

Appendix C

Cultural Resources Assessment

This document is designed for double-sided printing to conserve natural resources.

April 24, 2024

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University of California, Davis
2801 Second Street
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RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Dear Ms. Hyland:

In support of the South Coast Research and Extension Center (REC) Project (project), Michael Baker International completed a South Central Coastal Information Center (SCCIC) records search, literature and historical map review, review of Native American Heritage Commission (NAHC) Sacred Lands File search results; Irvine Historical Society outreach; built environment and archaeological field survey; California Register of Historical Resources (California Register) evaluation; and buried archaeological site sensitivity analysis to determine if the project area contains historical resources, as defined in California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), that may be impacted by the project. The project is subject to CEQA review; the Regents of the University of California (University), is the lead agency. Methods, results, and recommendations are summarized below.

PROJECT DESCRIPTION

The proposed project would construct a new Engagement Center at the southeast corner of the South Coast REC to support existing programming. The construction of a new Engagement Center would include landscaping, utility connections, and internal roadway improvements to facilitate ingress/egress to the proposed development and through the South Coast REC.

The project proposes to demolish the former agricultural irrigation pond situated at the southeast corner of the South Coast REC to construct the new Engagement Center. Overall, the Engagement Center would include approximately 13,750 square feet of building space, including a conference center, demonstration kitchen, classrooms, audio/video technical center, and ancillary uses. The approximately 6,000-square-foot conference center would be designed with a flexible, open concept to allow for reprogramming to accommodate a range of activities and events, with capacity for up to 200 people. An approximately 7,750-square-foot building adjacent to the conference center would include the other proposed indoor uses (e.g., classrooms, demonstration kitchen, and roof observation deck). The demonstration kitchen would be approximately 800 square feet and provide a space for food preparation and cooking as part of on-site engagement and extension activities. Connected to the kitchen would be approximately 5,400 square feet of classroom space, as well as the audio/video technical center for production and storage associated with broadcasting events and classes, restrooms, break rooms, and additional storage.

Connecting the conference center and kitchen/classroom building would be an approximately 22,000-square-foot, partially covered outdoor plaza. The design would be a flexible, hardscaped area

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to be used for overflow of larger events. Additionally, the Engagement Center would include a 1.25-acre outdoor space adjacent to the conference center as part of the University's Master Gardener program. This space would include a range of landscapes for the purpose of food and water educations.

PROJECT AREA

The project area, which includes project activities associated with demolition, site preparation, and construction, comprises a portion of Assessor's Parcel Number 591-182-01 in Irvine, California. The maximum depth of ground disturbance is estimated to be 8 feet below ground surface. The project area is mapped within the *El Toro, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle map Township 5 South, Range 8 West, Section Rancho Lomas de Santiago (see **Attachment 1**).

CULTURAL RESOURCES IDENTIFICATION METHODS

The methods and results of the SCCIC records search, literature and historical map search, NAHC Sacred Lands File search results review, historical society consultation, archaeological and built environment field survey, California Register evaluation, and buried archaeological site sensitivity analysis are presented below.

SOUTH CENTRAL COASTAL INFORMATION CENTER

Michael Baker International staff conducted a records search of the project area and half-mile search radius at the SCCIC on December 6 and 19, 2023 (see **Attachment 2**). The SCCIC, as part of the California Historical Resources Information System, California State University, Fullerton, an affiliate of the California Office of Historic Preservation (OHP), is the official state repository of cultural resources records and reports for Orange County. As part of the records search, the following federal and California inventories were reviewed:

- Archaeological Determinations of Eligibility (OHP 2022). The directory includes determinations for eligibility for archaeological resources in Orange County.
- California Inventory of Historic Resources (OHP 2023a).
- California Points of Historical Interest (OHP 2023b).
- California Historical Landmarks (OHP 2023c).
- Built Environment Resources Directory (BERD) (OHP 2023d). The directory includes resources evaluated for listing and listed in the National Register of Historic Places, National Historic Landmarks, California Register, California Historical Landmarks, and California Points of Historical Interest in Orange County.

Results

According to SCCIC records, 6 studies have been previously completed within the project area, and 21 studies have been completed within the quarter-mile search radius, as identified in **Table 1**. No cultural resources are documented within the project area, or quarter-mile search radius and no built environment resources within the project area were identified in the BERD (OHP 2023d).

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TABLE 1: PREVIOUS CULTURAL RESOURCE INVESTIGATIONS WITHIN 0.25 MILES

Report No.	Author(s)	Date	Title	In Project Area?	Resources in Project Area?
OR-00253	Desauteles, Roger J.	1978	<i>The proposed Bee and Round Canyon Landfill Disposal Station Located in the County of Orange, California</i>	Yes	No
OR-00305	Schroth, Adella	1979	<i>The History of Archaeological Research on Irvine Ranch Property: the Evolution of a Company Tradition.</i>	Yes	No
OR-00435	Stickel, Gary E.	1979	<i>City of Los Angeles Hyperion Water Pollution Control Facilities County of Los Angeles Joint Water Pollution Control Plant, and Orange County Sanitation District Proposed Round Canyon Site</i>	Yes	No
OR-00648	Breece, Bill and Beth Padon	1982	<i>Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase II</i>	No	No
OR-00683	Douglas, Ronald D.	1981	<i>Archaeological and Paleontological Resource Assessment, Turtle Rock Enclave Eight Irvine, California</i>	No	No
OR-00696	Cottrell, Marie G. and Del Chario, Kathleen C.	1981	<i>Archaeological and Paleontological Resource Assessment, Turtle Rock Enclave Eight Irvine, California</i>	No	No
OR-00847	Padon, Beth	1985	<i>Archaeological Resource Inventory City of Irvine and its Sphere of Influence</i>	Yes	No
OR-01022	Del Chario, Kathleen C., Drummy-Chapel, Vada, and Demcak, Carol R.	1989	<i>Cultural Resource Assessment for the Allen-McColloch Pipeline (AMP) Flow Augmentation Project Reaches S4B/S5</i>	No	No
OR-01233	Cottrell, Marie G. and Wagner, Hugh M.	1990	<i>Tomato Springs: Additional Research Results</i>	No	No
OR-01592	Becker, Kenneth M.	1997	<i>Evaluation of the Cultural Resources of the Bee Canyon Retarding Basin, Orange County, California</i>	No	No
OR-02225	Strozier, Hardy	1978	<i>The Irvine Company Planning Process and California Archaeology- A Review and Critique</i>	Yes	No
OR-02343	Bissell, Ronald M.	2001	<i>Peer Review of 'A Phase I Cultural Resources Inventory for Planning Area 6, Irvine California,' dated 16 March 2001. Authors, Frank McDowell, M.A. and Christopher Drover, Ph.D. Prepared by The Keith Companies,</i>	No	No

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Report No.	Author(s)	Date	Title	In Project Area?	Resources in Project Area?
			<i>Incorporated (TKCI) for the Irvine Community Development Company (ICDC)</i>		
OR-02534	Unknown	1976	<i>Annual Report to The Irvine Company from Archaeological Research, Inc.</i>	Yes	No
OR-02649	Allen, Rebecca	1997	<i>Archeological Survey Report Marine Corps Air Station, El Toro</i>	No	No
OR-02936	Archer, Gavin	2005	<i>Archaeological and Paleontological Monitoring Planning Area 6, Phase 1 Residential 12 kv and Telephone Underground Improvements Portola Parkway (Sr-133 to Sta 151+00) Proposed Assessment District 04-20 and Tentative Tract 16562</i>	No	No
OR-02938	Drover, Christopher E., Henry C. Koerper, and Craig Lambert	2001	<i>A Cultural Resources Inventory for Planning Area 6, Irvine, California With Appendices</i>	No	No
OR-02947	Smith, David M. and Christopher E. Drover	2001	<i>A Phase II Test for Eligibility Lambert Reservoir Irvine, California</i>	No	No
OR-03291	Strudwick, Ivan H. and Shannon Carmack	2005	<i>Cultural Resource Assessment the Lambert Ranch Project City of Irvine Orange County, California</i>	No	No
OR-03331	Billat, Lorna	2006	<i>Uc Davis Monopalm/la-2794b, 7601 Irvine Boulevard, Irvine, Orange County, Ca 92618</i>	No	No
OR-03364	Billat, Lorna	2004	<i>Honor Farm/7648a, 7601 Irvine Blvd, Irvine, CA, Orange County</i>	No	No
OR-03483	Bonner, Wayne H.	2006	<i>Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA02878B (UC Ag Research), 7681 Irvine Boulevard, Irvine, Orange County, California</i>	No	No
OR-04036	Archer, Gavin, David C. Hanna, Matthew Wetherbee, and Mark R. Deering	2007	<i>Archaeological Data Recovery at Sites PA6-15 and -18 and CA-ORA-244, Locus G Planning Area 6, Phase 2, Neighborhood 4A Irvine, California</i>	No	No
OR-04037	Archer, Gavin and David Hanna	2008	<i>Archaeological Discovery Report and In Situ Preservation Plan Site PA6-17 Planning Area 6 Phase II, Neighborhood 4A Irvine, California</i>	No	No
OR-04039	Archer, Gavin	2007	<i>Pre-construction Archaeological</i>	No	No

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Report No.	Author(s)	Date	Title	In Project Area?	Resources in Project Area?
			<i>Investigations for the Planning Area 6, Phase I Project including Archival Research, Test Excavations, Data Recovery Excavations, Tree Removal Monitoring, and Re-survey</i>		
OR-04040	Archer, Gavin	2007	<i>Archaeological Monitoring and Investigations During Construction Planning Area 6, Neighborhoods 1 and 2, City of Irvine</i>	No	No
OR-04041	Archer, Gavin	2007	<i>Preliminary Draft Report Test Excavation and Evaluation of Archaeological Discovery PA6-11 and Discovery Treatment Plan Neighborhood 4A, Planning Area 6, City of Irvine</i>	No	No
OR-04339	Underbrink, Susan and Ileana Bradford	2014	<i>Cultural Resource Monitoring Report, Paseo de Verdugo Project San Juan Capistrano, Orange County, California</i>	No	No

The records search results indicated that 44 previously recorded cultural resources are recorded within a half-mile radius of the project area (**Table 2**). None of the 44 resources intersect the current project area.

TABLE 2: PREVIOUSLY RECORDED RESOURCES WITHIN 0.50 MILES OF PROJECT AREA

Primary #	Trinomial	Attributes	DPR Form Recorder and Updates
P-30-000244	CA-ORA-000244	AP02. Lithic scatter AP11. Hearths/pits AP13. Trails/linear earthworks AP15. Habitation debris	1965 (McKinney, Smith, Pacific Coast Archaeological Society, Inc.) 1977 (J. Neitzel, M. Cottrell, R. Price, T. Schuster, Archaeological Research, Inc.) 1977 (J. Neitzel, M. Cottrell, R. Price, T. Schuster, Archaeological Research, Inc.) 1979 (R. Brown, Environmental Research Archaeologists) 2001 (Edward [Ted] Shickler and Craig E. Lambert, The Keith Companies, Inc.) 2008 (Dave Hanna, Stantec)
P-30-000545	CA-ORA-000545	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	1976 (COOLEY, Pacific Coast Archaeological Society, Inc.) 1982 (Breece, William) 2001 (Shickler, Edward, & Craig E. Lambert, The Keith Companies) 2007 (G. Cardenas, Stantec Consulting)

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Primary #	Trinomial	Attributes	DPR Form Recorder and Updates
P-30-001588	CA-ORA-001588	AP02. Lithic scatter AP12. Quarry AP15. Habitation debris	2001 (E. Shickler, The Keith Companies)
P-30-001592	CA-ORA-001592	AP02. Lithic scatter AP15. Habitation debris	2001 (E. Shickler, The Keith Companies) 2004 (D. Ewers, M. Deering, Stantec Consulting)
P-30-001594	CA-ORA-001594	AP02. Lithic scatter AP15. Habitation debris	2001 (E. Shickler, The Keith Companies)
P-30-001595	CA-ORA-001595	AP02. Lithic scatter AP12. Quarry	2001 (E. Shickler, C. Lambert, The Keith Companies) 2008 (Gavin Archer)
P-30-001673	CA-ORA-001673	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	2007 (G. Cardenas, Stantec)
P-30-001675	CA-ORA-001675	AP11. Hearths AP15. Habitation debris	2007 (G. Cardenas, Stantec)
P-30-001676	CA-ORA-001676	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	2007 (G. Cardenas, Stantec)
P-30-001677	CA-ORA-001677	AP02. Lithic scatter AP07. Architectural feature AP11. Quarry AP15. Habitation debris	2007 (G. Cardenas, Stantec)
P-30-001678	CA-ORA-001678	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	2007 (G. Cardenas, Stantec)
P-30-001679	CA-ORA-001679	AP11. Hearths/pits	2007 (G. Cardenas, Stantec)
P-30-001680	CA-ORA-001680	AP02. Lithic scatter AP11. Hearths/pits	2007 (G. Cardenas, Stantec)
P-30-001685	CA-ORA-001685	AP02. Lithic scatter	2004 (Daniel G. Ewers, Mark R. Deering, Stantec) 2008 (Gavin Archer)
P-30-001704	CA-ORA-001704	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	2008 (G. Archer, Stantec)
P-30-001705	CA-ORA-001705	AP02. Lithic scatter AP11. Hearths/pits AP15. Habitation debris	2007 (G. Cardenas and G. Archer, Stantec)
P-30-001706	CA-ORA-001706	AP02. Lithic scatter AP11. Hearths/pits	2007 (G. Cardenas and G. Archer, Stantec)

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Primary #	Trinomial	Attributes	DPR Form Recorder and Updates
P-30-001707	CA-ORA-001707	AP02. Lithic scatter AP11. Hearths/pits	2008 (Gavin Archer and Mark Deering, Stantec)
P-30-100143	N/A	AP02. Lithic scatter	2006 (Mike De Giovine, Stantec)
P-30-100147	N/A	AP02. Lithic scatter	2009 (Mark Deering, Stantec)
P-30-100148	N/A	AP02. Lithic scatter	2009 (Mark Deering, Stantec) (APE): Not evaluated
P-30-100149	N/A	AP02. Lithic scatter	2009 (Mark Deering, Stantec)
P-30-100352	N/A	AH04. Privies/dumps/trash scatters	2004 (Daniel G. Ewers, The Keith Companies)
P-30-100389	N/A	AP02. Lithic scatter	2004 (Scott Crull, Daniel G. Ewers, The Keith Companies)
P-30-100400	N/A	AP02. Lithic scatter	2006 (C. Lash, The Keith Companies)
P-30-100420	N/A	AP02. Lithic scatter	2005 (S. Pentney, The Keith Companies)
P-30-100422	N/A	AP02. Lithic scatter AP15. Habitation debris	2005 (R. Norton, The Keith Companies)
P-30-100423	N/A	AP02. Lithic scatter	2005 (R. Mills, The Keith Companies)
P-30-100424	N/A	AP02. Lithic scatter	2005 (G. Cardenas, The Keith Companies); 2008
P-30-100425	N/A	AP02. Lithic scatter	2005 (C. Lash, The Keith Companies)
P-30-100426	N/A	AP15. Habitation debris	2005 (G. Cardenas, The Keith Companies)
P-30-100427	N/A	AP02. Lithic scatter	2005 (G. Cardenas, Stantec)
P-30-100429	N/A	AP02. Lithic scatter	2005 (K. Rice, Stantec)
P-30-100430	N/A	AP02. Lithic scatter	2005 (K. Rice, Stantec)
P-30-100431	N/A	AH04. Privies/dumps/trash scatters AP02. Lithic scatter	2005 (K. Rice, Stantec)
P-30-100432	N/A	AP02. Lithic scatter AP16. Other	2005 (G. Maxwell, Stantec)
P-30-100434	N/A	AP02. Lithic scatter	2005 (G. Cardenas, Stantec); 2008 (Cathy Lash, Stantec)
P-30-100435	N/A	AP02. Lithic scatter	2005 (S. Pentney, Stantec)
P-30-100437	N/A	AP04. Bedrock milling feature	2005 (S. Pentney, Stantec)
P-30-176636	N/A	HP22. Reservoir	2001 (E. Shickler, The Keith Companies)
P-30-176637	N/A	HP39. Other	2001 (E. Shickler, The Keith Companies)
P-30-176638	N/A	HP39. Other	2001 (E. Shickler, The Keith Companies); 2004 (S. Crull, The Keith Companies)
P-30-176639	N/A	HP33. Farm/Ranch HP39. Other	2001 (E. Shickler, The Keith Companies)
P-30-176640	N/A	HP02. Single Family Property	2001 (E. Shickler, The Keith Companies)

LITERATURE AND HISTORICAL MAP REVIEW

Michael Baker International staff reviewed literature and historical maps for information about the project area and the vicinity. Below is a list of resources reviewed, followed by a narrative description of the results.

Historical Maps

- *Corona, California*, 1:125,000 topographic map (USGS 1902)
- *Corona, California*, 1:125,000 topographic map (USGS 1911)
- *Corona, California*, 1:125,000 topographic map (USGS 1920)
- *El Toro, California*, 1:31,680 topographic map (USGS 1935)
- *Santiago Peak, California*, 1:62,500 topographic map (USGS 1943)
- *El Toro, California*, 1:24,000 topographic map (USGS 1950)
- *El Toro, California*, 1:24,000 topographic map (USGS 1970)

Historical Aerial Images

- Historicaerials.com (2023)
- Orange County Archives (2023)
- University of California, Santa Barbara Library (UCSB) Geospatial Collection (2023)

Historical Databases

- Ancestry.com (2023)
- Calisphere (2023)
- Internet Archive (2023)
- Newspapers.com (2023)

Literature

- "The Archaeology of California" (Arnold, Walsh, and Hollimon 2004)
- "Gabrielino" (Bean and Smith 1978)
- "One If by Land, Two If by Sea: Who Were the First Californians?" (Erlandson et al. 2007)
- *Handbook of the Indians of California* (Kroeber 1925)
- *A Field Guide to American Houses: The Definitive Guide to Identifying and Understanding America's Domestic Architecture* (McAlester 2013)
- *The First Angelinos: The Gabrielino Indians of Los Angeles* (McCawley 1996)
- *California Archaeology* (Moratto 1984)

Prehistoric Context

Several southern California regional syntheses exist; this study uses the cultural sequence developed by Mason and Peterson (2014) because it was developed locally using a large number of dated sites (n = 37) and over 300 radiocarbon dates (see Table 3).

TABLE 3: SOUTHERN CALIFORNIA CULTURAL SEQUENCE (AFTER MASON AND PETERSON 2014)

Period	Year Before Present (BP)	Calendar Years (AD/BC)
Mission	181-116	AD 1769-1834
Late Prehistoric 2	650-181	AD 1300-1769

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Late Prehistoric 1	1350-650	AD 600-1300
Intermediate	3000-1350	1050 BC-AD 600
Milling Stone 3	4650-3000	2700-1050 BC
Milling Stone 2	5800-4650	3850-2700 BC
Milling Stone 1	8000-5800	6050-3850 BC
Paleo-Coastal	Prior to 8000	Prior to 6050 BC

Paleo-Coastal (Paleoindian) Period (Prior to 6050 BC / 8000 BP)

The search for the earliest Paleo-coastal communities has been predicated on the “Ice Free Corridor” theory—that at the end of the Pleistocene (~11,700 years BP), people from northeast Asia crossed Beringia and entered the western United States through a gap between the Laurentide and Cordilleran ice sheets, after which they moved to settle the coasts. However, paleontological, geological, and pollen analyses have shown that the so-called “Ice Free Corridor” was not a viable migration option from 30,000 to 11,500 years ago (Mandryk et al. 2001). Additionally, with the increase in the number of accepted sites dated prior to 11,700 BP (e.g., Monte Verde, Chile at 14,800 BP), including several coastal California Channel Island sites (e.g., Arlington Springs on Santa Rosa Island at 13,000 calibrated [cal] BP and Daisy Cave on San Miguel Island at 12,000 cal BP), new models for the settlement of the New World had to be considered (Erlandson et al. 1996; Johnson et al. 2002).

Paleo-coastal subsistence patterns have predominantly been described as dependent on megafauna hunting as represented by large Clovis-like points in the archaeological record. However, this pattern has not been convincingly identified in coastal California (Erlandson et al. 2007:56). Instead, at early sites such as Daisy Cave, there is evidence of much more diverse subsistence patterns, particularly the use of a variety of marine habitats. As an alternative to the “Ice Free Corridor” theory and considering the cultural material seen at early Channel Islands sites, Erlandson et al. (2007) argue that the earliest New World settlers followed the productive kelp forest habitats that exist along the Pacific Rim. This “kelp highway” allowed settlers to use near-shore marine resources, such as large red abalones (*Haliotis rufescens*), black turban snails (*Tegula funebris*), sea urchin (*Strongylocentrotus* spp.), pinnipeds, sea otter, and California sheephead (*Semicossyphus pulcher*), while ice sheets covered portions of North America. In addition to near-shore marine ecofacts found at early Channel Island sites, Paleo-coastal artifacts include small-stemmed Channel Island barbed points, chipped stone crescents (proposed to be used for bird hunting), fish gorges and evidence of boat technology (Erlandson et al. 2011). There is also evidence of inter-regional trade with the Great Basin, based on the discovery of spire lopped *Olivella biplicata* beads dating to 9000 to 7000 cal BC (Fitzgerald, Jones, and Schroth 2005).

The earliest evidence of the settlement of the Southern Channel Islands comes from Eel Point (SCLI-43) on San Clemente Island around 6500 to 6000 cal BC, straddling the Paleo-Coastal/Milling Stone Period 1 boundary. Based on its distance from the mainland (77 kilometers), and the fact that it was never connected to the mainland, it can be assumed that seaworthy vessels were used, although no remnants of such vessels have been found to date (Cassidy, Raab, and Kononenko 2004; Yatsko 2000). Other evidence for seaworthy vessels on San Clemente Island includes a woodworking tool kit consistent with tools used to build watercraft historically (Rondeau, Cassidy, and Jones 2007). Eel Point also shows a marine subsistence pattern focused on hunting seals, sea lions, and dolphins and the collection of seashells (Porcasi and Fujita 2000). The earliest evidence of the occupation of San Nicolas Island occurred at approximately 6550 BC (8500 BP) at CA-SNI-339 (Schwartz and Martz 1992). Earlier

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sites may have been lost due to rising sea levels after 10,000 BP (Martz 1994). Other sites show hunting of sea mammals, near-shore fish such as perch, and a variety of shellfish (Bleitz-Sanburg 1987).

Milling Stone Period (6050-1050 BC / 8000-3000 BP)

Mason and Peterson (2014) divide the Milling Stone period into three subdivisions: Milling Stone 1 (8000-5800 BP; 6050-3850 BC), Milling Stone 2 (5800-4650 BP; 3850-2700 BC), and Milling Stone 3 (4650-3000 BP; 2700-1050 BC). The climate at the beginning of Milling Stone Period 1 was warmer and drier than today with freezing winters rare near the coast. However, toward the end of the Milling Stone Period 1, the climate started to cool and stabilize to a climate similar to today's weather (C. King 2001).

Also during the Milling Stone period, there is evidence of trade between the Great Basin and other areas of California. Coso Mountain obsidian artifacts have been found at archaeological sites in southern California while shell beads, particularly Olivella grooved rectangle beads, have been found as far away as Oregon and Nevada (C. King 2001; Raab and Howard 2002; Vellanoweth 1995, 2001). Vellanoweth (2001) argues that Olivella grooved rectangle beads may be used as an ethnic marker for Uto-Aztecan speaking peoples, since they were not made in Chumash territory to the north.

At 5000 BP on the southern California mainland, there was an increase in the quantity of ground stone tools (e.g., manos, metates, mortars, pestles) suggesting an intensification of the use of plant and marine resources, particularly seeds and shellfish (Arnold, Walsh, and Hollimon 2004). Toward the end of the Milling Stone period, the use of manos and metates subsided while the number of mortars and pestles grew. This switch may indicate that acorns started to make up a larger portion of the diet.

The presence of pottery within Gabrieleño territory prior to contact has been argued to be the result of trade or exchanges with those Native American communities that made pottery, i.e., the southwest or Colorado River tribes. However, some archaeologists argue they have identified fired hand-shaped ceramic pieces using local materials. Nineteen irregular hand-shaped and fired ceramic pieces from Little Harbor on Santa Catalina Island were dated to around 5000 years old (Porcasi 1998). Porcasi argues that these ceramic pieces are like those found at an archaeological site (CA-ORA-64) in Irvine, Orange County, and suggests they are evidence of a broad interaction sphere linking the southern Channel Islands with the desert interior. Boxt and Dillon (2013) argue that the Gabrieleño living at site CA-LAN-2630, located on California State University, Long Beach campus, made ceramics before the post-contact era from locally derived clays.

Intermediate Period (1050 BC-AD 600 / 3000-1350 BP)

During the Intermediate period, the climate became warmer and drier, with lower rainfall, than the Milling Stone period. The sea level rise slowed with surface temperatures lower than before, although paleoclimate data suggests heavier rainfall between circa 3000 and 1700 BP. Early in the Intermediate period, mortars and pestles replaced milling stones and handstones in artifact assemblages, which may signal a shift from grass and hard seeds to acorn exploitation. During this time, there was an increase in the utilization of near-shore fish, sea mammal resources, and deep-water resources on the islands (Glassow 1980; C. King 2001; Tartaglia 1976). There was increased sedentism in the Intermediate period, with villages being permanent or semi-permanent. Population growth resulted in intensive resource collection, leading to the decline of local resources and the need to collect higher-cost resources. This is evident at Eel Point, where there is a focus on lower-ranked resources such as fish and small shellfish (Byrd and Raab 2007:223). The active management of terrestrial

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resources became evident on the mainland during this time, with intentionally set fires and intensive horticulture practices such as pruning, sowing, planting, and irrigation being used to increase the productivity of trees and plants (Arnold, Walsh, and Hollimon 2004). This may have also occurred on the islands as well. Burial practices included flexed inhumations with large slate slabs or metates located on top of or near the head of the individual (Gamble and King 1997).

Late Prehistoric Period (AD 600-1769 / 1350-200 BP)

Mason and Peterson (2014) divide the Late Prehistoric period into two subdivisions: Late Prehistoric 1 (1350-650 BP; AD 600-1300) and Late Prehistoric 2 (650-200 BP; AD 1300-1750). During the Late Prehistoric period, the cultural manifestations observed in the ethnohistoric period begin to emerge. By AD 500, there is a change in the cultural manifestations seen in the archaeological record. This includes a change in interment practices from burial to cremation, dog burials, and a switch from z-twining to s-twining in basketry (Sutton 2009; Rozaire 1967). These features are considered the markers signaling the migration of Takic-speaking people from the desert to the coast. It has been argued that the Takic groups settled along the coast and imitated the cultural practices and adaptations used by the previous Hokan-speaking populations they supposedly displaced (Kowta 1969; Koerper 1979; Kroeber 1976; Moratto 1984:560; Sutton 2009).

The Late Prehistoric period saw the emergence of complex social organization with ascribed status evinced by the presence of abundant grave goods in child burials (L. B. King 1982; Martz 1984). Starting at AD 800, there is evidence of the exchange of Santa Catalina Island soapstone vessels to the mainland (e.g., Malaga Cove) with craft specialization intensifying at the end of the period (Howard 2002).

There has been considerable debate regarding to what extent climate change contributed to the development of complex societies in southern California, including the Gabrieleño (Gamble 2005; Kennett and Kennett 2000; Raab et al. 1995; Raab and Larson 1997; Arnold 1992; Koerper, Mason, and Peterson 2002). What is known is that new fishing strategies began to be utilized by AD 500. These new practices include the development and use of sewn plank canoes (Arnold and Bernard 2005), as well as a new fishing kit that included circular shell fishhooks manufactured from single pieces of abalone (*Haliotis* spp.), California mussel (*Mytilus californianus*), and Norris' top shell (*Norrisia norrisi*) (Strudwick 1986). Such a fishing kit was found at the nursery site on San Clemente, consisting of a seagrass bag containing fishing tackle such as lithic drills, abraders, rib net-spacers, a bone knife and barbs, pry bars, abalone fishhooks and hook blanks, a steatite whale effigy, and serpentine sinkers (Bleitz and Salls 1993). These tools were used to obtain deep sea fish such as the broadbill swordfish, striped marlin, albacore, yellowfin tuna, bluefin tuna, blue shark, and shortfin mako (Arnold and Bernard 2005). Also, by AD 500–600 BC, the bow and arrow came into the area, and as a result, projectile points got smaller, although large points are still evident on the Channel Islands due to the continued use of spears on large marine mammals (Arnold and Bernard 2005).

Mission Period (AD 1769-1834 / 181-116 BP)

Historic archaeologists identify the beginning of the Mission period with the establishment of the first Spanish mission in San Diego in 1769 and the settlement of Alta California by the Spanish. Even though the Pacific coast had been explored in 1602, the Spanish did not immediately settle in Alta California. In 1566, Spanish galleons from Manila, the Philippines, brought Asian goods to Acapulco, Mexico. During these long and arduous voyages, ships lacked substantial food resources, resulting in the death of crew members and eventual loss of ships (Corle 1949:37). To ensure a safe return, the

Spanish government decided that ports needed to be built in Alta California in order to resupply the ships with fresh meat, fruits and vegetables (James 1913:14; Corle 1949:32). Additionally in 1767, Marques de Grimaldi, the Minister of State, told Jose de Gálvez, the Visitor-General of Mexico, that the Russians and French were encroaching on its Alta California territory (Archibald 1978:1, James 1913:14). As a result, King Carlos II of Spain gave the order to “occupy and fortify San Diego and Monterey for God and the King of Spain” to fight foreign claims to Spanish land (James 1913:16).

In 1769, Gaspar de Portolá led one of three groups to Alta California in order to establish Spanish settlements, or presidios, at San Diego and Monterey Bay (McCawley 1996:188). Accompanying Portolá was Junípero Serra and other Franciscan priests who sought to establish missions to convert the Native Americans they encountered. They established a number of missions, sustained by Indian labor, that supplied the presidios with subsistence goods.

Another factor that changed trade relations in southern California during the Mission period was the missions’ policy of ‘reduccion’ (Webb 1983). According to Walter Prescott Webb, the policy of ‘reducción’ as practiced in the Spanish missions was a complex and significant aspect of Spanish colonial strategy. ‘Reducción’ referred to consolidating indigenous populations into centralized settlements or missions under the control of Spanish authorities, particularly the Franciscan friars. This process was part of a broader strategy of colonization and evangelization in the New World. The stability of the mission relied on the Indian population to make cloth, cook, and farm. According to Webb, ‘reducción’ served several purposes:

1. **Christianization and Conversion:** The primary goal was to convert indigenous peoples to Christianity. The friars aimed to teach them Christian doctrines and practices by bringing them into missions, replacing indigenous religious beliefs and rituals.
2. **Cultural Assimilation:** Alongside religious conversion, ‘reducción’ aimed at cultural assimilation. Indigenous people were taught Spanish language and customs, and their traditional way of life was often significantly altered or completely replaced.
3. **Economic Exploitation:** The missions often functioned as economic units. Indigenous people were engaged in agriculture, livestock raising, and crafts, contributing to the mission’s sustenance and the broader colonial economy.
4. **Control and Governance:** ‘Reducción’ facilitated the control over indigenous populations. By congregating them in missions, Spanish authorities could more easily govern, tax, and monitor them, thereby exerting political and social control.
5. **Protection from Slavery:** In some cases, ‘reducción’ was justified as a means to protect indigenous peoples from enslavement by colonists. The missions were seen as refuges where they could live under the protection of the friars.
6. **Demographic Concentration:** The policy also aimed to counteract the dispersion of indigenous populations, making them more accessible for administrative and religious purposes.

Webb's analysis often highlights the mixed outcomes of the ‘reducción’ policy. While it had some protective aspects for indigenous peoples, it also led to significant cultural loss, forced labor, and disruption of traditional social structures.

Ethnohistoric and Historic Context

Gabrieleño

Portions of the following section are taken from Torres (n.d.) and supplemental citations are provided. Ethnographic records identify the lands surrounding the project area as being inhabited by the Kizh

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(Gabrieleño) (Stickel 2016). The Gabrieleño inhabited the entire Los Angeles basin, including most of Orange County. Villages had 50-100 people. Each community included one or more patrilineal extended families or lineal kinship groups (clans) (Kroeber 1976:633; Bean and Smith 1978:547; McCawley 1996:89). Each village was united under the leadership of a chief who inherited the position from his father. The chief was the leader of the religious and secular life of the community and served as chief administrator, fiscal officer, war leader, legal arbitrator and religious leader (Harrington 1942; Bean and Smith 1978).

The Gabrieleño territory included all of the Los Angeles Basin, parts of the Santa Ana and Santa Monica Mountains, along the coast from Aliso Creek by Rancho Santa Margarita in the south to Topanga Canyon in the north, and the Southern Channel Islands of San Clemente, San Nicolas, and Santa Catalina Islands. The Gabrieleño spoke a dialect of the Cupan group of the Takic language family. This language was part of the larger Uto-Aztecan language stock which migrated west from the Great Basin. The Gabrieleño shared this language with their neighboring groups (Cahuilla, Juaneño, Luiseño, and Serrano) to the north, south, and east (Bean and Smith 1978:538, Figure 1).

Gabrieleño people lived in villages that were autonomous from other villages, forming tribelets. Each village had access to hunting, collecting, and fishing areas with smaller seasonal camps (Bean and Smith 1978). Possibly as many as 40 villages existed (Dakin [1939] 1978:221). Villages were typically located in or near protected coves, canyons, or foothills and always close to bodies of water. Large Gabrieleño villages in Orange County include *Hotuuknga* and *Pasbenga* (located near the present-day City of Santa Ana). *Hotuuknga* is thought to have been located within present-day Anaheim, Yorba Linda, and/or Brea (McCawley 1996:59, 60, 72, Map 8). The village was said to have been along the Santa Ana River, which they called *Kah'ho Pah'hit*, which provided essential resources to and was sacred to the tribal population.

The closest Gabrieleño village to the project site was of *Kengaa*, which was likely located at the mouth of San Diego Creek. Archaeological sites that likely correspond to this village are CA-ORA-119a and ORA-111 (McCawley 1996:72, citing O'Neil 1988). An unnamed village is marked in the approximate location of the San Joaquin marsh (Kirkman 1938), which may also be *Kangaa*.

Typically, women gathered and men hunted and fished, although work tasks often overlapped. Acorns and shellfish were the most important food for the Gabrieleño, although the types and quantity of different foods varied by season and locale. Other important food sources were grass and many other seed types, deer, *rodentia* and *lepus* species, quail, doves, ducks and other fowl, fish, and marine mammals. Material culture included a variety of ground stone implements (manos, metates, mortar, pestles, etc.), steatite bowls and pallets (comals), basketry, a wide variety of decorative shell objects and jewelry, bone fishhooks, bone tools, and flaked stone tools (arrow projectile points, drills, scrapers, etc.). The Gabrieleño were recorded as "earth ovens" users as part of a widespread technology for native peoples in southern California (Harrington 1942:9).

After European contact, many Gabrieleño were forced to aid in the construction of Mission San Gabriel. These various captives across California became known by the names of missions they built in their territories. Therefore, the Spanish used the name "Gabrieleño" to refer to the Native Americans associated with the Mission San Gabriel. Due to the Spanish origin of the word, variations on spelling and pronunciation vary between cultural groups of today, with some cultural groups spelling it "Gabrieleño" and some as "Gabrielino." The Gabrieleño suffered a population decline due to introduced diseases and restrictions on their native reproductive practices by the fathers (McCawley

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1996). Most Mission Indians were trained as cowboys, sheepshearers, farm laborers, and domestic laborers and continued in those professions after the missions were secularized in the first half of the nineteenth century (Talley 1984).

Juaneño Acjachemen

The Acjachemen (Juaneño) spoke a language that is part of the Takic language family. Their traditional cultural territory, as identified by a tribal representative, is an area that stretches from coastal Long Beach to the north to Camp Pendleton to the south and includes all of Orange County as well as parts of western Riverside County (Perry 2021). In prehistory, the Juaneño had a patrilineal society and lived in groups with other relatives. These groups had established claims to places, including their villages' sites and resource areas. The drainages of San Juan Creek, Trabuco Creek, and San Mateo Creek all contained villages (O'Neil and Evans 1980). Marriages were usually arranged from outside villages, establishing a social network of related peoples in the region. There was a well-developed political system including a hereditary chief. Religion was an important aspect of their society. Religious ceremonies included rites of passage at puberty and mourning rituals (Kroeber 1976). The Chinigchinich religious practices were also significant to Juaneño culture and spirituality (Boscana 1978).

Houses were typically conical in shape and thatched with locally available plant materials. Rectangular brush-covered roofs often shaded work areas. Each village had a ceremonial structure in the center enclosed by a circular fence where religious activities were performed (Bean and Shipek 1978).

Women are known to have been the primary gatherers of plant foods but also gathered shellfish and trapped small game animals. Men hunted large game and most small game, fished, and assisted with plant food gathering, especially of acorns. Adults were actively involved in making tools, including nets, arrows, bows, traps, food preparation items, pottery and ornaments. Tribal elders had important political and religious responsibilities and educated younger members (Bean and Shipek 1978).

Historical Period Context

Regional Development

Following California's statehood in 1850, many Mexican-held land grants in Orange County were sold to Americans, such as James Irvine, Benjamin and Thomas Flint, and Llewellyn Bixby. Three land grants comprise the modern city of Irvine: Rancho San Joaquin, Rancho Lomas de Santiago, and Rancho Santiago de Santa Ana. The land was primarily used for sheep ranching, and Irvine, Bixby wholly owned the grants, and the Flint brothers by 1868. In 1878, Irvine bought out his partners' shares for \$150,000, thus owning 110,000 acres that stretched 23 miles from the Pacific Ocean to the Santa Ana River. After James Irvine died in 1886, his son, James Irvine Jr. took full possession of his father's ranch, which he incorporated into The Irvine Company. By 1894, the property was transformed primarily into agricultural crops, olive orchards, and citrus orchards (City of Irvine n.d.; Irvine Historical Society n.d.).

Agricultural development boomed after the end of World War I and continued to expand as the area's most important industry until World War II. In the early 1940s, The Irvine Company sold a portion of its land to the US Navy, which built two Marine Corps air facilities. As a result of the postwar population boom throughout Southern California, The Irvine Company converted some of its agricultural lands into commercial and residential development. The company sought to convert the area into the "Beverly Hills of Orange County." In 1959, The Irvine Company donated 1,000 acres of land to the University of California to build a campus in Orange County. The university's architect, William Pereira,

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and The Irvine Company planners drew up master plans for a city of 50,000 people to surround the university. The plan included residential, commercial, industrial, and agricultural zones. By 1970, The Irvine Company constructed the Irvine Industrial Complex West (later renamed to the Irvine Business Complex) and the residential villages of Turtle Rock, University Park, Culverdale, the Ranch, and Walnut (City of Irvine n.d.; Irvine Historical Society n.d.; Orange County Historical Society n.d.; Chattel Architecture Planning & Preservation, Inc. 2006).

The City of Irvine was incorporated on December 28, 1971. The City was far larger than the original plan called for by Pereira and The Irvine Company; however, this was done to allow for more development, as well as to protect and grow the City's tax base. Irvine is home to over 300,000 residents (City of Irvine n.d.).

The South Coast Research and Extension Center History

The University of California system first established agricultural experiment stations following the Hatch Act of 1887, which provided federal funds to conduct agricultural research. In 1914, the federal government expanded agricultural funding with the Smith-Lever Act, which established funds for cooperative extension services. These extension centers are run by universities and offer agricultural outreach and education to the public (UCANR 2018:34).

The need for an agricultural experiment station in the south coastal area of California was realized as early as 1926. The University of California Regents sought to establish a facility near the University of California, Los Angeles; however, acquiring a large block of land in Los Angeles was not feasible. In the 1950s, Orange County was chosen as the South Coast Field Station site due to its proximity to the University of California campuses in both Los Angeles and Riverside. Arthur J. McFadden, a regent for the university system and a director of The Irvine Company, organized the sale of 200 acres of land from The Irvine Company to the University of California. The Irvine Company also provided a \$100,000 grant to the station to promote its work (*Farm Bureau News* 1967; Huberty 1958; *Register* 1959).

The University of California established the South Coast Field Station in Irvine on July 1, 1957, though scientists were conducting research in the months leading up to the official opening. The university system established the facility to conduct agricultural experiments in a controlled coastal climate, and scientists carried out varied research on horticulture, vegetable crops, plant pathology, irrigation, subtropical horticulture, entomology, botany, and viticulture. Much of the research is devoted to crops grown for commercial purposes in Southern California. The South Coast Field Station has become known for developing several strains of plants, including strawberries and avocados. The station provides 200 acres of testing grounds, complete with research buildings, greenhouses, and a water reservoir (*California Agriculture* 1967; *Register* 1957, 1959).

In addition to serving as an agricultural experiment site, the South Coast Field Station is currently the headquarters to the Orange County Farm Bureau, and University of California Cooperative Extension programs such as the Master Food Preservers, Master Gardeners, 4-H Youth Development, and the Expanded Food and Nutrition Education Program for the US Department of Agriculture (UCANR n.d.).

The South Coast Research Irrigation Reservoir

The University of California system authorized construction of the reservoir at the South Coast Field Station in November 1955. University of California architect Carl McElvy designed the structure and Cox Bros. Construction Company carried out the construction, which was completed by December 1956 (McElvy 1955; *Register* 1956).

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The reservoir is a rectangular shaped asphalt and concrete structure. It is approximately 280 feet long by 170 feet wide, with a depth of 10 feet. The lining of the reservoir was coated with a coal tar seal coat to protect the structure from adverse weather. The architect added a concrete pumphouse and water lines from the reservoir to facilitate water delivery to the nearby crops (McElvy 1955; Google Earth 2024).

NAHC SACRED LANDS FILE SEARCH

On behalf of UCD, the NAHC searched the Sacred Lands File for any Native American cultural resources that might be affected by the project. The NAHC responded in a letter dated December 5, 2023, stating that a search provided negative results and provided a list of Native American tribe names to contact for further information. The NAHC correspondence and tribal contact list are presented in **Attachment 3**. UCD is conducting Assembly Bill 52 tribal consultation, which will be documented as part of the environmental document.

HISTORICAL SOCIETY OUTREACH

On December 7, 2023, Michael Baker International staff emailed the Irvine Historical Society a letter and figures depicting the project area. The correspondence requested any information regarding historical resources within the project area. Mary Susa of the Irvine Historical Society emailed on December 10, 2023, stating that the organization had no comments. No additional correspondence was received. Outreach to the Irvine Historical Society is presented in **Attachment 4**.

FIELD SURVEY

A pedestrian archaeological survey of the project area was conducted on December 12 and 13, 2023, by Michael Baker International Archaeologist Marcel Young. The entire project area was walked over in transects approximately 15 meters apart.

The project area consists of planted crops, a vacant dirt lot, and an asphalt reservoir. A pumphouse control station and gas tank are on the property's northern edge near the reservoir. Ground visibility was between 30 and 40 percent. Agricultural plantings were confined to the northeast section of the project area. The reservoir comprises most of the project area, running north to south. Vegetation grows throughout the reservoir and along the dirt lot in the southern section of the project area. Vegetation includes tomato plants, castor beans, fountain grass, mullein, mustard grass, prickly pear, olive, pepper, and avocado trees. Dirt roads flank the outer edge of the project area. Signs of ground disturbance included push piles of dirt inside the reservoir and on the northwest mid-edge of the project area.

No archaeological resources were identified as a result of the survey. However, the reservoir within the project area was constructed in 1956 and is thus considered a potential historical resource as it meets the basic criteria for consideration as a historical resource being over 50 years old. As such, the reservoir was evaluated for listing in the California Register.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES EVALUATION

The criteria for eligibility for listing in the California Register are based upon the National Register. To be eligible for listing in the California Register, a property must be at least 50 years of age (resources less than 50 years of age may be eligible if they can demonstrate that sufficient time has passed to understand their historical importance) and possess significance at the local, state, or national level, under one or more of the following criteria:

Criterion 1. It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

Criterion 2. It is associated with the lives of persons important in our past.

Criterion 3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value.

Criterion 4. It has yielded, or may yield, information important in history or prehistory.

In addition to meeting a significance criterion, a property must also have integrity, or the ability to convey its significance, under a majority of the seven aspects of integrity—location, design, materials, workmanship, setting, feeling, and association.

UCD South Coast Research and Extension Center Reservoir Evaluation

The following includes an evaluation of the UCD South Coast REC reservoir for its eligibility for listing on the California Register. This property has not previously been evaluated for the California Register (OHP 2023d). It has been evaluated herein in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code.

Criterion 1 – Research did not demonstrate that this reservoir is associated with events significant to the broad patterns of our history or culture at the local, state, or national level. The reservoir was completed in 1956 and is not directly or significantly associated with the development history of Irvine, nor known to have individually made a significant contribution to other broad patterns of local, regional, state, or national culture or history. While the reservoir may have served as a functional component of the agricultural research conducted at the South Coast REC, it did not have a direct role in the research or discoveries, nor did it influence the later course of educational or agricultural development at the site. The sole purpose of the structure was to create a more dependable water supply for crop cultivation. Therefore, this property is recommended not eligible for listing in the California Register under Criterion 1.

Criterion 2 – Research failed to indicate that this reservoir is associated with the lives of persons who significantly contributed to culture or history at the local, state, or national level. To be eligible under Criterion 2, a property must be directly associated with a person's productive life during the period in which they achieved their significance. While the UCD South Coast REC may be linked to scientific advancement in the field of agriculture, independently the reservoir would be unlikely to qualify as the best representation of those achievements. Therefore, this property is recommended not eligible for listing in the California Register under Criterion 2.

Criterion 3 – The reservoir is representative of a typical water storage system from the mid-twentieth century and is not illustrative of any innovations in civil engineering. Research identified the reservoir's architect as Carl McElvy and the builder as Cox Bros. Construction Company. Nonetheless, this simple structure would unlikely qualify as the work of any master, as the individuals tasked with its development undoubtedly carried out a utilitarian design focused solely on practical water supply for the South Coast REC. Finally, the reservoir does not possess high artistic value because it does not articulate a particular concept of design or aesthetic ideal. Therefore, the property is recommended not eligible for listing in the California Register under Criterion 3.

Criterion 4 – The built environment of the subject property is not likely to yield valuable information which will contribute to our understanding of human history because the property is not and never was the principal source of important information pertaining to significant events, people,

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engineering, or water retention technology. Therefore, this property is recommended not eligible for listing in the California Register under Criterion 4.

Conclusion – Lacking significance, this property is recommended ineligible for listing in the California Register. As such, the UCD South Coast REC reservoir is not a historical resource as defined by CEQA Section 15064.5(a).

BURIED ARCHAEOLOGICAL SITE SENSITIVITY ANALYSIS

Sensitivity for buried archaeological sites is considered low to moderate based on the lack of previously recorded archaeological sites within the project area and vicinity, the construction of the reservoir, and modern agricultural disturbances in the project area. Some unanticipated archaeological deposits may be identified given the proximity to previous water sources in the area and the number of prehistoric archaeological sites within a half mile of the project area.

The predominant soil type within the project area consists of a lack of San Emigdio fine sandy loam with an A horizon of just 7 inches, and there is no E or B horizon, limiting the probability of intact archaeological deposits. Disturbances include the construction of the reservoir beginning in 1955 and agricultural use. Historical maps, including a 1935 topographic map, show a natural spring, Tomato Spring, within half a mile of the project area. According to the SCCIC records search, several previously recorded prehistoric resources are near the foothills north of the project area. The literature review failed to identify Native American villages or place names associated with the project area. Therefore, the buried site sensitivity for the project area is considered low to moderate. The identification and recordation of the UCD South Coast REC reservoir has exhausted the historic-period archaeological data potential.

FINDINGS AND RECOMMENDATIONS

The cultural resources identification efforts described herein identified no historical resources within the project area, as defined by CEQA Section 15064.5(a). One reservoir was documented on appropriate DPR 523 series forms and evaluated for its eligibility for listing on the California Register in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code. The resource is not eligible for inclusion in the California Register. No further work is recommended for this resource.

Research suggests that archaeological sensitivity is low to moderate within the project area. There is potential to identify resources during earth-moving activities. Therefore, impacts to archaeological resources and human remains will be avoided through implementation of the following recommendations:

Archaeological Resources Inadvertent Discovery – In the event that any subsurface cultural resources are encountered during earth-moving activities, it is recommended that all work within 50 feet be halted until an archaeologist can evaluate the findings and make recommendations. Prehistoric materials can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, or quartzite toolmaking debris; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash, and charcoal, shellfish remains, and cultural materials); and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include wood, stone, or concrete footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, metal, glass, ceramics, and other refuse. The archaeologist will evaluate the find in accordance with federal, state, and local guidelines,

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including those set forth in the California Public Resources Code Section 21083.2, to assess the significance of the find and identify avoidance or other measures as appropriate.

Human Remains Inadvertent Discovery – If human remains are found, excavations shall stop within 50 feet of the find, and State of California Health and Safety Code Sections 7050.5-7055 will be followed. The contractor shall notify the City of Irvine immediately. The City will notify the Orange County coroner. If the coroner determines the remains are human and archaeological, in compliance with Section 5097.98 of the California Public Resources Code, the coroner shall notify the Native American Heritage Commission, which will identify the legal most likely descendant (MLD). If avoidance is not feasible, then the qualified archaeologist, in consultation with the MLD, shall prepare and execute a plan of treatment with the advice and consent of the City. Treatment is anticipated to include respectful excavation of the remains and repatriation and reburial.

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PREPARER QUALIFICATIONS

MICHELLE ANDERSON, MA, ARCHITECTURAL HISTORIAN

Michelle is an architectural historian with more than five years of professional experience in cultural resources management. She holds a Master of Arts degree in historic preservation planning from Cornell University. She has authored and contributed to historic resource evaluation studies and planning documents for municipal, state, and federal clients in California, Nevada, Arizona, Idaho, Montana, Alaska, and New York. Michelle has prepared CEQA and National Historic Preservation Act (NHPA) Sections 106 and 110 compliance reports, conducted historical society and Native American consultation, and provided preservation planning staff augmentation and training services to Certified Local Governments. Outside the workplace, Michelle is active in preservation activities in her community. She has served as a commissioner on the City of Davis Historical Resources Management Commission and on the board of Historic Preservation Planning Alumni, Inc. Through her academics and experience, she meets the Secretary of the Interior's Professional Qualification Standards in history and architectural history.

JAMES DANIELS, MA, RPA, SENIOR ARCHAEOLOGIST

James is a senior archaeologist with cultural resource management experience in California, Nevada, and North Carolina. His experience includes archaeological surveys, evaluations of historic and prehistoric sites for listing in the California and National Registers, site mitigation data recoveries, mitigation monitoring, and preparation of archaeological resource management reports and cultural resources technical reports. As senior archaeologist, he supports projects needing CEQA, National Environmental Policy Act (NEPA), NHPA Section 106, Native American Graves Protection and Repatriation Act, Assembly Bill 52, US Army Corps of Engineers 404 permits, and local cultural resource regulation compliance. He assists with environmental impact statements and reports and alternative mitigation measures for clients, including interpretive signage, informative website design, brochures, and ethnographic studies. He also assists in Native American consultation and coordination of Native American monitoring. James provides advanced technical services for clients, including geophysical surveys with ground-penetrating radar, obsidian and ceramic sourcing using portable X-ray fluorescence, photogrammetry, and GIS predictive modeling and data collection using Esri Field Maps. James meets the Secretary of the Interior's Professional Qualification Standards in archaeology.

JOSHUA RAWLEY, MA, ARCHITECTURAL HISTORIAN TECHNICIAN

Joshua is an architectural historian technician with experience interpreting historical documentation and conducting built environment surveys in California and Alaska. In addition, he volunteers with the City of Riverside and has conducted research to support its LGBTQ+ Historic Context project. He meets the Secretary of the Interior's Professional Qualification Standards for history.

MARCEL YOUNG, BA, ARCHAEOLOGIST

Marcel has worked in various capacities in cultural resource management since 2013. He is experienced in surveying and evaluating historic and prehistoric archaeological sites in California. He is versed in conducting fieldwork within frameworks of Section 106 of the NHPA, NEPA, and CEQA. He has participated in projects in several phases of archaeology: Phase I pedestrian, Extended Phase I testing, shovel test surveys, buried site testing, Phase III data recovery, and monitoring.

Sincerely,


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Architectural Historian II



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Attachments:

Attachment 1 – Figures

Attachment 2 – SCCIC Records Search Results

Attachment 3 – NAHC Sacred Lands File Search Results

Attachment 4 – Historical Society Consultation

REFERENCES

- Ancestry.com. 2023. Subject matter search. Online database. Accessed December 2023.
<https://www.ancestry.com/>.
- Archibald, Robert 1978 *The Economic Aspects of the California Missions*. Academy of American Franciscan History, Washington, D.C.
- Arnold, Jeanne E. 1992. "Complex Hunter-Gatherer-Fishers of Prehistoric California: Chiefs, Specialists, and Maritime Adaptations of the Channel Islands." *American Antiquity* 57: 60–84.
- Arnold, Jeanne E., and Julienne Bernard. 2005. "Negotiating the Coasts: Status and the Evolution of Boat Technology in California." *World Archaeology* 37(1): 109–131.
- Arnold, Jeanne E., Michael Walsh, and Sandra E. Hollimon. 2004. "The Archaeology of California." *Journal of Archaeological Research* 12(1):1–73.
- Bean, Lowell J., and Florence C. Shipek. 1978. "Luiseño." In *California*, edited by Robert F. Heizer. *Handbook of North American Indians*, Vol. 8, W. C. Sturtevant, general editor. Washington, DC: Smithsonian Institution.
- Bean, Lowell J. and Charles R. Smith. 1978. "Gabrielino." In *California*, edited by Robert F. Heizer. *Handbook of North American Indians*, Vol. 8, W. C. Sturtevant, general editor. Washington, DC: Smithsonian Institution.
- Bleitz-Sanburg, D. E. 1987. "The Changing Exploitation of Mammalian and Avian Food Resources at SNI-11." Master's thesis, Department of Anthropology, California State University, Los Angeles.
- Bleitz, D. E., and R. A. Salls. 1993. "A Prehistoric Fishing Kit from San Clemente Island, California." In *Third California Islands Symposium: Recent Advances in Research on the California Islands*, edited by F. G. Hochberg, pp. 537–549. Santa Barbara Museum of Natural History, California.
- Boscana, Geronimo. 1978. "Chinigchinich: Historical Account of the Belief, Usages, Customs, and Extravagancies of the Indians of this Mission of San Juan Capistrano Called the Acagchemem Tribe." John P. Harrington, anno. Banning, CA: Malki Museum Press.
- Boxt, Matthew, and Brian Dillon. 2013. "Prehistoric Pottery of Coastal Los Angeles County." *Pacific Coast Archaeological Society Quarterly* 47(3&4): 45-87.
- Byrd, Brian, and L. Mark Raab. 2007. "Prehistory of the Southern Bight: Models for a New Millennium." In *California Prehistory*, edited by Terry Jones and Kathryn Klar, pp. 215-227. New York: Altamira Press.
- California Agriculture*. 1962. "South Coast Field Station." 8-9. Accessed December 2023. On file at Michael Baker International.
- Calisphere. 2023. Subject matter search. Online database. Accessed December 2023.
<https://calisphere.org/>.

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 24

- Cassidy, Jim, L. Mark Raab, and Nina A. Kononenko. 2004. "Boats, Bones, and Biface Bias: The Early Holocene Mariners of Eel Point, San Clemente Island, California." *American Antiquity* 69(1):109–130.
- Chattel Architecture, Planning & Preservation, Inc. 2006. *City of Orange Historic Context Statement*. Prepared for P&D Consultants for the City of Orange General Plan Update.
- City of Irvine. n.d. "History of the City." Accessed December 2023. <https://www.cityofirvine.org/about-irvine/history-city>.
- Corle, Edwin. 1949. *The Royal Highway*. New York: Bobbs-Merrill Copman, Inc.
- Dakin, Susanna Bryant. (1939) 1978. *A Scotch Paisano in Old Los Angeles: Hugo Reid's Life in California, 1832-1852 Derived from his Correspondence*. Reprinted University of California Press, Los Angeles.
- Erlandson, Jon M., Douglas J. Kennett, B. Lynn Ingram, Daniel A. Guthrie, Don P. Morris, Mark A. Tveskov, G. James West, and Phillip L. Walker. 1996. "An Archaeological and Paleontological Chronology for Daisy Cave (CA-SMI-261), San Miguel Island, California." *Radiocarbon* 38(2):355–373.
- Erlandson, Jon M., Rick C. Torben, Terry L. Jones, and Judith F. Porcasi. 2007. "One If by Land, Two If by Sea: Who Were the First Californians?" in *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn Klar. Lanham, MD: AltaMira Press.
- Erlandson, Jon M., Torben C. Rick, Todd J. Braje, Molly Casperson, Brendan Culleton, Brian Fulfrost, Tracy Garcia, Daniel A. Guthrie, Nicholas Jew, Douglas J. Kennett, Madonna L. Moss, Leslie Reeder, Craig Skinner, Jack Watts, Lauren Willis. 2011. "Paleoindian Seafaring, Maritime Technologies, and Coastal Foraging on California's Channel Islands." *Science* (331) 6021:1181-1185.
- Farm Bureau News*. 1967. "Arthur J. McFadden Honored." Accessed December 2023. On file at Michael Baker International.
- Fitzgerald, Richard, Terry L. Jones, and Adella Schroth. 2005. "Ancient Long-Distance Trade in Western North America: New AMS Radiocarbon Dates from Southern California." *Journal of Archaeological Science* 32 (2005) 423–434.
- Gamble, Lynn H. 2005. "Culture and Climate: Reconsidering the Effect of Palaeoclimatic Variability among Southern California Hunter-gatherer Societies." *World Archaeology* 37(1): 92–108.
- Glassow, Michael A. 1980. "Recent Developments in the Archaeology of the Channel Islands." *In The California Islands: Proceedings of a Multidisciplinary Symposium*, edited by D. M. Power, pp. 79-99. Santa Barbara Museum of Natural History, California.
- Google Earth. 2024. Subject Search of "7061 Irvine Boulevard". Electronic internet database. Accessed January 2024. <https://earth.google.com>.
- Harrington, John P. 1942. "Cultural Element Distributions: XIX: Central California Coast." *University of California Anthropological Records* 7(1):1-42.
- HathiTrust. 2023. Subject matter search. Online database. Accessed December 2023. <https://www.hathitrust.org/>.

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 25

Historicaerials.com. 2023. "7061 Irvine Boulevard, Irvine, CA." Aerial photograph.
<https://www.historicaerials.com/>.

Howard, V. 2002. "Santa Catalina's Soapstone Vessels: Production Dynamics." In *Proceedings of the Fifth California Islands Symposium*, edited by D. R. Browne, K. L. Mitchell, and H. W. Chaney, pp. 598-606. US Department of the Interior, Washington, DC.

Huberty, Martin R. 1958. Letter to Dean Millen. Accessed December 2023. On file at Michael Baker International.

Internet Archive. 2023. Subject matter search. Online database. Accessed December 2023.
<https://archive.org/>.

Irvine Historical Society. n.d. The Dawn of the Irvine Ranch: The Irvine Ranch History Irvine, California." Accessed December 2023. <https://irvinehistory.org/>.

James, George Wharton. 1913. "The Old Franciscan Missions of California." The Project Gutenberg. Accessed August 12, 2021. <http://www.gutenberg.org/files/13854/13854-h/13854-h.htm>.

Johnson, John R., Thomas W. Stafford, Jr., Henry O. Ajie, and Don P. Morris. 2002. "Arlington Springs Revisited." In *Proceeding of the Fifth California Islands Symposium*, edited by D. R. Brown, K. L. Mitchell and H. W. Chaney, pp. 541-545. Santa Barbara Museum of Natural History, California.

Kennett, Douglas J., and James P. Kennett. 2000. "Competitive and Cooperative Responses to Climatic Instability in Coastal Southern California." *American Antiquity* 65(2):379-395.

King, Chester D. 2001. "Early Southern California." In *Encyclopedia of Prehistory: Volume 6: North America*, edited by Peter N. Peregrine and Melvin Ember, pp. 144-157. Springer, Boston.

King, L. B. 1982. "The Medea Creek Cemetery (LAn-243): Late Inland Patterns of Social Organization, Exchange, and Warfare." Unpublished PhD dissertation, University of California, Los Angeles.

Kirkman, George W. 1938. *Principal Historic Sites, Old Highways, also Battlefields: Spanish, Mexican, Early American in Old Los Angeles County*. Historic map on file, Map Room of the History Department, Los Angeles Public Library.

Koerper, Henry C. 1979. "On the Question of the Chronological Placement of Shoshonean Presence in Orange County, California." *Pacific Coast Archaeological Society Quarterly* 15(3): 69-94.

Koerper, Henry C., R. D. Mason, and M. L. Peterson. 2002. "Complexity, Demography, and Change in Late Holocene Orange County." In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by Jon M. Erlandson and Terry L. Jones, pp. 63-81. *Perspectives in California Archaeology*, Volume 6. Cotsen Institute of Archaeology, University of California, Los Angeles.

Kowta, M. 1969. "The Sayles Complex: A Late Milling Stone Assemblage from the Cajon Pass and the Ecological Implications of its Scraper Planes." University of California Publications in Anthropology Volume 6. University of California, Berkeley.

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 26

- Kroeber, A. L. 1925. *Handbook of the Indians of California*. Reprint. Washington, DC: Bureau of American Ethnology.
- Mandryk, Carole A.S., Heiner Josenhans, Daryl W. Fedje, and Rolf W. Mathewes. 2001. "Late Quaternary Paleoenvironments of Northwestern North America: Implications for Inland versus Coastal Migration Routes." *Quaternary Science Reviews* 20(1-3): 301-314.
- Martz, Patricia. 1984. "Social Dimensions of Chumash Mortuary Populations in the Santa Monica Mountains Region." PhD dissertation, University of California, Los Angeles.
- . 1994. "A Research Design for Prehistoric Archaeological Sites San Nicolas Island, California." Naval Air Weapons Station Point Mugu.
- Mason, R. and M. Peterson. 2014. "Subsistence Remains and Intensification of the Newport Coast, Orange County, California." *Pacific Coast Archaeological Society Quarterly* 49(1-1): 105-125.
- McAlester, Virginia. 2013. *A Field Guide to American Houses: The Definitive Guide to Identifying and Understanding America's Domestic Architecture*. New York: Alfred A. Knopf.
- McCawley, William. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press.
- McElvy, Carl C. 1955. "Agreement, Bonds, General Conditions and Specifications for Irrigation Reservoir Project No. 81700." On file at the University of California Agriculture and Natural Resources.
- Moratto, Michael J. 1984. *California Archaeology*. New York, NY: Academic Press.
- Newspapers.com. 2023. Subject matter search. Online database. Accessed December 2023. <https://www.newspapers.com/>.
- OHP (California Office of Historic Preservation). 2022. Archaeological Determinations of Eligibility for Orange County. Electronic database. Sacramento: California Department of Parks and Recreation. On file at the South Central Coastal Information Center.
- . 2023a. California Inventory of Historic Resources. Electronic database. Sacramento: California Department of Parks and Recreation. Accessed November 2023. <https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=30>.
- . 2023b. California Points of Historical Interest. Electronic database. Sacramento: California Department of Parks and Recreation. Accessed November 2023. <https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=30>.
- . 2023c. California Historical Landmarks. Electronic database. Sacramento: California Department of Parks and Recreation. Accessed November 2023. <https://ohp.parks.ca.gov/ListedResources/?view=county&criteria=30>.
- . 2023d. Built Environment Resources Directory for Orange County. Electronic database. Accessed November 2023. https://ohp.parks.ca.gov/?page_id=30338.

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 27

- O'Neil, Stephen. 1988. "Their Mark Upon the Land: Native American Place Names in Orange County and Adjacent Areas." In *Memoirs of the Natural History Foundation of Orange County, Vol. 2: The Natural and Social Sciences of Orange County*. Edited by Henry C. Koerper, pp. 106-122. Natural History Foundation of Orange County.
- O'Neil, S., and N. Evans. 1980. "Notes on Historical Juaneño Villages and Geographical Features." *Journal of California and Great Basin Anthropology* 2(2): 226-232.
- Orange County Historical Society. n.d. "A Brief History of Orange County." Accessed December 2023. https://www.orangecountyhistory.org/wp/?page_id=38.
- Orange County Archives. 2023. Subject matter search. Aerial photograph database. <https://www.ocgis.com/ocpw/historicalimagery/>.
- Perry, Joyce. 2021. President, Juaneño Band of Mission Indians, Acjachemen Nation. Email correspondence with Lindsey Hashimoto, Senior Planner, University of California, Irvine. September 9, 2021.
- Porcasi, Judith. 1998. "Middle Holocene Ceramic Technology on the Southern California Coast: New Evidence from Little Harbor Santa Catalina Island." *Journal of California and Great Basin Anthropology* 20(2): 270-285.
- Porcasi, Judith F., and Harumi Fujita. 2000. "The Dolphin Hunters: A Specialized Prehistoric Maritime Adaptation in the Southern California Channel Islands and Baja California." *American Antiquity*, 65(3): 543-566.
- Raab, L. Mark, Katherine Bradford, Judith F. Porcasi, and William J. Howard. 1995. "Return to Little Harbor, Santa Catalina Island, California: A Critique of the Marine Paleotemperature Model." *American Antiquity* 60(2): 287-308.
- Raab, L. Mark, and D. O. Larson. 1997. "Medieval Climatic Anomaly and Punctuated Cultural Evolution in Coastal Southern California." *American Antiquity* 62: 319-336.
- Raab, L. Mark, and William J. Howard. 2002. "Modeling Cultural Connections Between the Southern Channel Islands and Western United States: The Middle Holocene Distribution of Olivella Grooved Rectangle Beads." In *The Fifth California Islands Symposium*, pp 590-597.
- Register*. 1956. "UC's South Coast Field Station Construction Begins Near Tustin." December 17, 1956. A4. Accessed January 2024. www.newspapers.com.
- . 1957. "New Strawberry Being Developed at Tustin." June 19, 1957. B4. Accessed December 2023. www.newspapers.com.
- . 1959. "Agriculture Experiments Conducted on 200-Acre Plot in County." December 20, 1959. B3. Accessed December 2023. On file at Michael Baker International.
- Rondeau, M. F., J. Cassidy, and T. L. Jones. 2007. "Colonization Technologies: Fluted Projectile Points and the San Clemente Island Woodworking/Microblade Complex." In *California Prehistory:*

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 28

- Colonization, Culture, and Complexity*, edited by T. L. Jones and K. A. Klar, pp 63-70. United Kingdom: AltaMira Press.
- Rozaire, C. E. 1967. "Archaeological Considerations Regarding the Southern California Islands." In R.N. Philbrick (ed.), *Proceedings of the Symposium on the Biology of the California Islands*, Santa Barbara Botanical Gardens, Inc., Santa Barbara, pp. 327–336.
- Schwartz, S. J., and P. C. Martz. 1992. "An Overview of the Archaeology of San Nicolas Island, Southern California." *Pacific Coast Archaeological Society Quarterly*, 28(4): 46–75.
- Stickel, E. G. 2016. *Why the original Indian tribe of the greater Los Angeles area is called Kizh not Tongva*. Accessed January 23, 2024. https://gabrielenoindians.org/wp-content/uploads/2022/08/Kizh-not-Tongva_withoutref-1.pdf.
- Strudwick, Ivan H. 1986. "Temporal and Areal Considerations Regarding the Prehistoric Circular Fishhook of Coastal California." Master's thesis, California State University, Long Beach.
- Sutton, M. 2009. "People and Language, Defining the Takic Expansion into Southern California." *Pacific Coast Archaeological Society Quarterly* 41(2 and 3): 31-93.
- Talley, R. Paige. 1984. *Prehistory and History Ethnographic Summary. Addendum to Eastern Corridor Alignment Study, Orange County, California*. R. D. Mason. Scientific Resource Surveys, Inc. On file, South Central Coastal Information Center, California State University, Fullerton.
- Tartaglia, L. J. 1976. "Prehistoric Maritime Adaptations in Southern California." PhD dissertation, Department of Anthropology, University of California, Los Angeles.
- Torres, John A. n.d. Unnamed report. Report on file at Tribal Cultural Resource Management. Covina, California.
- UCANR (University of California Agriculture and Natural Resources). 2018. "Orientation Guide." Accessed December 2023. <https://ucanr.edu/sites/anrstaff/files/272083.pdf>.
- . n.d. "South Coast Research and Extension Center." Accessed December 2023. <https://screc.ucanr.edu/about/>.
- UCSB (University of California, Santa Barbara). 2023. General Subject Search. https://mil.library.ucsb.edu/ap_indexes/FrameFinder/.
- USGS (United State Geological Survey). 1902. *Corona, California*. 1:125,000. Electronic resource map. <https://ngmdb.usgs.gov/topoview/viewer/#>.
- . 1911. *Corona, California*. 1:125,000. Electronic resource map. <https://ngmdb.usgs.gov/topoview/viewer/#>.
- . 1920. *Corona, California*. 1:125,000. Electronic resource map. <https://ngmdb.usgs.gov/topoview/viewer/#>.

MICHAEL BAKER INTERNATIONAL

RE: CULTURAL RESOURCES IDENTIFICATION MEMORANDUM FOR THE SOUTH COAST RESEARCH AND EXTENSION (REC) ENGAGEMENT CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

Page 29

———. 1935. *El Toro, California*. 1:31,680. Electronic resource map.
<https://ngmdb.usgs.gov/topoview/viewer/#>.

———. 1943. *Santiago Peak, California*. 1:62,500. Electronic resource map.
<https://ngmdb.usgs.gov/topoview/viewer/#>.

———. 1950. *El Toro, California*. 1:24,000. Electronic resource map.
<https://ngmdb.usgs.gov/topoview/viewer/#>.

———. 1970. *El Toro, California*. 1:24,000. Electronic resource map.
<https://ngmdb.usgs.gov/topoview/viewer/#>.

Vellanoweth, R. L. 1995. "New Evidence from San Nicolas Island Concerning the Distribution and Manufacture of Olivella Grooved Rectangle Beads." *Pacific Coast Archaeological Society Quarterly* 31(4):13–22.

———. 2001. "AMS Radiocarbon Dating and Shell Bead Chronologies: Middle Holocene Trade and Interaction in Western North America." *Journal of Archaeological Science* 28 (9): 941–950.

Webb, Edith Buckland. 1983. *Indian Life at the Old Missions*. Lincoln, NE: University of Nebraska Press.

Yatsko, Andrew. 2000. "Late Holocene Paleoclimatic Stress and Prehistoric Human Occupation on San Clemente Island." PhD dissertation, University of California, Los Angeles.

Attachment 1

Figures

Attachment 2
SCCIC Records Search Results

Attachment 3
NAHC Sacred Lands File
Search Results

Attachment 4
Historical Society Consultation

Attachment 1

Figures



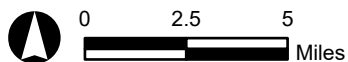
Legend

 Project Location

SOUTH COAST RESEARCH AND EXTENSION CENTER PROJECT
IRVINE, CA

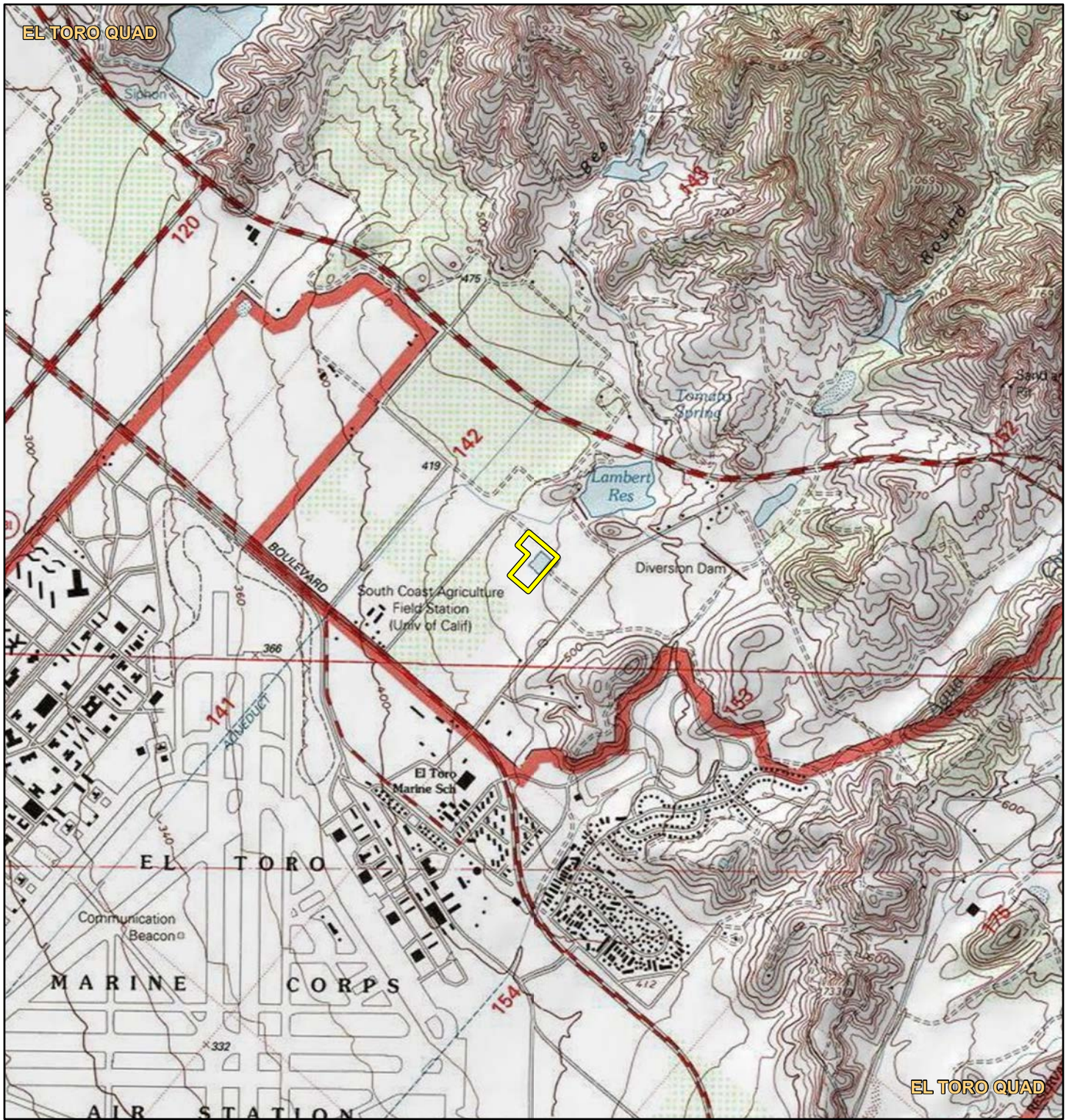
Regional Vicinity

Michael Baker
INTERNATIONAL



Source: Esri, ArcGIS Online, National Geographic World Map: Irvine, California

Figure 1



Legend

 Project Area

SOUTH COAST RESEARCH AND EXTENSION CENTER PROJECT
IRVINE, CA

Project Vicinity

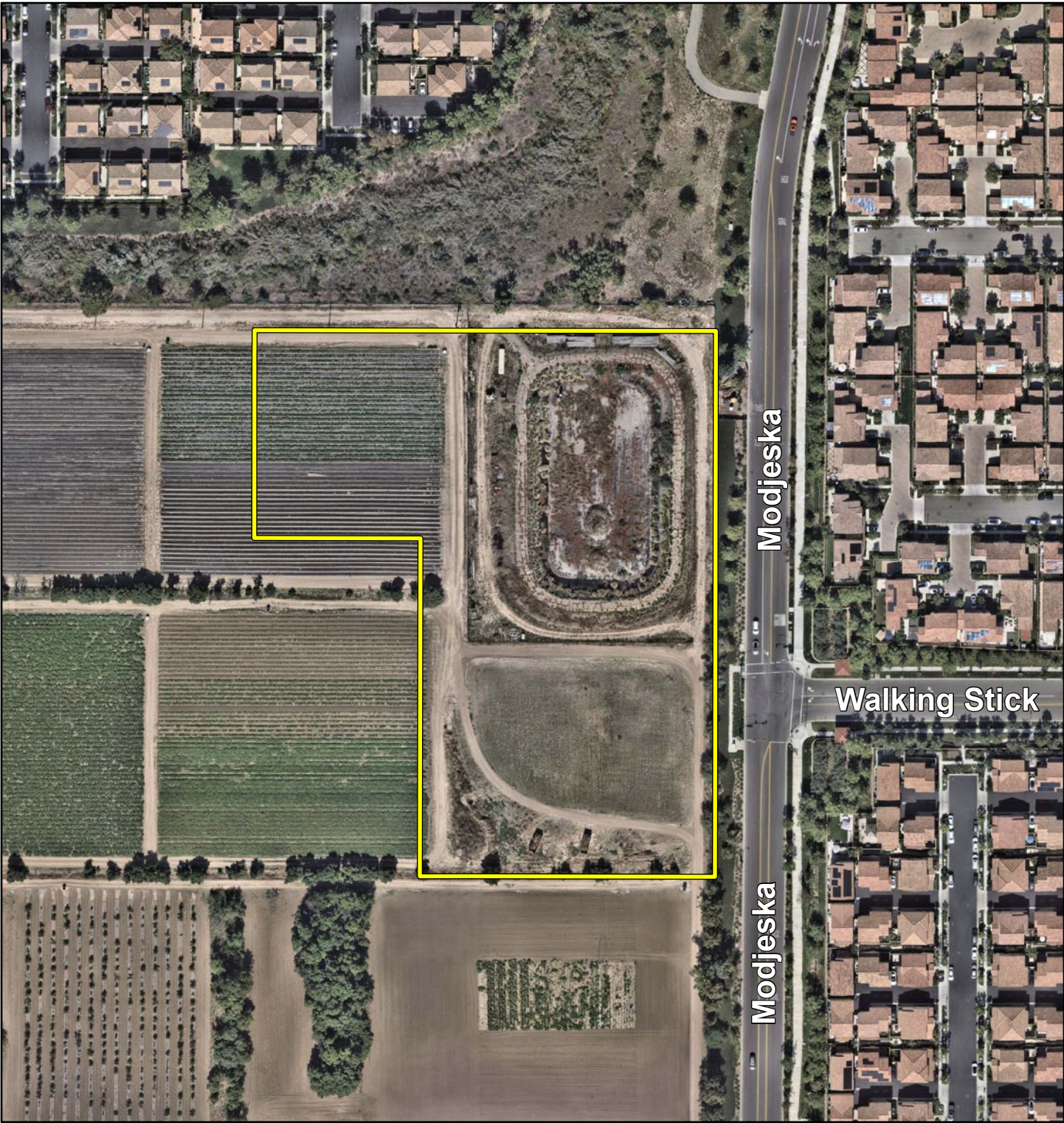
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0 0.25 0.5
Miles

Source: Esri, ArcGIS Online, El Toro USGS 7.5-Minute topographic quadrangle maps: Irvine, California

Figure 2



Legend

 Project Area

Attachment 2

SCCIC Records Search Results

Report List

UC Davis South Coast Research & Extension Center Project

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-00253		1978	Desautels, Roger J.	The Proposed Bee and Round Canyon Landfill Disposal Station Located in the County of Orange, California	Scientific Resource Surveys, Inc.	30-000244, 30-000520, 30-000521, 30-000522, 30-000523, 30-000524, 30-000545, 30-000647, 30-000648, 30-000649, 30-000650, 30-000651, 30-000652, 30-000717, 30-000718, 30-000719, 30-000720, 30-000721
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-00435		1979	Stickel, Gary E.	City of Los Angeles Hyperion Water Pollution Control Facilities County of Los Angeles Joint Water Pollution Control Plant, and Orange County Sanitation District Proposed Round Canyon Site		19-004357, 30-000244, 30-000761, 30-000762
OR-00648		1982	Breece, Bill and Beth Padon	Cultural Resource Survey: Archaeological Resources: Foothill Transportation Corridor, Phase Ii	LSA Associates, Inc.	30-000244, 30-000304, 30-000361, 30-000442, 30-000450, 30-000451, 30-000458, 30-000479, 30-000485, 30-000486, 30-000487, 30-000488, 30-000507, 30-000545, 30-000564, 30-000601, 30-000629, 30-000630, 30-000641, 30-000649, 30-000650, 30-000651, 30-000710, 30-000711, 30-000712, 30-000713, 30-000719, 30-000725, 30-000726, 30-000853, 30-000864, 30-000865, 30-000866
OR-00683	Paleo -	1981	Douglas, Ronald D.	Archaeological and Paleontological Resource Assessment, Turtle Rock Enclave Eight Irvine, California	LSA Associates, Inc.	30-000376, 30-000377, 30-000378
OR-00696		1981	Cottrell, Marie G. and Del Chario, Kathleen C.	Archaeological Investigations of the Tomato Springs Sites	Archaeological Resource Management Corp.	30-000244, 30-000649, 30-000650, 30-000651

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UC Davis South Coast Research & Extension Center Project

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-01022		1989	Del Chario, Kathleen C., Drummy-Chapel, Vada, and Demcak, Carol R.	Cultural Resource Assessment for the Allen-McColloch Pipeline (AMP) Flow Augmentation Project Reaches S4B/S5	Archaeological Resource Management Corporation	30-000244, 30-000643, 30-000647, 30-000651
OR-01233		1990	Cottrell, Marie G. and Wagner, Hugh M.	Tomato Springs: Additional Research Results	Pacific Coast Archaeological Society	30-000244
OR-01592		1997	Becker, Kenneth M.	Evaluation of the Cultural Resources of the Bee Canyon Retarding Basin, Orange County, California	RMW Paleo Associates, Inc.	30-000244, 30-000649, 30-000651, 30-000652, 30-001351
OR-02225	Other - Irvine Ranch	1978	Strozier, Hardy	The Irvine Company Planning Process and California Archaeology- A Review and Critique	The Irvine Company	
OR-02343		2001	Bissell, Ronald M.	Peer Review of 'A Phase I Cultural Resources Inventory for Planning Area 6, Irvine California,' dated 16 March 2001. Authors, Frank McDowell, M.A. and Christopher Drover, Ph.D. Prepared by The Keith Companies, Incorporated (TKCI) for the Irvine Community Development Company	RMW Paleo Associates, Inc.	30-000244, 30-000545, 30-000651, 30-000652, 30-000761, 30-000762, 30-001246, 30-001297, 30-001298, 30-001311, 30-001347, 30-001348, 30-001480
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-02649		1997	Allen, Rebecca	Archeological Survey Report Marine Corps Air Station, El Toro	KEA Environmental, Inc	30-000755, 30-000756, 30-000757, 30-000758, 30-000759, 30-000760, 30-000961, 30-001356, 30-001462
OR-02936	Paleo -	2005	Archer, Gavin	Archaeological and Paleontological Monitoring Planning Area 6, Phase 1 Residential 12 kv and Telephone Underground Improvements Portola Parkway (Sr-133 to Sta 151+00) Proposed Assessment District 04-20 and Tentative Tract 16562	The Keith Companies Archaeological Division	30-000244, 30-000545, 30-000601

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UC Davis South Coast Research & Extension Center Project

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-02938		2001	Drover, Christopher E., Henry C. Koerper, and Craig Lambert	A Cultural Resources Inventory for Planning Area 6, Irvine, California With Appendices	The Keith Companies Cultural Resources Division	30-000244, 30-000545, 30-000649, 30-000650, 30-000651, 30-000652, 30-000761, 30-000762, 30-001070, 30-001297, 30-001311, 30-001480, 30-001588, 30-001589, 30-001590, 30-001591, 30-001592, 30-001593, 30-001594, 30-001595, 30-001596
OR-02947		2001	Smith, David M. and Christopher E. Drover	A Phase II Test for Eligibility Lambert Reservoir Irvine, California	The Keith Companies, Inc. Cultural Resources Division	
OR-03291		2005	Strudwick, Ivan H. and Shannon Carmack	Cultural Resource Assessment the Lambert Ranch Project City of Irvine Orange County, California	LSA Associates, Inc.	30-176777
OR-03331		2006	Billat, Lorna	Uc Davis Monopalm/la-2794b, 7601 Irvine Boulevard, Irvine, Orange County, Ca 92618	EarthTouch, Inc.	30-001595, 30-001661, 30-100352, 30-176638
OR-03364		2004	Billat, Lorna	Honor Farm/7648a, 7601 Irvine Blvd, Irvine, CA, Orange County	EarthTouch Inc.	
OR-03483		2006	Bonner, Wayne H.	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate LA02878B (UC Ag Research), 7681 Irvine Boulevard, Irvine, Orange County, California	Michael Brandman Associates	30-001592, 30-001595, 30-100352, 30-176638
OR-04036		2007	Archer, Gavin, David C. Hanna, Matthew Wetherbee, and Mark R. Deering	Archaeological Data Recovery at Sites PA6-15 and -18 and CA-ORA-244, Locus G Planning Area 6, Phase 2, Neighborhood 4A Irvine, California	STANTEC	30-000244, 30-000650, 30-001588, 30-001702, 30-001703
OR-04037		2008	Archer, Gavin and David Hanna	Archaeological Discovery Report and In Situ Preservation Plan Site PA6-17 Planning Area 6 Phase II, Neighborhood 4A Irvine, California	Stantec	30-000244, 30-001588, 30-001707
OR-04039		2007	Archer, Gavin	Pre-construction Archaeological Investigations for the Planning Area 6, Phase I Project including Archival Research, Test Excavations, Data Recovery Excavations, Tree Removal Monitoring, and Re-survey	Irvine Community Development Company	30-000244, 30-000545, 30-000649, 30-001348, 30-001589, 30-001592, 30-001593, 30-001595, 30-001685, 30-100352, 30-100385, 30-100386, 30-100387, 30-100388, 30-100389, 30-176638

Report List

UC Davis South Coast Research & Extension Center Project

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
OR-04040		2007	Archer, Gavin	Archaeological Monitoring and Investigations During Construction Planning Area 6, Neighborhoods 1 and 2, City of Irvine	STANTEC	30-000545, 30-001673, 30-001674, 30-001675, 30-001676, 30-001677, 30-001678, 30-001679, 30-001680, 30-100143, 30-100144, 30-100145, 30-100146, 30-100147, 30-100148, 30-100149, 30-100408, 30-100409, 30-100410, 30-100411, 30-100412, 30-100413, 30-100414, 30-100415, 30-100416, 30-100417, 30-100418, 30-100419, 30-100420, 30-100421, 30-100422, 30-100423, 30-100424, 30-100425, 30-100426, 30-100427, 30-100428, 30-100429, 30-100430, 30-100431, 30-100432, 30-100433, 30-100434, 30-100435, 30-100436, 30-100437, 30-100477
OR-04041		2007	Archer, Gavin	Preliminary Draft Report Test Excavation and Evaluation of Archaeological Discovery PA6-11 and Discovery Treatment Plan Neighborhood 4A, Planning Area 6, City of Irvine	STANTEC	30-001588, 30-001594
OR-04339		2014	Underbrink, Susan and Ileana Bradford	Cultural Resource Monitoring Report, Paseo de Verdugo Project San Juan Capistrano, Orange County, California	TRC	30-001732

Resource List

UCD South Coast Research Center

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-000244	CA-ORA-000244	Resource Name - Tomato Spr., San Pantaleon, El Aguaje de Padre Gomez, Strandt #109; Other - Planning Area 6 Neighborhood 4A Phase 2; Voided - 30-000651; Voided - 30-000652; Other - LA/OMA 3; Other - Field #5 & #6	Site	Prehistoric, Protohistoric	AP02; AP11; AP13; AP15	1965 (McKinney, Smith, Pacific Coast Archaeological Society, Inc.); 1977 (J. Neitzel, M. Cottrell, R. Price, T. Schuster, Archaeological Research, Inc); 1977 (J. Neitzel, M. Cottrell, R. Price, T. Schuster, Archaeological Research, Inc); 1979 (R. Brown, Environmental Research Archaeologists); 2001 (Edward (Ted) Shickler and Craig E. Lambert, The Keith Companies, Inc.); 2008 (Dave Hanna, Stantec)	LA-00566, OR-00253, OR-00435, OR-00648, OR-00693, OR-00696, OR-01022, OR-01233, OR-01592, OR-01995, OR-02343, OR-02936, OR-02938, OR-03058, OR-04036, OR-04037, OR-04039, OR-04335
P-30-000545	CA-ORA-000545	Resource Name - Tomato Springs Archaeological Landscape, PA6-08	Site	Prehistoric	AP02; AP11; AP15	1976 (COOLEY, Pacific Coast Archaeological Society, Inc.); 1982 (Breece, William); 2001 (Shickler, Edward, & Craig E. Lambert, The Keith Companies); 2007 (G. Cardenas, Stantec Consulting)	OR-00253, OR-00648, OR-00847, OR-01995, OR-02343, OR-02522, OR-02936, OR-02938, OR-04039, OR-04040, OR-04335
P-30-001588	CA-ORA-001588	Resource Name - TS-1	Site	Prehistoric	AP02; AP12; AP15	2001 (E. Shickler, The Keith Companies)	OR-02938, OR-04036, OR-04037, OR-04041, OR-04335
P-30-001592	CA-ORA-001592	Resource Name - TS-5	Site	Prehistoric	AP02; AP15	2001 (E. Shickler, The Keith Companies); 2004 (D. Ewers, M. Deering, Stantec Consulting)	OR-02938, OR-03483, OR-04039, OR-04335
P-30-001594	CA-ORA-001594	Resource Name - TS-7	Site	Prehistoric	AP02; AP15	2001 (E. Shickler, The Keith Companies)	OR-02938, OR-04041, OR-04335
P-30-001595	CA-ORA-001595	Resource Name - TS-8	Site	Prehistoric	AP02; AP12	2001 (E. Shickler, C. Lambert, The Keith Companies); 2008 (Gavin Archer)	OR-02938, OR-03331, OR-03483, OR-04039
P-30-001673	CA-ORA-001673	Resource Name - PA6-01; Other - Tomato Springs Arch Landscape	Site	Prehistoric	AP02; AP11; AP15	2007 (G. Cardenas, Stantec)	OR-04040, OR-04335
P-30-001675	CA-ORA-001675	Resource Name - PA6-03; Other - Tomato Springs Arch. Landscape	Site	Prehistoric	AP11; AP15	2007 (G. Cardenas, Stantec)	OR-04040, OR-04335

Resource List

UCD South Coast Research Center

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-001676	CA-ORA-001676	Resource Name - PA6-05; Other - Tomato Springs Arch Landscape	Site	Prehistoric	AP02; AP11; AP15	2007 (G. Cardenas, Stantec)	OR-04040, OR- 04335
P-30-001677	CA-ORA-001677	Resource Name - PA6-06; Other - Tomato Springs Arch. Landscape	Site	Prehistoric	AP02; AP07; AP11; AP15	2007 (G. Cardenas, Stantec)	OR-04040, OR- 04335
P-30-001678	CA-ORA-001678	Resource Name - PA6-07; Other - Tomato Springs Arch. Landscape	Site	Prehistoric	AP02; AP11; AP15	2007 (G. Cardenas, Stantec)	OR-04040, OR- 04335
P-30-001679	CA-ORA-001679	Resource Name - PA6-09; Other - Tomato Springs Arch. Landscape	Site	Prehistoric	AP11	2007 (G. Cardenas, Stantec)	OR-04040, OR- 04335
P-30-001680	CA-ORA-001680	Resource Name - PA6-10; Other - Tomato Springs Arch Landscape	Site	Prehistoric	AP02; AP11	2007 (G. Cardenas, Stantec)	OR-04040, OR- 04335
P-30-001685	CA-ORA-001685	Resource Name - PA6-16	Site	Prehistoric	AP02	2004 (Daniel G. Ewers, Mark R. Deering, Stantec); 2008 (Gavin Archer)	OR-04039, OR- 04335
P-30-001704	CA-ORA-001704	Resource Name - PA6-11	Site	Prehistoric	AP02; AP11; AP15	2008 (G. Archer, Stantec)	OR-04335
P-30-001705	CA-ORA-001705	Resource Name - PA6-12	Site	Prehistoric	AP02; AP11; AP15	2007 (G. Cardenas and G. Archer, Stantec)	OR-04335
P-30-001706	CA-ORA-001706	Resource Name - PA6-13	Site	Prehistoric	AP02; AP11	2007 (G. Cardenas and G. Archer, Stantec)	OR-04335
P-30-001707	CA-ORA-001707	Resource Name - PA6-17	Site	Prehistoric	AP02; AP11	2008 (Gavin Archer and Mark Deering, Stantec)	OR-04037
P-30-100143		Resource Name - PA6I-053; Other - Field Number MMD52	Other	Prehistoric	AP02	2006 (Mike De Giovine, Stantec)	OR-04040, OR- 04335
P-30-100147		Resource Name - PA6I-133, N2SIGC10	Other	Prehistoric, Unknown	AP02	2009 (Mark Deering, Stantec)	OR-04040, OR- 04335
P-30-100148		Resource Name - PA6I-134, N2SIGC12	Other	Prehistoric	AP02	2009 (Mark Deering, Stantec)	OR-04040, OR- 04335
P-30-100149		Resource Name - PA6I-135, N2SIGC13	Other	Prehistoric	AP02	2009 (Mark Deering, Stantec)	OR-04040, OR- 04335
P-30-100352		Resource Name - PA-6 Isolate #6 - "Purex Bottle"	Other	Historic	AH04	2004 (Daniel G. Ewers, The Keith Companies); 2007; 2007	OR-03331, OR- 03483, OR-04039

Resource List

UCD South Coast Research Center

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-100389		Resource Name - PA-6 #5 Isolate Mano	Other	Prehistoric	AP02	2004 (Scott Crull, Daniel G. Ewers, The Keith Companies); 2007	OR-04039, OR- 04335
P-30-100400		Resource Name - PA61-039	Other	Prehistoric	AP02	2006 (C. Lash, The Keith Companies)	
P-30-100420		Resource Name - PA61-007	Other	Prehistoric	AP02	2005 (S. Pentney, The Keith Companies)	OR-04040, OR- 04335
P-30-100422		Resource Name - PA61-009	Other	Prehistoric	AP02; AP15	2005 (R. Norton, The Keith Companies)	OR-04040, OR- 04335
P-30-100423		Resource Name - PA61-010	Other	Prehistoric	AP02	2005 (R. Mills, The Keith Companies)	OR-04040, OR- 04335
P-30-100424		Resource Name - PA61-011	Other	Prehistoric	AP02	2005 (G. Cardenas, The Keith Companies); 2008	OR-04040, OR- 04335
P-30-100425		Resource Name - PA61-018	Other	Prehistoric	AP02	2005 (C. Lash, The Keith Companies)	OR-04040, OR- 04335
P-30-100426		Resource Name - PA61-019	Other	Prehistoric	AP15	2005 (G. Cardenas, The Keith Companies)	OR-04040, OR- 04335
P-30-100427		Resource Name - PA61-021	Other	Prehistoric	AP02	2005 (G. Cardenas, Stantec)	OR-04040
P-30-100429		Resource Name - PA61-042	Other	Prehistoric	AP02	2005 (K. Rice, Stantec)	OR-04040, OR- 04335
P-30-100430		Resource Name - PA61-043	Other	Prehistoric	AP02	2005 (K. Rice, Stantec)	OR-04040, OR- 04335, OR-04336
P-30-100431		Resource Name - PA61-044	Other	Prehistoric, Historic	AH04; AP02	2005 (K. Rice, Stantec)	OR-04040, OR- 04335
P-30-100432		Resource Name - PA61-045	Other	Prehistoric	AP02; AP16	2005 (G. Maxwell, Stantec)	OR-04040, OR- 04335
P-30-100434		Resource Name - PA61-116; Other - PA6CL05	Other	Prehistoric	AP02	2005 (G. Cardenas, Stantec); 2008 (Cathy Lash, Stantec)	OR-04040, OR- 04335
P-30-100435		Resource Name - PA61-117	Other	Prehistoric	AP02	2005 (S. Pentney, Stantec)	OR-04040, OR- 04335
P-30-100437		Resource Name - PA61-119	Other	Prehistoric	AP04	2005 (S. Pentney, Stantec)	OR-04040, OR- 04335
P-30-176636		Resource Name - TS-10; Other - The Lambert Reservoir	Structure	Historic	HP22	2001 (E. Shickler, The Keith Companies)	OR-04335

Resource List

UCD South Coast Research Center

Primary No.	Trinomial	Other IDs	Type	Age	Attribute codes	Recorded by	Reports
P-30-176637		Resource Name - TS-11	Object	Historic	HP39	2001 (E. Shickler, The Keith Companies)	OR-04335
P-30-176638		Resource Name - TS-12	Object	Historic	HP39	2001 (E. Shickler, The Keith Companies); 2004 (S. Crull, The Keith Companies)	OR-03331, OR-03483, OR-04039
P-30-176639		Resource Name - TS-13	Object	Historic	HP33; HP39	2001 (E. Shickler, The Keith Companies)	
P-30-176640		Resource Name - TS-14	Building	Historic	HP02	2001 (E. Shickler, The Keith Companies)	OR-04335

Attachment 3
NAHC Sacred Lands File
Search Results

NATIVE AMERICAN HERITAGE COMMISSION

December 5, 2023

Emily Hyland
University of California, ANR

Via Email to: EKHyland@ucdavis.edu

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, UC ANR South Coast REC Engagement Center Project, Orange County

To Whom It May Concern:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:



CHAIRPERSON
Reginald Pagaling
Chumash

VICE-CHAIRPERSON
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

SECRETARY
Sara Dutschke
Miwok

PARLIAMENTARIAN
Wayne Nelson
Luiseño

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Stanley Rodriguez
Kumeyaay

COMMISSIONER
Laurena Bolden
Serrano

COMMISSIONER
Reid Milanovich
Cahuilla

COMMISSIONER
Vacant

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

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

- Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

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

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Orange County
12/5/2023

Tribe Name	Fed (F) Non-Fed (N)	Contact Person	Contact Address	Phone #	Fax #	Email Address	Cultural Affiliation	Counties	Last Updated
Gabrieleno Band of Mission Indians - Kizh Nation	N	Andrew Salas, Chairperson	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno Band of Mission Indians - Kizh Nation	N	Christina Swindall Martinez, Secretary	P.O. Box 393 Covina, CA, 91723	(844) 390-0787		admin@gabrielenoindians.org	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	8/18/2023
Gabrieleno/Tongva San Gabriel Band of Mission Indians	N	Anthony Morales, Chairperson	P.O. Box 693 San Gabriel, CA, 91778	(626) 483-3564	(626) 286-1262	GTTribalcouncil@aol.com	Gabrieleno	Los Angeles, Orange, Riverside, San Bernardino, Ventura	12/4/2023
Gabrielino /Tongva Nation	N	Sandonne Goad, Chairperson	106 1/2 Judge John Also St., #231 Los Angeles, CA, 90012	(951) 807-0479		sgoad@gabrielino-tongva.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	3/28/2023
Gabrielino Tongva Indians of California Tribal Council	N	Robert Dorame, Chairperson	P.O. Box 490 Bellflower, CA, 90707	(562) 761-6417	(562) 761-6417	gtongva@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino-Tongva Indians of California Tribal Council	N	Christina Conley, Cultural Resource Administrator	P.O. Box 941078 Simi Valley, CA, 93094	(626) 407-8761		christina.marsden@alumni.usc.edu	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Santa Barbara, Ventura	3/16/2023
Gabrielino-Tongva Tribe	N	Sam Dunlap, Cultural Resource Director	P.O. Box 3919 Seal Beach, CA, 90740	(909) 262-9351		tongvatcr@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	5/30/2023
Gabrielino-Tongva Tribe	N	Charles Alvarez, Chairperson	23454 Vanowen Street West Hills, CA, 91307	(310) 403-6048		Chavez1956metro@gmail.com	Gabrielino	Los Angeles, Orange, Riverside, San Bernardino, Ventura	5/30/2023
Juaneno Band of Mission Indians Acjachemen Nation - Belardes	N	Joyce Perry, Cultural Resource Director	4955 Paseo Segovia Irvine, CA, 92603	(949) 293-8522		kaamalam@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/17/2023
Juaneno Band of Mission Indians Acjachemen Nation 84A	N	Heidi Lucero, Chairperson, THPO	31411-A La Matanza Street San Juan Capistrano, CA, 92675	(562) 879-2884		jbman.chairwoman@gmail.com	Juaneno	Los Angeles, Orange, Riverside, San Bernardino, San Diego	3/28/2023
Pala Band of Mission Indians	F	Christopher Nejo, Legal Analyst/Researcher	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3564		cnejo@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Pala Band of Mission Indians	F	Alexis Wallick, Assistant THPO	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3537		awallick@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Pala Band of Mission Indians	F	Shasta Gaughen, Tribal Historic Preservation Officer	PMB 50, 35008 Pala Temecula Road Pala, CA, 92059	(760) 891-3515		sgaughen@palatribe.com	Cupeno Luiseno	Orange, Riverside, San Bernardino, San Diego	11/27/2023
Santa Rosa Band of Cahulla Indians	F	Lovina Redner, Tribal Chair	P.O. Box 391820 Anza, CA, 92539	(951) 659-2700	(951) 659-2228	lsaul@santarosa-nsn.gov	Cahulla	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	
Soboba Band of Luiseno Indians	F	Joseph Ontiveros, Tribal Historic Preservation Officer	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-5279	(951) 654-4198	jontiveros@soboba-nsn.gov	Cahulla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023
Soboba Band of Luiseno Indians	F	Jessica Valdez, Cultural Resource Specialist	P.O. Box 487 San Jacinto, CA, 92581	(951) 663-6261	(951) 654-4198	jvaldez@soboba-nsn.gov	Cahulla Luiseno	Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego	7/14/2023

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 Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed UC ANR South Coast REC Engagement Center Project, Orange County.

Record: PROJ-2023-005952
Report Type: AB52 GIS
Counties: All
NAHC Group: All

Attachment 4

Historical Society Consultation

From: [Anderson, Michelle](#)
To: info@irvinehistory.org
Cc: [Daniels, James](#)
Subject: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Thursday, December 7, 2023 10:31:11 AM
Attachments: [2023-12-07 Irvine Historical Society Outreach Letter.pdf](#)

Good morning,

Michael Baker International is conducting a cultural resources study for the South Coast Research and Extension Center Project in Irvine, California. Please see the attached letter and maps for additional details about the project. We are conducting outreach to you, the local historical society, to ask if you have any information regarding historic properties or cultural resources that may be within the project area. Please contact Michael Baker International using the contact information in the attached letter.

Sincerely,

Michelle Anderson | Architectural Historian II | Pronouns: she/her
3100 Zinfandel Drive, Suite 125 | Rancho Cordova, CA 95670 | [O] 916-517-4422
Michelle.Anderson@mbakerintl.com | www.mbakerintl.com



December 7, 2023

IRVINE HISTORICAL SOCIETY

5 SAN JOAQUIN

IRVINE, CALIFORNIA 92612

VIA EMAIL: INFO@IRVINEHISTORY.ORG

RE: SOUTH COAST RESEARCH AND EXTENSION CENTER PROJECT, CITY OF IRVINE, ORANGE COUNTY, CALIFORNIA

To whom it may concern:

Michael Baker International is conducting a cultural resources study in support of the South Coast Research and Extension Center Project (project) in Irvine, California. The project proposes demolition of the former water detention basin at the South Coast Research and Extension Center and construction of a new engagement center (see **Attachment 1**). The basin is known to be greater than 45 years of age. The proposed project is subject to the California Environmental Quality Act (CEQA).

Please notify us if your organization has any information regarding historical resources within the project area depicted in **Attachment 1**. Please contact me at your earliest convenience at Michelle.Anderson@mbakerintl.com or 916-517-4422 if you have any questions or comments.

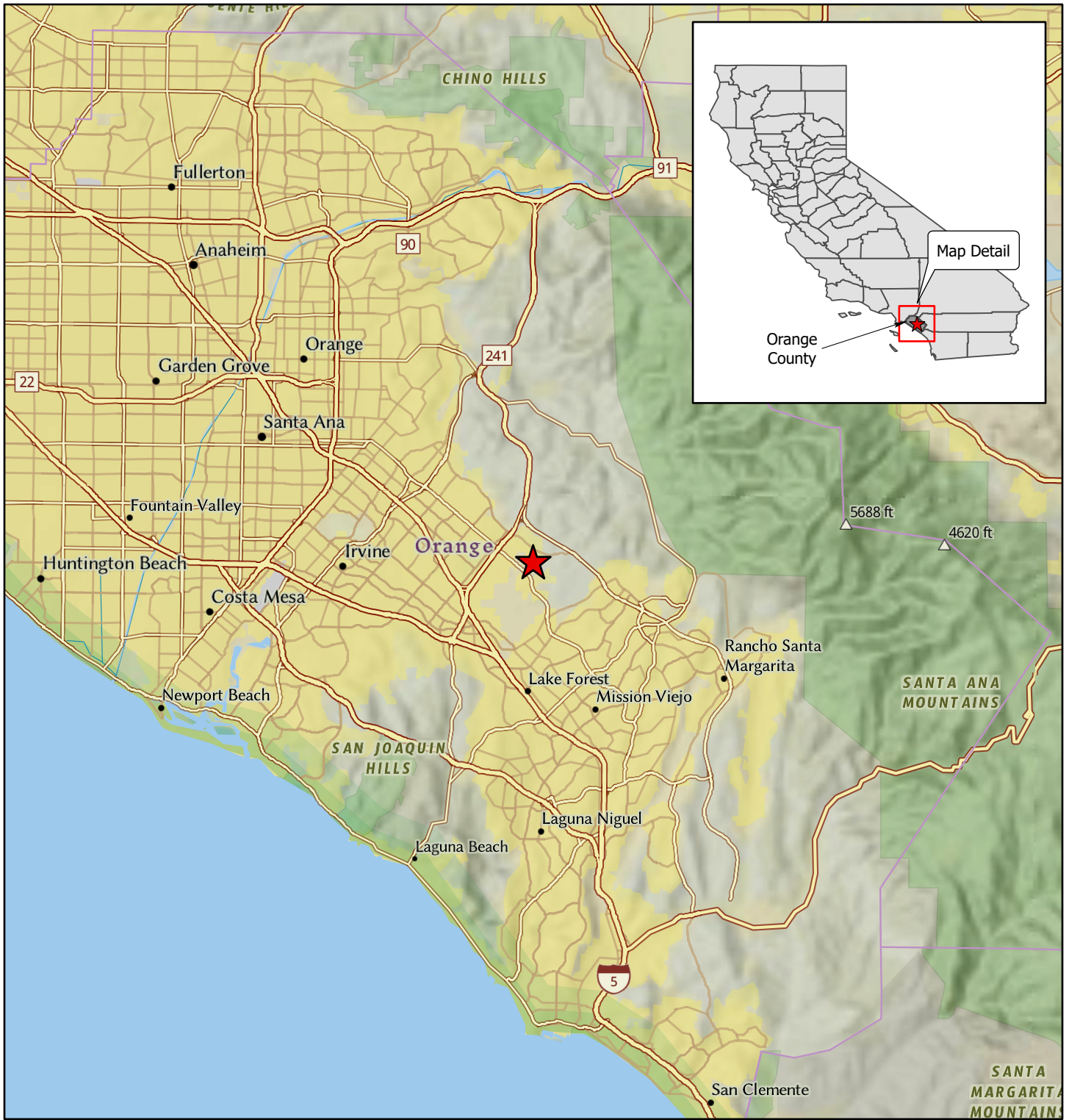
Sincerely,

Michelle Anderson

Michelle Anderson, MA
Architectural Historian II

Attachments:

Attachment 1 - Figures



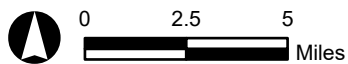
Legend

★ Project Location

SOUTH COAST RESEARCH AND EXTENSION CENTER PROJECT
IRVINE, CA

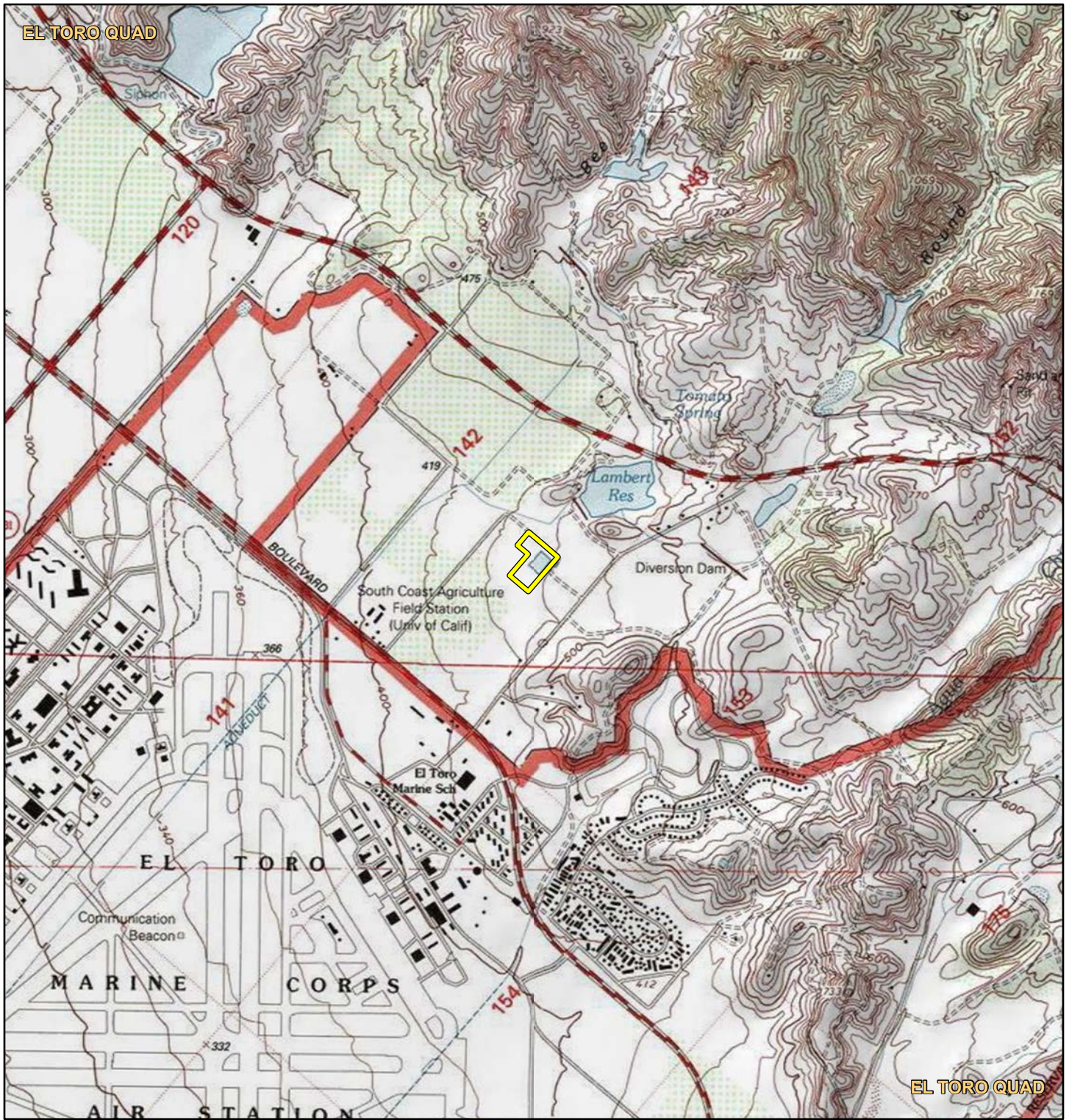
Regional Vicinity

Michael Baker
INTERNATIONAL



Source: Esri, ArcGIS Online, National Geographic World Map: Irvine, California

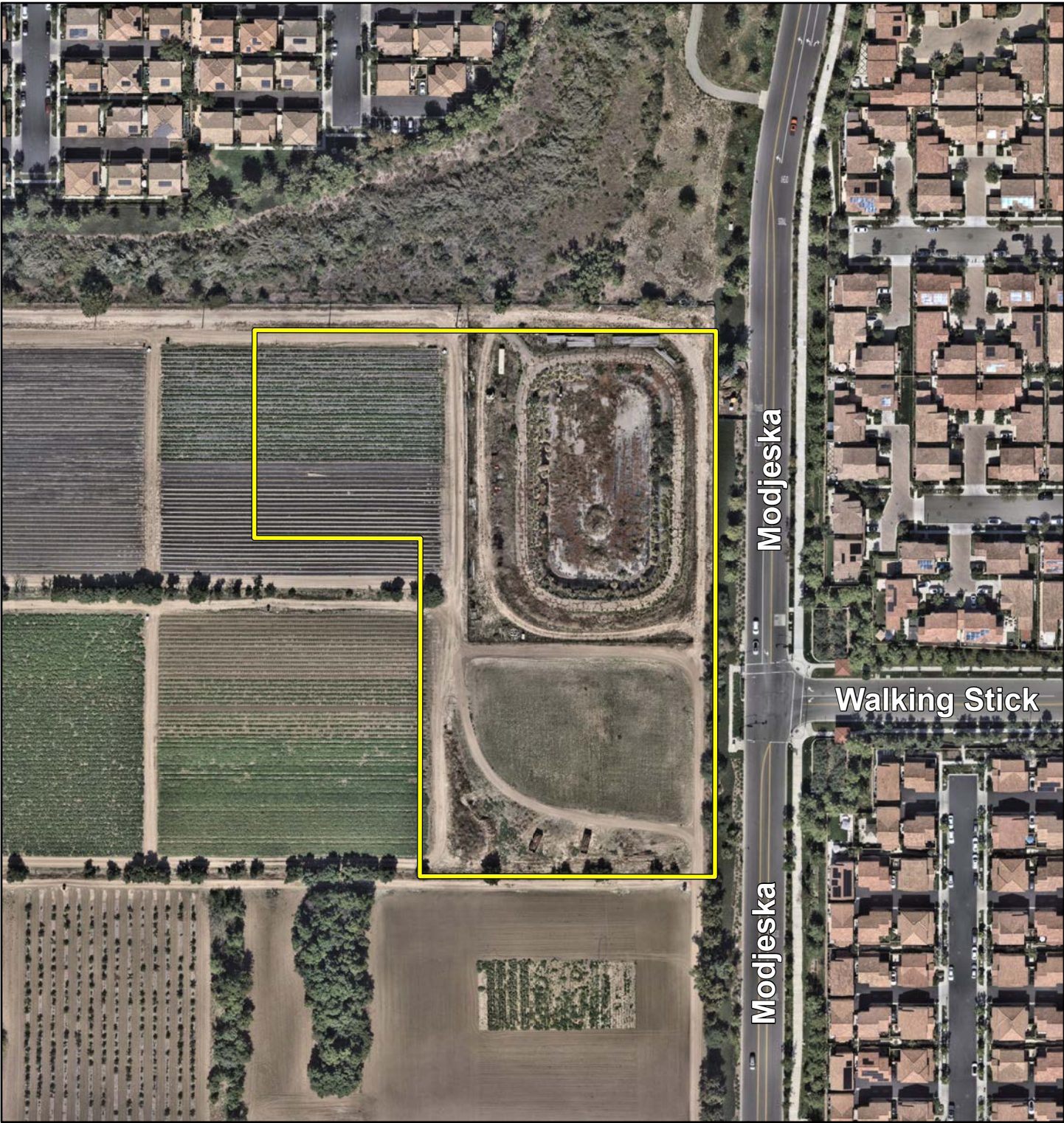
Figure 1




Legend

 Project Area

SOUTH COAST RESEARCH AND EXTENSION CENTER PROJECT
IRVINE, CA



Legend

 Project Area

From: postmaster@IRVINEHISTORICALSOCIETY.onmicrosoft.com
To: Gail@irvinehistory.org
Subject: Delivered: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Thursday, December 7, 2023 2:09:43 PM
Attachments: [South Coast Research and Extension Center Project - Historical Society Outreach.msg](#)

Your message has been delivered to the following recipients:
Gail@irvinehistory.org <<mailto:Gail@irvinehistory.org>>
Subject: South Coast Research and Extension Center Project - Historical Society Outreach

From: postmaster@IRVINEHISTORICALSOCIETY.onmicrosoft.com
To: Mary@irvinehistory.org
Subject: Delivered: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Thursday, December 7, 2023 2:09:55 PM
Attachments: [South Coast Research and Extension Center Project - Historical Society Outreach.msg](#)

Your message has been delivered to the following recipients:
Mary@irvinehistory.org <mailto:Mary@irvinehistory.org>
Subject: South Coast Research and Extension Center Project - Historical Society Outreach

From: [Mary Susa](#)
To: [Anderson, Michelle](#)
Subject: Read: EXTERNAL: Read: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Sunday, December 10, 2023 2:56:05 PM

Your message

To:
Subject: EXTERNAL: Read: South Coast Research and Extension Center Project - Historical Society Outreach
Sent: Sunday, December 10, 2023 10:56:03 PM (UTC+00:00) Monrovia, Reykjavik
was read on Sunday, December 10, 2023 10:55:55 PM (UTC+00:00) Monrovia, Reykjavik.

From: [Mary Susa](#)
To: [Anderson, Michelle](#)
Subject: EXTERNAL: Re: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Sunday, December 10, 2023 2:56:31 PM

EXTERNAL EMAIL

Thank you for the material. We have reviewed and have no comments.

Mary

From: Anderson, Michelle <Michelle.Anderson@mbakerintl.com>
Sent: Thursday, December 7, 2023 10:31 AM
To: info@irvinehistory.org <info@irvinehistory.org>
Cc: Daniels, James <James.Daniels@mbakerintl.com>
Subject: South Coast Research and Extension Center Project - Historical Society Outreach

Good morning,

Michael Baker International is conducting a cultural resources study for the South Coast Research and Extension Center Project in Irvine, California. Please see the attached letter and maps for additional details about the project. We are conducting outreach to you, the local historical society, to ask if you have any information regarding historic properties or cultural resources that may be within the project area. Please contact Michael Baker International using the contact information in the attached letter.

Sincerely,

Michelle Anderson | Architectural Historian II | Pronouns: she/her
3100 Zinfandel Drive, Suite 125 | Rancho Cordova, CA 95670 | [O] 916-517-4422
Michelle.Anderson@mbakerintl.com | www.mbakerintl.com



From: [Anderson, Michelle](#)
To: [Mary Susa](#)
Subject: RE: EXTERNAL: Re: South Coast Research and Extension Center Project - Historical Society Outreach
Date: Monday, December 11, 2023 7:54:10 AM

Thank you, Mary. Have a wonderful week!

Regards,

Michelle Anderson | Architectural Historian II | Pronouns: she/her
3100 Zinfandel Drive, Suite 125 | Rancho Cordova, CA 95670 | [O] 916-517-4422
Michelle.Anderson@mbakerintl.com | www.mbakerintl.com



From: Mary Susa <Mary@irvinehistory.org>
Sent: Sunday, December 10, 2023 2:56 PM
To: Anderson, Michelle <Michelle.Anderson@mbakerintl.com>
Subject: EXTERNAL: Re: South Coast Research and Extension Center Project - Historical Society Outreach

EXTERNAL EMAIL

Thank you for the material. We have reviewed and have no comments.

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