

The results of the pedestrian assessment indicate no impacts to precontact or historical resources are anticipated during project construction. The cultural resources study findings suggest that there is a low potential for the presence of precontact cultural resources. Therefore, it is not recommended that archaeological monitoring be conducted during subsurface ground construction work.

If human remains are encountered during excavations associated with this project, work will halt in that area and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are of recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are precontact, they will contact the NAHC. The NAHC will be responsible for designating the most likely descendant (MLD), who will make recommendations as to the manner for handling these remains and further provide for the disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. Following notification by the NAHC, the MLD will make these recommendations within 48 hours of having access to the project site following notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

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ATTACHMENTS

ATTACHMENT A

PROJECT MAPS

Map 1
Regional Location

Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

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April 12, 2022

Scale: 1:380,160

N

0 3 6 Miles

0 3 6 Kilometers

Legend

- Project Location
- County Boundary

IBC Multi-Use Trail Along Barranca Channel

Regional Location Map

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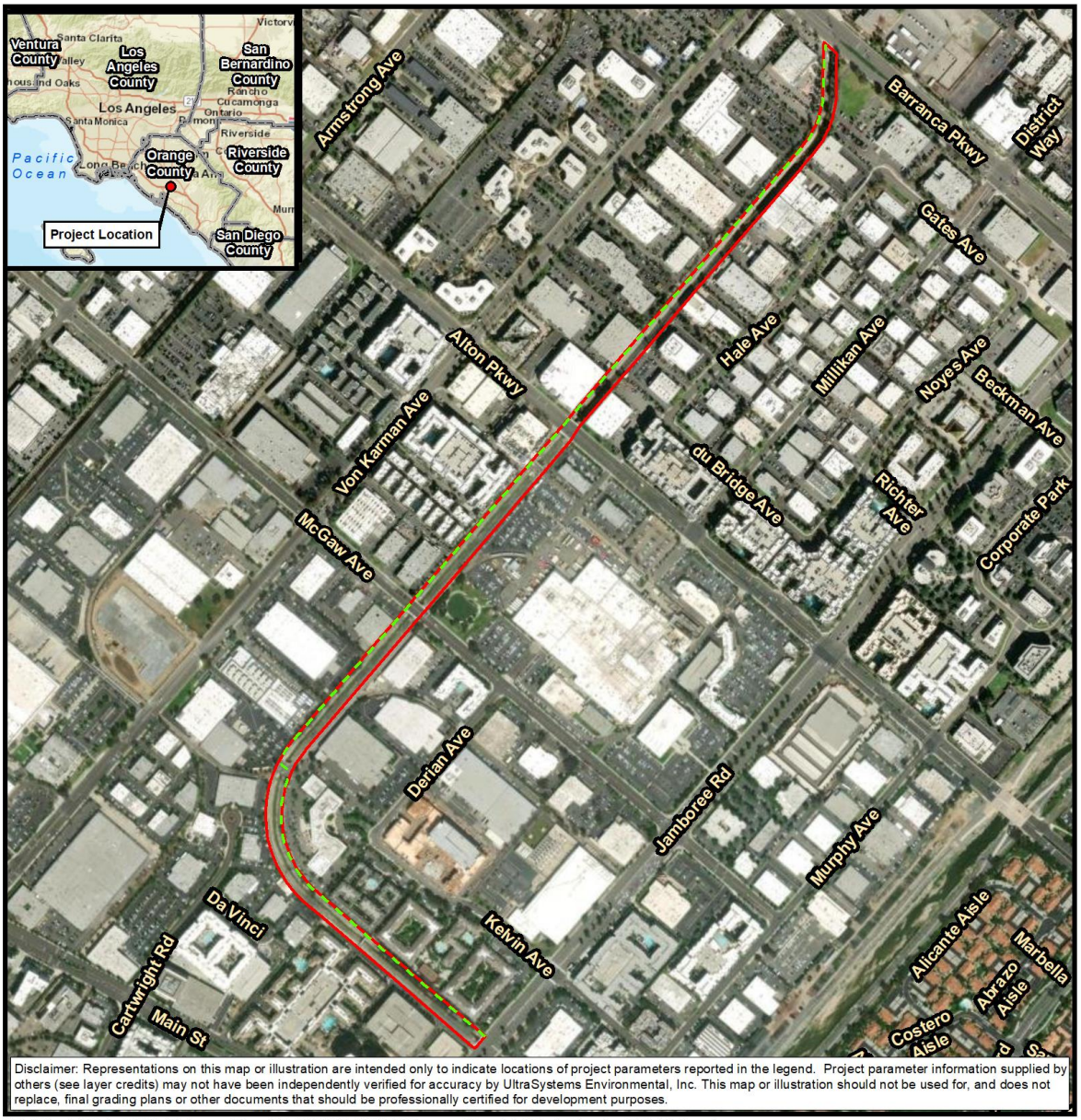
Map 2
Project Location



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Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community;UltraSystems Environmental, Inc., 2024.

September 09, 2024

Scale: 1:9,000

N

0 375 750 Feet

0 90 180 Meters

Legend

Project Boundary

Proposed Trail Alignment

IBC Multi-Use Trail Along Barranca Channel

Project Location

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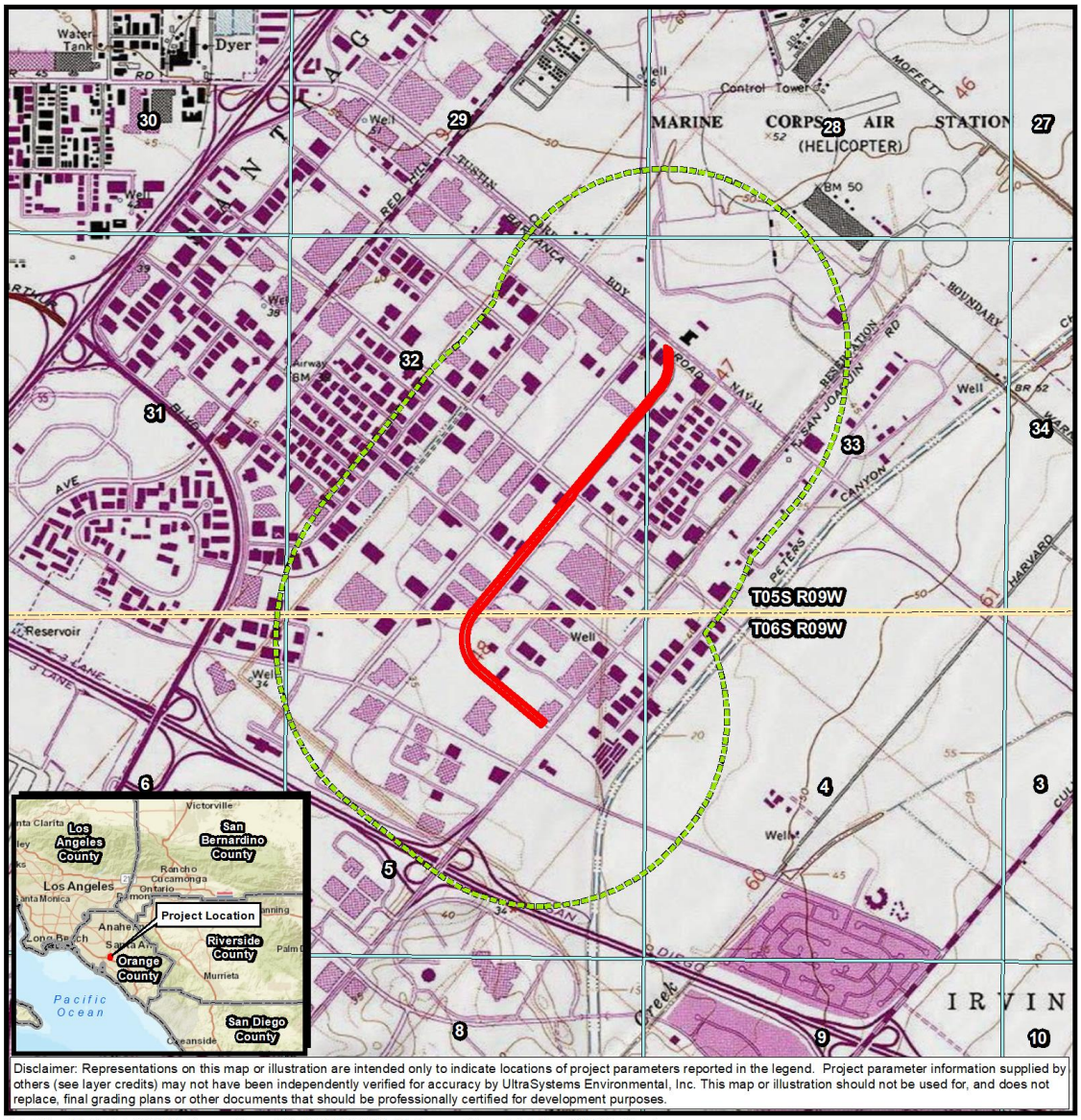
Map 3
USGS Topographic Map with Project APE Shown



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\Gissvr\gis\Projects\7160_IBI_BarrancaChannel_IS_MND\MXDs\7160_IBI_Barranca_Channel_4_5_Topo_2024_09_06.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Copyright:© 2013 National Geographic Society, i-cubed; CA Dept. of Conservation, May 2019; UltraSystems Environmental, Inc., 2024

September 06, 2024

IBC Multi-Use Trail Along Barranca Channel

Topographic Map
USGS Quadrangle: Tustin
Township: 5S, 6S Range: 9W
Sections: 32, 33, 5

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Half-Mile Radius
- Township Boundary
- Section Boundary

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ATTACHMENT B

PERSONNEL BACKGROUND

Stephen O'Neil, M.A., RPA

Cultural Resources Manager, Cultural Anthropology/Archaeology

Education

- M.A., Anthropology (Ethnography emphasis), California State University, Fullerton, CA, 2002
- B.A., Anthropology, California State University, Long Beach, CA, 1979

Professional and Institutional Affiliations

- California Mission Studies Association
- City of Laguna Beach Environmental Sustainability Committee, appointed 2012
- Orange County Natural History Museum; Board Member
- Pacific Coast Archaeological Society; Board Member and Past President
- Society of California Archaeology

Professional Registrations and Licenses

- Register of Professional Archaeologists (No. 16104) (current)
- Riverside County, CA, Cultural Resource Consultant (No. 259) (current)
- Cultural Resource Field Director, BLM Permit (CA-13-19) – California, 2013
- NEPA and CEQ Consultation for Environmental Professionals; course by the National Association of Environmental Professionals, 2013

Professional Experience

Mr. O'Neil has 30 years of experience as a cultural anthropologist in California. He has researched and written on archaeology, ethnography, and history. Mr. O'Neil has archaeological experience in excavation, survey, monitoring, and lab work. Most of this has been on Native American prehistoric sites, but also includes Spanish, Mexican, and American period adobe sites. His supervisory experience includes excavation and survey crew chief and project director of an adobe house excavation. He has a wide range of expertise in Phase I & II Environmental Site Assessments, archaeological resource assessment surveys, salvage operations, and cultural background studies for various EIR projects. Mr. O'Neil has worked for cultural resource management firms as well as government agencies and Native American entities. He has prepared technical reports as well as published journal articles.

Select project experience

Inglewood Avenue Corridor Widening Project, City of Lawndale, Los Angeles County, CA: 2013–2014

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. The City of Lawndale is widening Inglewood Avenue from Marine Avenue north. The project uses Caltrans funds and the cultural resources report was prepared in Caltrans format. A separate historic properties report was prepared as well. Prepared for Huitt-Zollars Engineering.

Via Ballena Storm Drain Relocation, City of San Clemente, Orange County, CA: 2013

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. This residential area has a damaged storm drain under Via Ballena that was causing earth movement and erosion. The meet requirements for state funding, and cultural resources inventory report was required. Prepared for the City of San Clemente

Pine Canyon Road – Three Points Road to Lake Hughes Road, Los Angeles County, CA: 2013

Mr. O'Neil directed and conducted archaeological field survey, cultural resource records search, Native American contacts and report writing for this project. This nine-mile portion of Pine Canyon Road lies partially within the Angeles National Forest. A series of widening and culvert repairs is planned by the Los Angeles County Department of Public Works (LACDPW). An assessment was made of possible cultural resources, historic and prehistoric that may be affected by the construction, and four historic sites were recorded. Prepared for LACDPW.

Alton Parkway Extension Project, Cities of Irvine and Lake Forest, Orange County, CA: 2012

Mr. O'Neil directed and conducted archaeological and paleontological monitoring, archaeological excavation, cultural resource records search, Native American contacts and report writing for this project. Alton Parkway was extended 2.1 miles between the cities of Irvine and Lake Forest. For the portion within the City of Irvine, UltraSystems conducted monitoring and excavation services. One prehistoric site was excavated and reported on; a series of living features were discovered and also reported. The final monitoring report described the paleontological and archaeological findings. A separate technical report on the archaeological excavations was also prepared. Mr. O'Neil directed research into historic and prehistoric background, and prepared the final assessment of potential impacts. Prepared for the Orange County Department of Public Works.

NEPA and CEQA Documentation, Los Angeles Regional Interoperable Communications System (LA-RICS), Los Angeles County, CA: 2011–2014

Mr. O'Neil is part of UltraSystems team currently preparing technical studies and NEPA and CEQA documentation toward the construction of LA-RICS, an $800-million emergency communications system due to be operational in 2016. LA-RICS will provide a highly coordinated emergency communications system to all first-responders to natural and man-made disasters throughout Los Angeles County. Mr. O'Neil is the cultural and historical resources studies team leader, directing five researchers. These studies include coordination of field visits to all 260-plus locations for an archaeologist and/or an architectural historian with agency escorts to observe and record any onsite prehistoric and historic features, performing records and literature searches at archaeology information centers and local archives, contacting local agencies for historically listed structures and districts, coordinate public notices of the project throughout Los Angeles County, consultation with the NAHC and all local tribal organizations, and direct consultation with the California State Historic Preservation Officer (SHPO). This information was compiled by Mr. O'Neil and is used to prepare FCC historical resource forms which were submitted to the SHPO for review.

Rodrigo Jacobo, MA, BA

Historian/ Cultural Resources Specialist

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Years of Experience
10

Years with Firm
>1

Education

- Bachelor's Degree in History, with an emphasis on Latin American Studies from the University of California, San Diego
- Master's Degree in History, with an emphasis on Latin America/US History from National University
- Online Teaching Certificate in General Education from Palomar College.

Areas of Expertise

- Word
- Excel
- PowerPoint
- Bilingual: Fluent in Spanish

PROFESSIONAL SUMMARY

Rodrigo Jacobo has worked as an academic research historian since 2013 and as an adjunct professor of history since 2017. As both a research historian and adjunct professor he specialized not only in history but also ethnic and cultural studies. He has extensive expertise in the application of research methods and analysis, qualitative and quantitative, as well as the utilization of archival records and primary sources. He has worked with other historians and professionals to compile and compose historical reports, monographs and historiographies. In addition to his historical and research skills, he is also a well-spoken public speaker, a skill he mastered as an academic. He holds a BA from the University of California, San Diego (UCSD) and an MA from National University (NU) in history.

ULTRASYSTEMS PROJECT EXPERIENCE

Kaizer Permanente Medical Center Project, Redlands, California, San Bernardino County, CA; 2023

The Project consists of the expansion of the existing Kaiser Permanente Redlands Medical Offices site in multiple phases – the first phase is a new 4-stpry Medical Office Building/Ambulatory Services Center; the second phase is a 7-story hospital; the third phase is a 4-story Medical Office Buildings; the fourth phase will be an addition to the hospital. UltraSystems conducted a cultural resources study to evaluate the potential presence of prehistoric and historic resources. The project site is 36.5 acres in area. This is located in northeast Redlands, *Redlands, Calif.*, USGS topo quad, R 03 W, T 01 N, in the NE ¼ of Section 19. The subject property was vacant.

Mr. Jacobo conducted an archaeological field survey of the project site in December 2023 with Stephen O'Neil, M.A., RPA, the Principal Investigator and assisted with preparation of the subsequent Phase I cultural resources inventory report. UEI Project 7214.

Fontana Civic Center Expansion Project, City of Fontana, San Bernardino County, CA; 2023

The proposed project includes the construction of a new City Hall and a new Annex Building with minor landscaping improvements. The project boundary covers an area of approximately 10 acres. Currently the site is occupied by the current City Hall and an annex building on a landscaped and hardscape parcel. This is located in central Fontana Redlands, *Fontana, Calif.*, USGS topo quad, R 06 W, T 01 N, in the NW ¼ of Section 18. The subject property is occupied by the current City Hall campus.

Mr. Jacobo conducted an archaeological field survey of the project site in December 2023 with Stephen O'Neil, M.A., RPA, the Principal Investigator and assisted with preparation of the subsequent Phase I cultural resources inventory report. UEI Project 7230.

SELECT HISTORICAL EXPERIENCE

Adjunct History Professor, Palomar College; August 2017 to Ongoing

Currently teaching history at Palomar College, instructing on the following courses: US History, World History, Western Civilization, Chicano Studies, History of the Americas (Latin American Studies). He has taught these courses in both in-classroom and online settings. This demonstrates his expertise in a wide range of historical fields. These classes have been taught using the Blackboard and Canvas platforms. Furthermore, through his time in the

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Rodrigo Jacobo

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classroom, he has gathered more than adequate experience working with students and their many needs, which has allowed him to adapt to a variety of individuals, while exposing him to a wide range of learning skills. Finally, through his experiences as a professor he has gained invaluable knowledge about the means to conduct a class, how to prepare and give lectures, how to grade assignments, how to prepare for a class, to understand the learning capabilities of students and, most importantly how to engage students intellectually. He has worked with students of all backgrounds and learning abilities, as well different age groups, from high school students to older adults. Other duties: Participate in curriculum development of transfer courses; Serve with full-time Humanities faculty as resource staff in the History Department for part-time faculty and for the college at large; Participate in Humanities Program responsibilities including, but not limited to, program development and review, Student Learning Outcomes assessment and review, and course coordination; serve on college-wide committees and work with other university departments and community partners to improve student success; maintain professional currency in the field of history.

Research Historian, Palomar College/Free Agent; August 2013 to Ongoing

Currently assisting a variety of professors in their studies and/or research at Palomar College, San Diego County. Mr. Jacobo has assisted in conducting both qualitative and quantitative research, ex. archival research, but also statistical research. This roll has allowed him to further develop his knowledge and expertise in the fields of history and historical research. Being a research historian has allowed him to gain much knowledge and insight into how to conduct research dealing with anything historical in nature. This position has left Mr. Jacobo with research skills that are multi-disciplinary. Also, as a Research Assistant he has specific duties that include data organization and management, data analysis, interpretation, and discussion of results with research teams and/or professors, auditing data quality, preparation of draft documents and presentations, interacting with professors/researchers, coordinating research staff, monitoring project budgets and timelines, and other research support as needed. Lastly, this work has allowed him to develop strong interpersonal skills, strong oral and written communication skills, strong quantitative and qualitative analysis skills and a strong grounding in research methodology, and the ability to work in a team environment. Other duties: Having expert level understanding of the historical method of research and inquiry, including the ability to conduct basic historical research, speak and write effectively, keep necessary records and prepare reports, and be highly analytical. Also, being able to and having the knowledge of to access data bases and archival holdings for the purpose of conducting research.

History Instructor, Idyllwild Arts Academy; August 2021 to May 2023

Mr. Jacobo worked as a history instructor at the international boarding school, Idyllwild Arts Academy. He taught sophomores, juniors, and seniors in the subjects of World History and US History. He also taught Latin American History and History of World Revolutions, courses that he created. IAA is an international school making it a very diverse environment. Working in this environment allowed him to interact with students of all walks of life and origin. He had the responsibility of teaching these many subjects and carrying out the duties that came with the job, such as giving classes, grading homework and tests and taking part in faculty meetings to collaborate. Such experience includes the ability to develop and implement equity minded classroom pedagogy and initiatives to improve student success and close equity gaps. Other duties included: Possessing an expert level understanding of the historical method of research and inquiry, including the ability to conduct basic historical research, speak and write effectively, maintain necessary records and prepare reports, and be highly analytical; have excellent public speaking skills, and be highly adaptable to situations to take effective action.

Megan B. Doukakis, M.A.

Assistant Project Archaeologist

Education

- M.A. Public Archaeology, California State University, Northridge, 2012–2018
- B.A., Anthropology, California State University, Long Beach, 2011
- University of California, Los Angeles - Pimu Catalina Archaeological Field School, 2010
- International Scholar Laureate Program: Delegation on Anthropology and Archaeology in China, 2009
- Earthwatch Institute, "Unearthing Mallorca's Past" archaeological excavation, Mallorca, Spain, 2005

Professional and Institutional Affiliations

- Phi Kappa Phi National Honor Society, 2011
- Sigma Alpha Lambda, National Leadership and Honor Organization, 2010
- Society for California Archaeology Membership 2012–2015

Professional Experience

Ms. Doukakis has over 12 years of experience as an archaeologist in California. She has conducted pedestrian archaeological survey, test and full scale excavations, archaeological monitoring, laboratory curation of archaeological materials to comply with state and federal historic preservation laws in Southern California and abroad. Ms. Doukakis has authored a number of Phase I, II, and III, ISMND, ICRMP, FCC form, EIR documents and project proposals. She has extensive experience with the California Historical Resources Information System as well as conducting paleontology record searches and the Native American Heritage Commission in conducting record searches and consulting with Native American groups. Ms. Doukakis is proficient at project management and project scheduling for large and small-scale projects.

Select Project Experience

Results of the Condition Assessment, Site Monitoring, and Effects Treatment Plan (CASMET) Marine Corps Base Camp Pendleton, San Diego County, CA

Client: Marine Corps Base Camp Pendleton, Duration: 5/11 to 9/11

Mrs. Doukakis conducted survey and excavation for the USMC Base Camp Pendleton condition assessment project. Areas were tested around Camp Pendleton for the presence and condition of cultural material previously recorded. She also conducted laboratory work and curation for the material collected within excavations. Mrs. Doukakis contributed to the final report with background records searches and prehistoric and historic background writing for the report.

Archaeological Excavation Results Report for the Alton Parkway Extension Project, Orange County, CA

Client: Orange County Department of Public Works; Contract: $357,170, 10/10 to 6/12

Mrs. Doukakis participated in the Alton Parkway project, City of Irvine, Orange County, CA. She was responsible for cleaning and cataloging the artifacts recovered from the excavation and surface collections. She also contributed to the final report by compiling the historical background information.

Identification and Evaluation of Historic Properties ADA Wheelchair Access Ramp Improvement Project, City of Lake Forest, Orange County, CA

Client: City of Lake Forest/Penco, Contract: $2,981.62, Duration: 6/12 to 7/12

Mrs. Doukakis contributed to the cultural resource records search, field survey, Native American contacts and report writing for this project. This residential area required wheelchair access ramps on every corner in this neighborhood. An assessment of the possible cultural resources that may be affected with this construction was made for the City of Lake Forest. Mrs. Doukakis contributed the historic and prehistoric background, and the assessment of the possible resources in the area.

Tenaska Solar Projects Imperial Solar Energy Center–South; Imperial Solar Energy Center–West; and Wistaria Ranch, Imperial County, CA

Client: Tenaska/CSOLAR Development, Contract: $3,441,809, 10/13 to 8/15.

Mrs. Doukakis conducted Native American contacts for field monitoring, coordinated with subcontractors to initiate cultural and paleontological field surveys, for the several solar energy projects being handled by UltraSystems Environmental in the El Centro area, Imperial County, CA. She contributed different parts of the survey report and monitoring program documents, including historic and prehistoric background, editorial review. At ISEC- West, Mrs. Doukakis was responsible for contacting and organizing Tribal monitors for this project. She contacted tribal organizations and inquired about their interest in providing tribal monitors for this project. directly organized with Native American groups to sign agreements, and fill out tax paperwork. She was also responsible for organizing and keeping track of and gathering field log from monitors from six tribal groups. She also recovered previously recorded artifacts in the field before the start of the project.

NEPA and CEQA Documentation, Los Angeles Regional Interoperable Communications System -Long Term Evolution, Los Angeles County, CA

Client: LARICS Joint Powers Authority, Contract: $3,051,312, 1/12 to 1/15.

UltraSystems' team prepared technical studies and NEPA and CEQA documentation toward the construction of LA-RICS-LTE, an $800-million emergency communications system that will provide a highly coordinated emergency communications system to all first-responders to natural and man-made disasters throughout Los Angeles County. For this project Mrs. Doukakis conducted record searches at the South Central Coastal Information Center for the Department of Commerce on over 300 project sites throughout the County of Los Angeles. She helped prepare letters to the NAHC and tribal organizations associated with the project area. Mrs. Doukakis contributed to contacting, organizing, and scheduling architectural historians to conduct historical research around the project areas. Letters were written for contact to local agencies and cities. A public notice was constructed and published in three local newspapers. Mrs. Doukakis also constructed hundreds of Federal Communications Commission 620 and 621 forms for submission to California State Historic Preservation Office.

Newton Canyon Monitoring Project, CA

Client: County of Los Angeles Department of Public Works, Contract: $2,930.00, Duration: 7/13 to 12/13

Mrs. Doukakis was an archaeological monitor for this project. She monitored all ground disturbing activities as well as lightly surveying the area for cultural material. Mrs. Doukakis also conducted the records center research at the South Central Coastal Information Center at CSUF. Through email, letter, and telephone correspondence, Mrs. Doukakis contacted the NAHC and associated tribal groups.

ATTACHMENT C

NATIVE AMERICAN HERITAGE COMMISSION RECORDS SEARCH AND NATIVE AMERICAN CONTACTS

UltraSystems
environmental•management•planning

April 8, 2022

Government Program Analyst
Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, California 95691

Subject: Cultural Resources Inventory, IBC Multi-Use Trail Along Barranca Channel, in the City of Irvine, Orange County, California. UltraSystems Environmental Project No. 7160.

Dear NAHC Staff,

UltraSystems Environmental, Inc. (UEI) has been contracted by the IBI Group for the City of Irvine to conduct a cultural resources inventory in support of the IBC Multi-Use Trail Along Barranca Channel Project (Project). The Project consists of the development and right-of-way permitting of a multi-use paved trail along the Barranca Channel in the City of Irvine, Orange County, California. UltraSystems will conduct a cultural resources inventory to evaluate the potential presence of prehistoric and historic resources within the project boundary. I am requesting a Native American Contact List of interested tribes, organizations and individuals in the general Project area, and a search of the Sacred Lands File for potential traditional cultural sites in the project area.

The proposed Project would develop and provide right-of-way permitting of a multi-use paved trail along the Barranca Channel between Barranca Parkway and Jamboree Road. The Project will entail the following improvements: an 11-foot wide paved trail with two foot wide shoulders on each side; install safety fencing between the paved trail and the channel; install safety lighting per City standards; install Wayfinding signage; street crossings and associated improvements for paved trail at Alton Parkway and McGaw Avenue; at-grade crossing/coordination for a private driveway serving B. Braun Medical, Inc. (south of Alton Parkway) and at the Burlington Northern & Santa Fe (BNSF) Railway; creating a connection with the entrance gate/bicycle-pedestrian bridge connecting the Kelvin Court Apartments and the driveway near the Main Street Village apartments and parking structure; and other potential improvements for consideration and approval by the City and Orange County Flood Control District/Orange County Public Works which may include landscaping, benches, trash receptacles, and paved trail entrances.

The Project site is within the City of Irvine, located along the Barranca Channel between Barranca Parkway and Jamboree Road. This may be seen on the *Tustin, Calif.*, USGS topographical quadrangle, Range 9 West, Township 5 South, in the SW ¼ of the NW ¼ of projected Section 33 and in the SE ¼ of projected Section 32; and in Range 9 West, Township 6 South, in the W ½ of the NE ¼ of projected Section 5. This is shown on the accompanying map and the Project boundary is depicted with a one-half mile buffer zone.

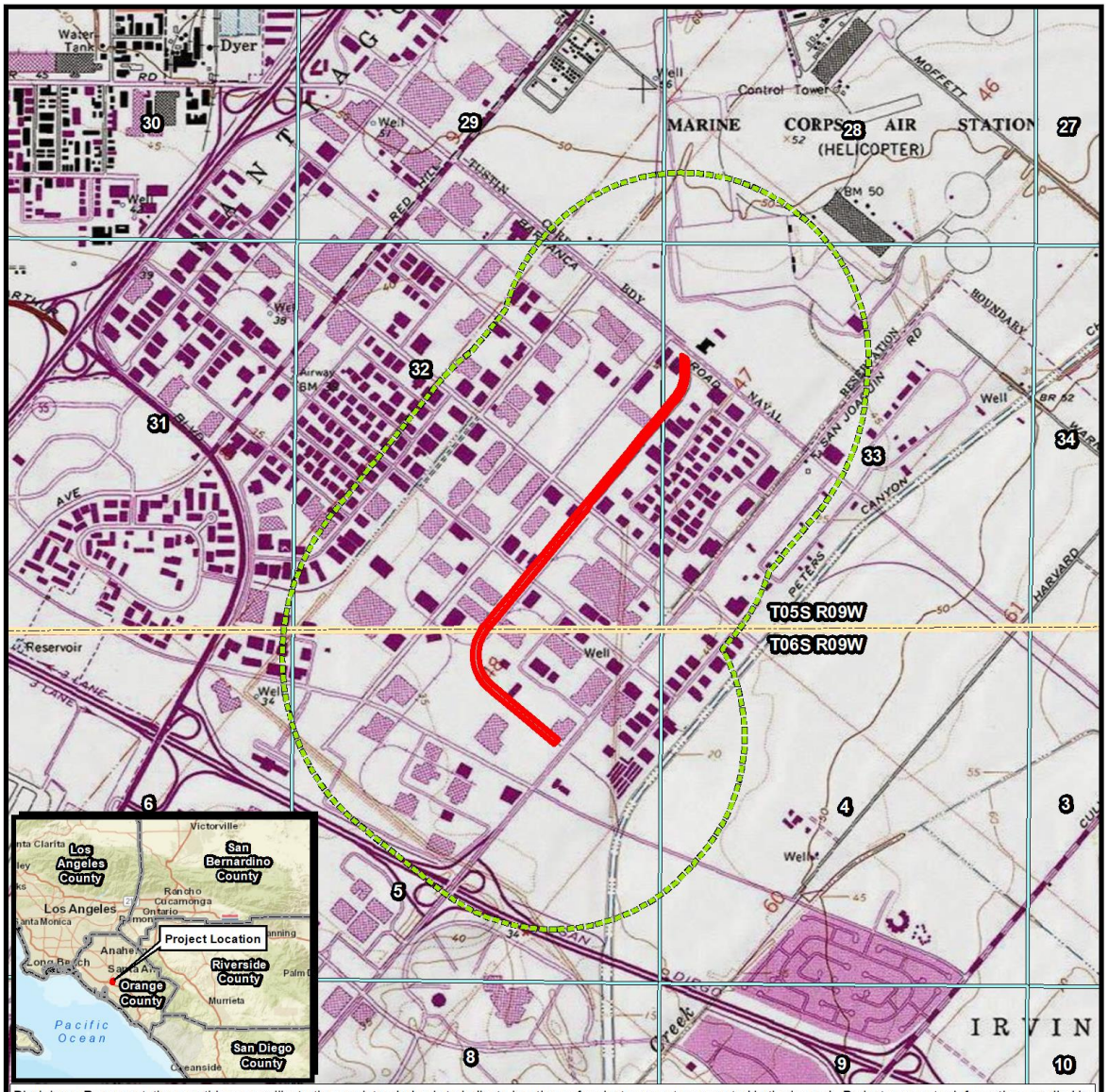
If you require additional information or have any questions, please contact me.

Thank you for your help.

Sincerely,

Stephen O'Neil, M.A., RPA
Cultural Resources Manager
soneil@ultrasystems.com

Corporate Office – Orange County
16431 Scientific Way
Irvine, CA 92618-7443
Telephone: 949.788.4900, ext. 276
Facsimile: 949.788.4901
Website: www.ultrasystems.com



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\Gissvr\gis\Projects\7160_IBI_BarrancaChannel_IS_MND\MXDs\7160_IBI_Barranca_Channel_4_5_Topo_2024_09_06.mxd

September 06, 2024

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Copyright:© 2013 National Geographic Society, i-cubed; CA Dept. of Conservation, May 2019; UltraSystems Environmental, Inc., 2024

Scale: 1:24,000

N

0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Half-Mile Radius
- Township Boundary
- Section Boundary

IBC Multi-Use Trail Along Barranca Channel

Topographic Map
USGS Quadrangle: Tustin
Township: 5S, 6S Range: 9W
Sections: 32, 33, 5

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STATE OF CALIFORNIA Gavin Newsom, Governor

NATIVE AMERICAN HERITAGE COMMISSION

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki, Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Raymond C. Hitchcock
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

May 19, 2022

Stephen O'Neil
UltraSystems Environmental

Via Email to: soneil@ultrasystems.com

Re: IBC Multi-Use Trail Along Barranca Channel Project, Orange County

Dear Mr. O'Neil:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

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

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

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

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Page 1 of 1

Native American Heritage Commission
Native American Contact List
Orange County
5/19/2022

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393 — Gabrieleno
Covina, CA, 91723
Phone: (626) 926 - 4131
admin@gabrielenoindians.org

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693 — Gabrieleno
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com

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

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

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

Juaneno Band of Mission Indians Acjachemen Nation - Belardes
Joyce Perry, Tribal Manager
4955 Paseo Segovia — Juaneno
Irvine, CA, 92603
Phone: (949) 293 - 8522
kaamalam@gmail.com

Juaneno Band of Mission Indians Acjachemen Nation - Belardes
Matias Belardes, Chairperson
32161 Avenida Los Amigos — Juaneno
San Juan Capisttrano, CA, 92675
Phone: (949) 293 - 8522
kaamalam@gmail.com

Pala Band of Mission Indians
Shasta Gaughen, Tribal Historic Preservation Officer
PMB 50, 35008 Pala Temecula Rd. — Cupeno, Luiseno
Pala, CA, 92059
Phone: (760) 891 - 3515
Fax: (760) 742-3189
sgaughen@palatribe.com

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

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

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 IBC Multi-Use Trail Along Barranca Channel Project, Orange County.

PROJ-2022-002828 — 05/19/2022 10:41 AM — 1 of 2

Native American Heritage Commission
Native American Contact List
Orange County
5/19/2022

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

Cahuilla
Luiseno

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 IBC Multi-Use Trail Along Barranca Channel Project, Orange County.

PROJ-2022-002828 | 05/19/2022 10:41 AM | 2 of 2

UltraSystems
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May 19, 2022

Charles Alvarez
Gabrielino-Tongva Tribe
23454 Vanowen Street
West Hills, CA, 91307

Subject: Cultural Resources Inventory, IBC Multi-Use Trail Along Barranca Channel, in the City of Irvine, Orange County, California. UltraSystems Environmental Project No. 7160.

Dear Mr. Alvarez,

UltraSystems Environmental, Inc. (UEI) has been contracted by the IBI Group for the City of Irvine to conduct a cultural resources inventory in support of the IBC Multi-Use Trail Along Barranca Channel Project (Project). The Project consists of the development and right-of-way permitting of a multi-use paved trail along the Barranca Channel in the City of Irvine, Orange County, California. UltraSystems is conducting a cultural resources study to evaluate the potential presence of prehistoric and historic resources within the project boundary.

The proposed Project would develop and provide right-of-way permitting of a multi-use paved trail along the Barranca Channel between Barranca Parkway and Jamboree Road. The Project will entail the following improvements: an 11-foot wide paved trail with two foot wide shoulders on each side; install safety fencing between the paved trail and the channel; install safety lighting per City standards; install Wayfinding signage; street crossings and associated improvements for paved trail at Alton Parkway and McGaw Avenue; at-grade crossing/coordination for a private driveway serving B. Braun Medical, Inc. (south of Alton Parkway) and at the Burlington Northern & Santa Fe (BNSF) Railway; creating a connection with the entrance gate/bicycle-pedestrian bridge connecting the Kelvin Court Apartments and the driveway near the Main Street Village apartments and parking structure; and other potential improvements for consideration and approval by the City and Orange County Flood Control District/Orange County Public Works which may include landscaping, benches, trash receptacles, and paved trail entrances.

As part of the cultural resources study for the Project, I am writing to request your input on potential Native American resources in or near the Area of Potential Effect (APE). In a letter dated May 19, 2022, the Native American Heritage Commission stated: "A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative" [emphasis in the original]. The Commission recommended that local Native American individuals and organizations be contacted be contacted for further information, including the Gabrielino-Tongva Tribe.

The Project site is within the City of Irvine, located along the Barranca Channel between Barranca Parkway and Jamboree Road. This may be seen on the *Tustin, Calif.*, USGS topographical quadrangle, Range 9 West, Township 5 South, in the SW ¼ of the NW ¼ of projected Section 33 and in the SE ¼ of projected Section 32; and in Range 9 West, Township 6 South, in the W ½ of the NE ¼ of projected Section 5. This is shown on the accompanying map and the Project boundary is depicted with a one-half mile buffer zone. The project site is set among commercial and light industrial development on all sides.

If you require additional information or have any questions, please contact me.

Thank you for your help.

Sincerely,

Stephen O'Neil, M.A., RPA
Cultural Resources Manager
soneil@ultrasystems.com
Corporate Office – Orange County
16431 Scientific Way
Irvine, CA 92618-7443
Telephone: 949.788.4900, ext. 276
Facsimile: 949.788.4901
Website: www.ultrasystems.com

SAMPLE

ICB Multi-Use Barranca CREEK Trail PROJECT
CITY OF IRVINE,
Orange County, California. [UltraSystems #7160]
Native American Contact Log

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contact	Comments
Cody Campagne, Cultural Resources Analyst	Native American Heritage Commission	N/A	April 8, 2022 (request) May 19, 2022 (response)	N/A	Request for Sacred Lands File search and local Native American representatives contact information was made on April 8, 2022. Response received May 19, 2022 from Cody Campagne with negative results.
Andrew Salas, Chairperson	Gabrieleno Band of Mission Indians – Kizh Nation	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project requesting a reply was left. No response to date.
Anthony Morales, Chairperson	Gabrieleno / Tongva San Gabriel Band of Mission Indians	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Sandonne Goad, Chairperson	Gabrieleno / Tongva Nation	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Robert Dorame, Chairperson	Gabrielino Tongva Indians of California Tribal Council	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contact	Comments
					no answer, and a message describing the project and requesting a reply was left. No response to date.
Christina Conley, Tribal Consultant and Administrator	Gabrielino Tongva Indians of California Tribal Council	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Charles Alvarez, Chairperson	Gabrieleno- Tongva Nation	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Joyce Perry, Tribal Manager	Juaneño Band of Mission Indians - Acjachemen Nation	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	N/A	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. On March 6, 2024, Joyce Perry, Tribal Manager responded via email, stating that the tribe has no concerns regarding the project.
Matias Belardes, Chairperson	Juaneño Band of Mission Indians - Acjachemen Nation	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	N/A	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. See response from Joyce Perry above.
Shasta Gaughen, Tribal Historic Preservation Officer	Pala Band of Mission Indians	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and

Name	Tribe/Affiliation	Letter Contacts	E-mail Contacts	Telephone Contact	Comments
					requesting a reply was left. No response to date.
Lovina Redner, Tribal Chair	Santa Rosa Band of Cahuilla Indians	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Isaiah Vivanco, Chairperson	Soboba Band of Luiseno Indians	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.
Joseph Ontiveros, Cultural Resource Department	Soboba Band of Luiseño Indians	May 19, 2022 (original) February 1, 2024 (re-sent)	May 19, 2022 (original) February 1, 2024 (re-sent)	March 8, 2024	Letter and email describing the project and requesting input on concerns was re-sent on February 1, 2024. A phone call was made on March 8, 2024; there was no answer, and a message describing the project and requesting a reply was left. No response to date.

From: Joyce Perry
To: Rodrigo Jacobo
Subject: Re: Project 7160 - Cultural Resources Study, IBC Multi-Use Trail Along Barranca Channel, Irvine, Orange County, California
Date: Wednesday, March 6, 2024 12:18:39 PM
Attachments: image001.png

Hi Jacobo,

After reviewing the project description, we have no concerns.

Thank you,
Joyce Stanfield Perry
Húu'uni 'óomaqati yáamaqati- Teach peace

Payomkawichum Kaamalam - President
kaamalam.com

Juaneño Band of Mission Indians, Acjachemen Nation
Cultural Resource Director

ATTACHMENT D

CHRIS RECORDS SEARCH BIBLIOGRAPHY

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00246		1978	Cottrell, Marie G.	Report of Archaeological Resources Assessment Conducted for the Irvine Industrial Complex-west		30-000121, 30-000287
OR-00252		1978	Desautels, Roger J.	Cultural Resources Report- Peliminary Assessment on the Proposed San Diego Creek Watershed Erosion and Sedimentary Control System in Hicks Canyon, Hicks Canyon Wash, Rattlesnake Creek Wash, San Diego Creek, and the San Joaquin Marsh Located in Orange Coun	Scientific Resource Surveys, Inc.	30-000115, 30-000116, 30-000121, 30-000195, 30-000196, 30-000197, 30-000284, 30-000478, 30-000511, 30-000513, 30-000719
OR-00305		1979	Schroth, Adella	The History of Archaeological Research on Irvine Ranch Property: the Evolution of a Company Tradition	Archaeological Resource Management Corp.	30-000002, 30-000044, 30-000047, 30-000048, 30-000051, 30-000053, 30-000059, 30-000060, 30-000061, 30-000062, 30-000063, 30-000064, 30-000065, 30-000066, 30-000067, 30-000068, 30-000069, 30-000070, 30-000071, 30-000072, 30-000073, 30-000077, 30-000091, 30-000099, 30-000100, 30-000104, 30-000106, 30-000107, 30-000109, 30-000111
OR-00314		1978	Desautels, Roger J.	Archaeological Survey Report on 2.875 Acres Located on Main Street, Irvine, County of Orange	Scientific Resource Surveys, Inc.	
OR-00362		1967	Desautels, Roger J.	Archaeological Report: CA-ora 195, Orange County, California	Archaeological Research, Inc.	30-000195
OR-00440		1979	Mabry, Theo N.	Records Search and Reconnaissance Harvard Avenue Extension City of Irvine, California	Archaeological Planning Collaborative	30-000111
OR-00441		1979	Mabry, Theo N.	Archaeological Records Search and Reconnaissance Survey Main Street/jamboree Road, Irvine, California	Archaeological Planning Collaborative	
OR-00808		1979	Unknown	Final Environmental Impact Report Regional Domestic Water Storage and Transmission Facilities From Diemer/sac and Wellfield Systems to Existing Distribution Network	Culp/Wesner,Culp	30-000344, 30-000349, 30-000382, 30-000383

Page 1 of 5 SCCIC 6/7/2022 3:24:04 PM

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00847		1985	Padon, Beth	Archaeological Resource Inventory City of Irvine and its Sphere of Influence	LSA Associates, Inc.	30-000161, 30-000349, 30-000361, 30-000383, 30-000478, 30-000494, 30-000495, 30-000496, 30-000499, 30-000545, 30-000601, 30-000734, 30-000735, 30-000767, 30-000803, 30-000804, 30-000805, 30-000806, 30-000807, 30-000808
OR-00863		1987	Bissell, Ronald M.	Cultural Resources Reconnaissance of Jamboree Center, Phase 2, Irvine, Orange County, California	RMW Paleo Associates, Inc.	
OR-00969		1989	Jertberg, Patricia R.	Cultural Resource Assessment Jamboree Road Widening	LSA Associates, Inc.	
OR-01099		1979	Cooley, Theodore G.	Archaeological Resources Assessment Conducted for Proposed Irvine Ranch Water District Pipeline Right of Ways	Archaeological Resource Management Corp.	30-000344, 30-000349, 30-000382, 30-000383, 30-000556, 30-000647, 30-000806, 30-000807, 30-000808, 30-000809, 30-000810, 30-000811
OR-01170		1991	Rosenthal, Jane	Addendum to Cultural Resources Assessment Jamboree Road Widening Irvine, California	LSA Associates, Inc.	19-000195
OR-01357		1993	White, Robert S. and Laura S. White	An Extended Literature and Records Search Addressing Prehistorical Archaeological Resources Located Within the Boundaries of the US Marine Corps Air Station (mcas), Tustin Orange County, California	Archaeological Associates, Ltd.	30-000353, 30-000373, 30-000381
OR-01413		1993	Whitney-Desautels, Nancy A. and David A. Kice	Cultural Resources Assessment of the Irvine Ranch Water District Alternate Aqueous Waste Disposal Facility Sites, Orange County, California	Scientific Resource Surveys, Inc.	
OR-01784		1998	Brechbiel, Brant A.	Cultural Resources Records Search and Literature Review Report for a Pacific Bell Mobile Services Telecommunications Facility: Cm 092-26 in the City of Irvine, California	Chambers Group, Inc.	
OR-02175		2000	Duke, Curt	Cultural Resource Assessment for At&t Wireless Services Facility Number C940.1, County of Orange	LSA Associates, Inc.	
OR-02200		2000	Atchley, Sara M.	Cultural Resources Investigation for the Nextlink Fiber Optic Project, Los Angeles and Orange Counties, California	Jones & Stokes	
OR-02225	Other - Irvine Ranch	1978	Strozier, Hardy	The Irvine Company Planning Process and California Archaeology- A Review and Critique	The Irvine Company	

Page 2 of 5 SCCIC 6/7/2022 3:24:04 PM

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-02235		2000	Duke, Curt	Revised Cultural Resource Assessment for At&t Wireless Services Facility Number C940.1, County of Orange, Ca	LSA Associates, Inc.	
OR-02247		2000	Alcock, Gwyn	Cultural Resources Investigation for the Nextlink Fiberoptic Project, Los Angeles and Orange Counties, Califonria (first Addendum); Nextlink Project Number: 17033-2	Jones & Stokes	
OR-02256		1999	Demcak, Carol R.	Cultural Resources Assessments for Orange County Sanitation Districts	Archaeological Resource Management Corp.	30-000083, 30-000084, 30-000085, 30-000086, 30-000087, 30-000144, 30-000277, 30-000288, 30-000289, 30-000300, 30-000352, 30-000353, 30-000381, 30-001352
OR-02350		1974	Crabtree, Robert H.	Conclusion of Archaeological Investigations on a Portion of 105 Acres Located East of Jamboree Road, South of San Diego Freeway	ARI	30-000195
OR-02352		1979	Unknown	Records Search and Reconnaissance Harvard Avenue Extension City of Irvine, California	Archaeological Planning Collaborative	30-000111, 30-000112, 30-000119, 30-000120
OR-02470		2002	Duke, Curt	Cultural Resource Assessment Cingular Wireless Facility No. Sc 036-02 Orange County, California	LSA Associates, Inc.	
OR-02485		2001	Chakurian, Anthony	Site Id Number C940_jamboree/alton, Proposed At&t Wireless Telecommunications Equipment Installatin 17052 Jamboree Road, Irvine, California 92614	Geo Trans, Inc.	
OR-02534		1976		Annual Report to The Irvine Company from Archaeological Research, Inc.	ARI	30-000051, 30-000064, 30-000099, 30-000100, 30-000106, 30-000119, 30-000130, 30-000184, 30-000196, 30-000197, 30-000484, 30-000518, 30-000575
OR-02600		1975	Cottrell, Marie G.	Archaeological Research, Inc. Quarterly Report	Archaeological Research, Inc.	30-000064, 30-000111, 30-000119, 30-000120, 30-000195, 30-000196, 30-000202, 30-000203, 30-000228, 30-000373, 30-000378, 30-000475, 30-000508, 30-000511, 30-000575
OR-03198		2005	Bonner, Wayne H.	Cultural Resources Records Search Results and Site Visit for Cingular Wireless Candidate Oc-0053-02 (performance Equipment) 1902 Mcgaw, Avenue, Irvine, Orange County, California	Michael Brandman Associates	

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OR-03203		2005	Bonner, Wayne H.	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate Cm-092-01 (oc-005-01) Schiffman Enterprises, 17462 Von Karman Avenue Irvine, Orange County, California	Michael Brandman Associates	
OR-03373		2006	Arrington, Cindy and Nancy Sikes	Cultural Resources Final Report of Monitoring and Findings for the Qwest Network Construction Project State of California: Volumes I and Ii	SWCA Environmental Consultants, Inc.	
OR-03476		2007	Bonner, Wayne H.	Cultural Resource Records Search and Site Visit Results for Royal Street Communications, Llc Candidate La2512a (murphy & Corporate Park), 2802 Barranca Park Way, Irvine, Orange County, California	Michael Brandman Associates	
OR-03486		2007	Baker, Cindy and Mary L. Maniery	Cultural Resource Inventory and Evaluation of United States Army Reserve 63d Regional Readiness Command Facilities	PAR Environmental Services, Inc.	19-003659, 19-186589, 19-187950, 19-187951, 19-187952, 19-187953, 19-187954, 19-187955, 19-187956, 30-176836, 30-176837
OR-03559		2009	Lorna Billat	New Tower Submission Packet: Cartel Industries, LA2795C	EarthTouch, Inc.	
OR-04000		2010	Strauss, Monica, Ehringer, Candace, and Bray, Madeleine	Irvine Ranch Water District Wells 21 and 22 and Tustin Legacy Well 1 (TL-1) Projects, Phase I Cultural Resources Assessment	ESA	30-000300, 30-000301, 30-000350, 30-000351, 30-000353, 30-000373, 30-000381, 30-001652
OR-04136		2000	Weitze, Karen and Christy Dolan	Historic American Building Survey for the Marine Corps Air Station, Tustin Lighter-Than-Air Ship Hangarss (HABS No. CA-2707), Orange County, California	KEA Environmental, Inc.	
OR-04137		2008	Unknown	The Tustin Hangars: Titans of History - An Historical Account of the MCAS Tustin Hangars	RBF Consulting and Petrone Communications	
OR-04220		2012	Helton, Clint	Cultural Resources Analysis for the Tustin US Army Reserve Center Proposed Military Construction Project	CH2MHill	
OR-04265		2013	Brown, Joan, Deering, Mark, and Sawyer, William	Archaelogical Resource Monitoring During Excavation Activities for Tustin Legacy Expansion, City of Tustin, County of Orange, California	Paleo Solutions	30-001725, 30-001726, 30-100190, 30-100191, 30-100192, 30-100193, 30-100194, 30-100195, 30-100196, 30-100197, 30-100198, 30-100199, 30-100200, 30-100201

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OR-04488		2014	Vader, Michael, Matt Gonzalez, Madeleine Bray, and Chris Lockwood	Archaeological Survey Report for the Peters Canyon Channel Water Capture and Reuse Pipeline Project, Irvine and Tustin, Orange County, California	ESA	

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