Cultural Resources Assessment for the Thousand Palms Channel Improvement Project, City of Indio, Riverside County, California

JUNE 2024

PREPARED FOR

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EXECUTIVE SUMMARY

Purpose and Scope: Kimley-Horn and Associates, Inc. (Kimley-Horn) retained SWCA Environmental Consultants (SWCA) to conduct a cultural resources assessment in support of the Thousand Palms Channel Improvements Project (project), proposed by the Coachella Valley Water District (CVWD or District). The project area is located along the Thousand Palms Channel generally between the Coachella Valley Stormwater Channel (CVSC) and the Coachella Canal near Sun City Shadow Hills in the city of Indio, California (project area). CVWD proposes to improve the existing unlined Thousand Palms Channel to receive regional flood flows from the North Indio Hills and Thousand Palms areas, and improve the channel's confluence with the CVSC. The Thousand Palms Channel has not been previously evaluated for potential historical significance.

This study was conducted to analyze potential impacts the project may have on cultural resources in the project area to facilitate compliance with the California Environmental Quality Act (CEQA). This study included the following: 1) California Historical Resources Information System (CHRIS) records search; 2) Sacred Lands File (SLF) search; 3) literature, map, and aerial photograph review; 3) intensive-level archaeological and built environment surveys; and 4) an evaluation to determine whether the Thousand Palms Channel and the portion of site P-33-007425/CA-RIV-005799 within the project area are eligible for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), and would therefore constitute a historical resource for the purposes of CEQA. The methodology for this assessment complies with best professional practices and CEQA Guidelines, Sections 5024.1, 21083.2, and 21084.1 of the Public Resources Code (PRC), and Title 14 California Code of Regulations (CCR) Section 15064.5.

Dates of Investigation: At SWCA's request, on May 13, 2022, staff at the Eastern Information Center (EIC) at the University of California, Riverside conducted a CHRIS records search for the project area plus a 1-mile radius. The SLF search was conducted by Andrew Green, Cultural Resource Analyst with the Native American Heritage Commission (NAHC) at the request of SWCA, and results of the SLF search were received on March 20, 2023. SWCA staff conducted intensive-level archaeological and built environment surveys of the project area on April 13 and 14, 2023. Subsequently, the project engineering and boundaries were revised. The current project footprint is smaller than the original footprint and is completely inside the original project boundaries. Accordingly, the project area and report were revised in May 2024.

Summary of Findings: Two previously recorded built environment resources were identified within the project area: the Coachella Canal (P-33-005705/CA-RIV-012999) and the CVSC (P-33-017259/CA-RIV-10847). The Coachella Canal was previously determined eligible for the NRHP with State Historic Preservation Office (SHPO) concurrence. It is eligible at the local and state levels of significance under Criterion A, and its period of significance was identified as 1938 to 1954. The Coachella Canal qualifies as a historical resource for the purposes of CEQA. The segment of the CVSC within the project area was previously recommended ineligible for the NRHP and CRHR.

SWCA identified one previously unrecorded built environment resource within the project area: the Thousand Palms Channel. The channel was surveyed, recorded on California Department of Parks and Recreation (DPR) 523 series forms, and evaluated for eligibility for listing in the NRHP and the CRHR. As described in this study, the Thousand Palms Channel originates from a natural feature, a wash, and is currently an unlined channel with earthen bed and banks, and minimal human-made features such as a concrete drop structure, baffle blocks, and riprap. The Thousand Palms Channel is recommended ineligible for listing in the NRHP and CRHR under all criteria as it lacks association with significant events and individuals (Criteria A/1 and B/2); does not embody the distinctive characteristics of a type, period, or method of construction, or represents the work of a master architect or engineer (Criteria C/3);

and does not appear to have the potential to yield information important to prehistory or history (Criteria D/4). Therefore, the Thousand Palms Channel is not a historical resource for the purposes of CEQA.

One previously recorded prehistoric archaeological resource (P-33-007425/CA-RIV-005799) was identified within the original boundary overlapping a small section of the northern portion of the project area's disturbance footprint. The site was recorded in 1995 as consisting of a light scatter of ceramics, groundstone fragments, fire-affected rock, broken river cobble, various types of shell, three hearth areas, eight structured depressions, and an intrusive historic trash component along the northern edge adjacent to the project area. Also noted were faunal remains, burned clay fragments, unfired clay balls/nodules, and many depressed areas with associated ceramics and burned bone.

During the archaeological field survey, a total of nine prehistoric ceramic fragments were recorded within push berms at six locations in the northern portion of the project area. Of the nine artifacts, seven are outside of the established construction grading limits while the remaining two artifacts are within the grading limits. Artifact 5 is also within a proposed access road alignment. While the artifacts were outside of the previously recorded boundary of P-33-0007425/CA-RIV-005799, the boundary was updated to include all nine artifacts. As a result of the site boundary update, the site overlaps the northwestern portion of the project area.

While site P-33-0007425/CA-RIV-005799 has not been evaluated in its entirety and a recommendation of eligibility cannot be made for the site as a whole, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is heavily disturbed with the artifacts displaced from their original context by agricultural and road grading activities. As such, the portion of site P-33-0007425/CA-RIV-005799 within the project area is recommended to be a non-contributing element to the site's eligibility for the CRHR, were it to be formally evaluated for listing. Therefore, the portion of the site in the project area is not considered to be a historical resource or a unique archaeological resource for the purposes of CEQA.

Recommendations: The portion of P-33-0007425/CA-RIV-005799 located within the current project area is recommended to be a non-contributing element to the site's eligibility for the CRHR, were it to be formally evaluated for listing. The primary components of the site, however, are located immediately west of the project area. As a result, SWCA recommends: 1) the preparation of a Cultural Resources Monitoring and Treatment Plan (CRMTP) in consultation with the agency and all consulting Native American tribal groups, 2) artifact collection within the APE, and 3) tribal and archaeological monitoring of all ground-disturbing construction work north of Avenue 42. The archaeological monitor should be overseen by a Qualified Archaeologist, defined as one who meets the Secretary of the Interior's Professional Qualification Standards in archeology. The CRMTP will include, at a minimum, the qualifications of key staff, monitoring protocols, provisions for evaluating and treating cultural materials, and reporting requirements. Prior to any construction activities, it is recommended that the nine artifacts within the project area be collected and treated in accordance with the approved CRMTP. In the event that human remains are encountered during construction, the Riverside County Coroner should be contacted in compliance with State of California Health and Safety Code Section 7050.5 and PRC Section 5097.98.

SWCA finds the project would have a ***less-than-significant impact to archaeological resources***.

As mentioned above, the Coachella Canal is a historical resource for the purposes of CEQA. As the proposed project would protect in place the Coachella Canal and its siphon which allows the canal to flow underneath the Thousand Palms Channel, the project would not have a significant direct adverse impact on the historical resource. There are no other built environment historical resources adjacent to the project area that would be indirectly impacted. Therefore, the proposed project would result in a ***less-than-significant impact to built environment historical resources***.

Disposition of Data: The final cultural resources survey report and any subsequent related reports will be filed with CVWD; the EIC at the University of California, Riverside; and with SWCA's Pasadena, California, office. All field notes, photographs, and records related to the current study are on file at the SWCA Pasadena office.

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CHAPTER 1. INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) retained SWCA Environmental Consultants (SWCA) to prepare a cultural resources assessment in support of the Thousand Palms Channel Improvements Project (project), proposed by the Coachella Valley Water District (CVWD or District). The project area is located along the Thousand Palms Channel generally between the Coachella Valley Stormwater Channel (CVSC) and the Coachella Canal at Sun City Shadow Hills in the city of Indio, California (project area). CVWD proposes to improve the existing unlined Thousand Palms Channel to receive regional flood flows from the North Indio Hills and Thousand Palms areas, and improve the channel's confluence with the CVSC. The Thousand Palms Channel has not been previously evaluated for potential historical significance.

This report documents the results of a cultural resources study conducted by SWCA. The purpose of the study is to identify whether any cultural resources have been previously documented, record and evaluate the Thousand Palms Channel for potential historical significance, assess whether previously unrecorded resources are likely to occur in the project area, and provide recommendations for avoiding adverse impacts to those resources consistent with cultural resources reviews under the California Environmental Quality Act (CEQA). The study included the following tasks: 1) California Historical Resources Information System (CHRIS) records search; 2) Sacred Lands File (SLF) search; 3) literature, map, and aerial photograph review; 4) intensive-level archaeological and built environment surveys; and 5) evaluation to determine whether the Thousand Palms Channel and the portion of site P-33-007425/CA-RIV-005799 within the project area are eligible for the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR), and would therefore constitute a historical resource for the purposes of the CEQA. The methodology for this assessment complies with best professional practices and CEQA Guidelines, Sections 5024.1, 21083.2, and 21084.1 of the Public Resources Code (PRC), and 14 California Code of Regulations (CCR) 15064.5.

SWCA Architectural Historian Susan Zamudio-Gurrola, M.H.P., conducted the built environment evaluation and served as co-author of this report. Debi Howell-Ardila, M.H.P., Senior Team Lead for Architectural History, provided senior oversight for the built environment assessment. SWCA Archaeologists Omar Rice, B.A., and Alec McKinney, B.S., completed the cultural resources pedestrian survey. Senior Cultural Resources Team Lead Liz Dennison, M.A., Registered Professional Archaeologist (RPA), oversaw the archaeological assessment and served as co-author of this report. Michael Bever, Ph.D., RPA, provided technical review for the archaeological assessment.

1.1 PROJECT DESCRIPTION

The Thousand Palms Channel project includes constructing the last conveyance facility intended to receive regional flood flows from the North Indio Hills and Thousand Palms areas. To this point, the project would improve the Thousand Palms Channel to the confluence with the CVSC.

In its existing condition, the Thousand Palms Channel is an earthen bottom channel with earthen side slopes. There are sections of the Channel that have been incised and other sections that have had berms constructed. These berms are not Federal Emergency Management Agency (FEMA) certified levees. Additionally, there are two at-grade roadway crossings at Madison Street and Avenue 42, as well as a bridge crossing under Interstate (I-) 10. In its existing conditions, the Thousand Palms Channel is unable to accommodate the 100-year flow rate throughout the entirety of the channel along the project reach. The portion of the channel north of the Avenue 42 crossing does not have the capacity to convey the 100-year flowrate of 16,836 cubic feet per second.

The project's preliminary design report evaluated four different alternatives and resulted in a preferred alternative consisting of an earthen channel with concrete side slopes (Figure 3). The proposed Thousand

Palms Channel from Sun City Shadow Hills to the CVSC would cross Madison Street and Avenue 42, would include three concrete lined drop structures, and improve the confluence point with the CVSC.

Currently, the Coachella Canal crosses under the Thousand Palms Channel via a reinforced concrete siphon, and a concrete drop structure is located within the Thousand Palms Channel alignment at the location of the siphon to protect the siphon from scour and erosion. As part of the current project, the Coachella Canal, siphon and drop structure are proposed to be protected in place. The drop structure will be extended further downstream and to a lower level to provide the necessary scour protection associated with the ultimate channel design. Concrete slope lining will be installed along the lower 16'- 6" limits of the existing structure to raise the top of walls to a constant elevation of 32.68 feet, NGVD29 (35.0 ft NAVD88).

1.2 PROJECT LOCATION

The project area is located near central Indio, California (Figure 1). The project area is plotted on Sections 9, 10, 15, and 16, Township 5 South, Range 7 East, and can be found on the 1966 U.S. Geological Survey (USGS) La Quinta, California and Indio, California, 7.5-minute quadrangles (Figure 2). The project area spans from one of the southeastern edges of the Sun City Shadow Hills community to the CVSC, just south of I-10 (Figure 3).

The project area encompasses the direct project footprint (e.g., areas of construction, staging and access) and an additional surrounding buffer area, established by the project designers, to allow for construction impacts and potential changes in the project limits (see Figure 3). The vertical extent of ground disturbance is 50 feet below ground to account for excavation related to the channel construction. The majority of the grading will occur within the areas that have been previously disturbed by existing paved and dirt roads currently used for access to the existing Thousand Palms Channel. The exception is along the eastern side of the channel, where existing roads will be expanded to the west into the existing area of disturbance.

Figure 1. Project vicinity.

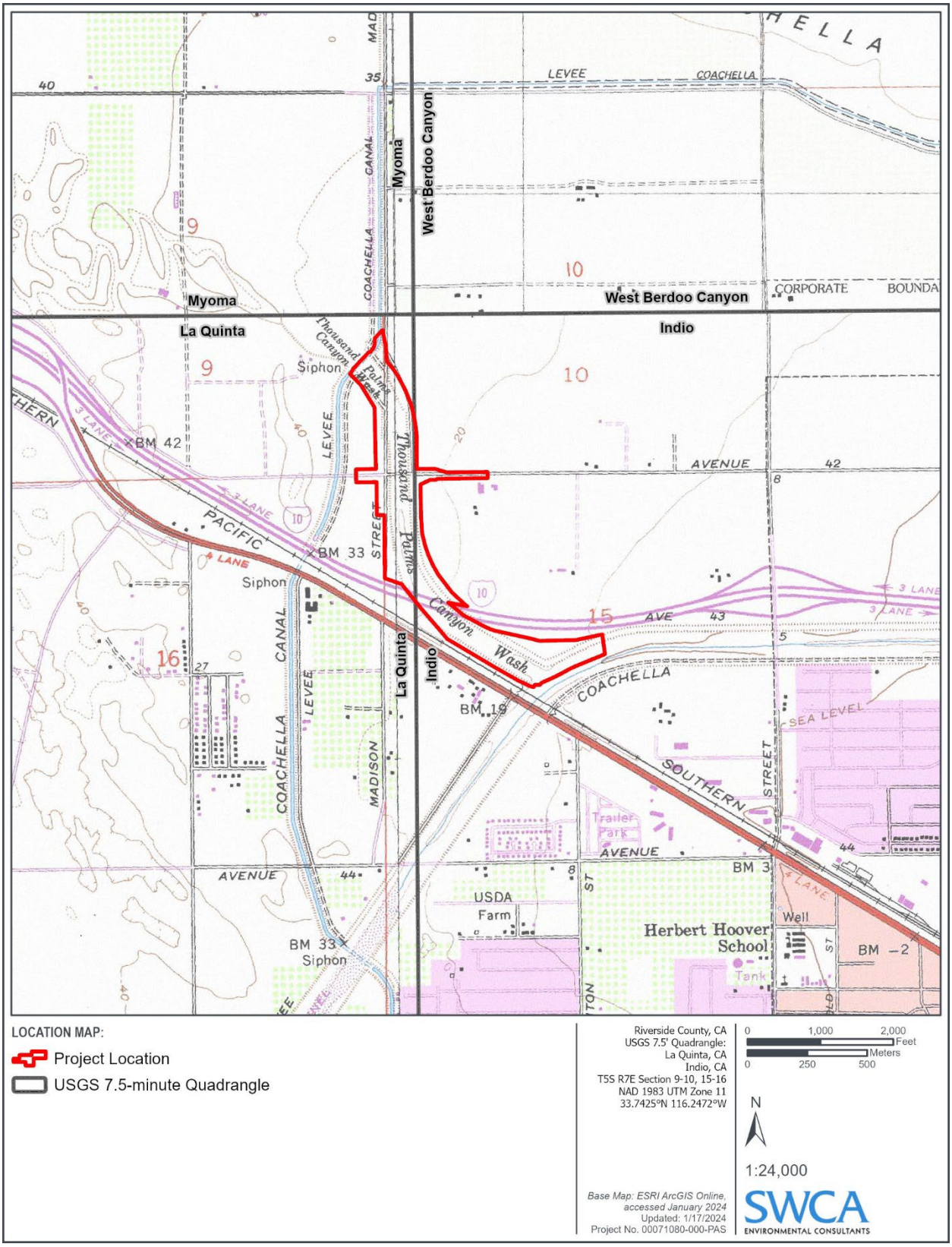

Figure 2. Project location depicted on USGS quadrangles.

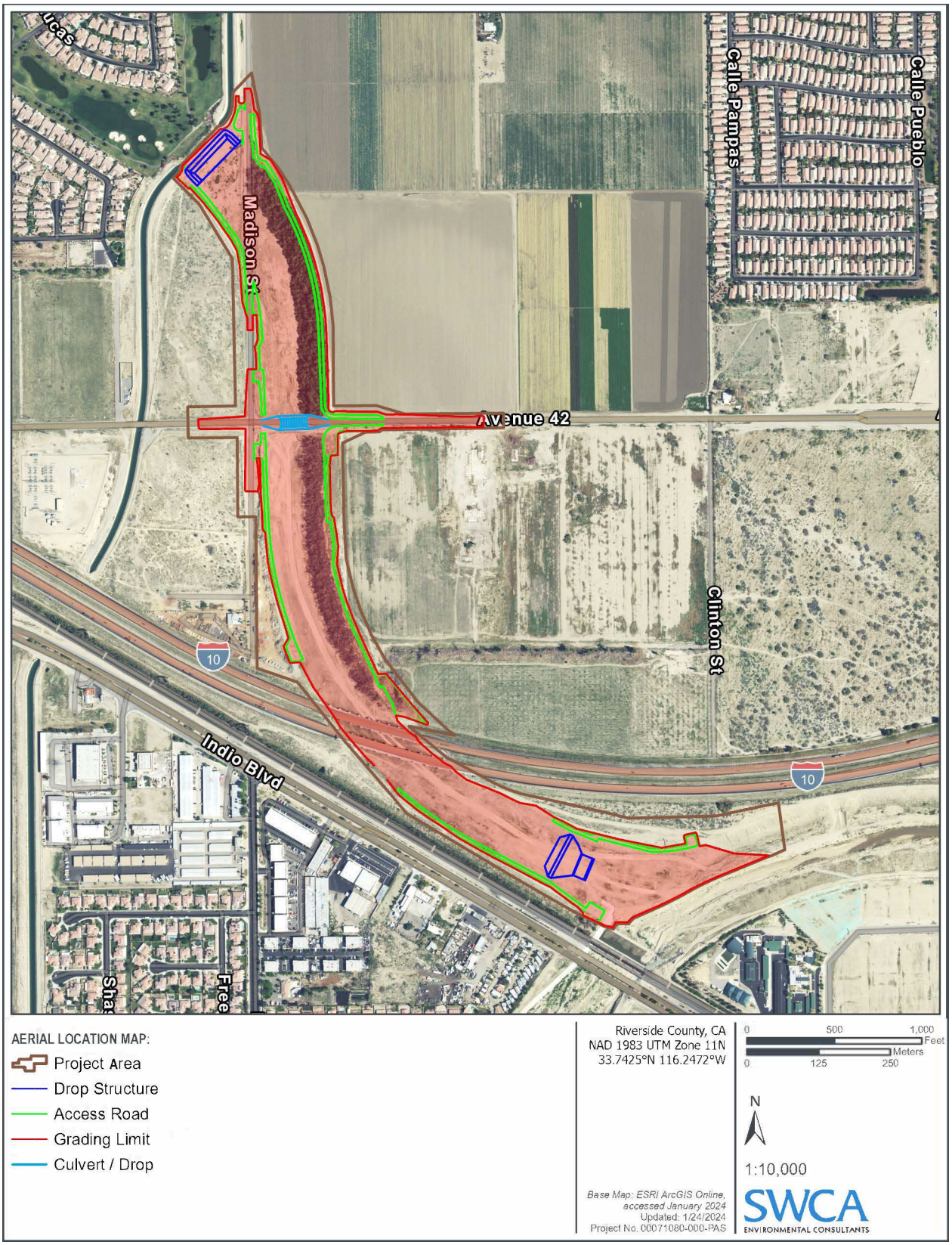

Figure 3. Project area depicted on a street map and aerial photograph.

CHAPTER 2. REGULATORY FRAMEWORK

This section includes a discussion of the applicable federal, state, and local laws, ordinances, regulations, and standards informing the identification of eligible historic resources.

2.1 FEDERAL REGULATIONS

2.1.1 National Register of Historic Places

The NRHP was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment" (36 Code of Federal Regulations [CFR] 60.2). The NRHP recognizes properties that are significant at the national, state, and local levels. To be eligible for the NRHP, a property must be significant in American history, architecture, archaeology, engineering, or culture under one or more of the following criteria (36 CFR 60.4):

- **Criterion A:** It is associated with events that have made a significant contribution to the broad patterns of our history;
- **Criterion B:** It is associated with the lives of persons who are significant in our past;
- **Criterion C:** It embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; and/or
- **Criterion D:** It has yielded, or may be likely to yield, information important in prehistory or history.

Ordinarily cemeteries, birthplaces, or graves of historic figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, and properties that are primarily commemorative in nature are not considered eligible for the NRHP, unless they satisfy certain conditions. In general, a resource must be 50 years of age to be considered for the NRHP, unless it satisfies a standard of exceptional importance.

In addition to meeting these criteria, a property must also retain historic integrity, which is defined in National Register Bulletin 15 as the ability of a property to convey its significance (National Park Service 1995). To assess integrity, the National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities:

1. Location – the place where the historic property was constructed or the place where the historic event occurred;
2. Design – the combination of elements that create the form, plan, space, structure, and style of a property;
3. Setting – the physical environment of a historic property;

4. Materials – the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

5. Workmanship – the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;

6. Feeling – a property's expression of the aesthetic or historic sense of a particular period of time; and

7. Association – the direct link between an important historic event or person and a historic property.

2.2 STATE REGULATIONS

The California Office of Historic Preservation (OHP), a division of the California Department of Parks and Recreation, is responsible for carrying out the duties described in the California PRC and for maintaining the California Historic Resources Inventory and CRHR. The state-level regulatory framework also includes CEQA.

2.2.1 California Environmental Quality Act

CEQA requires a lead agency to consider project effects on historical resources (which is understood to include significant archaeological resources). Under CEQA, a "project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment" (PRC 21084.1). Analysis is a two-part process: first, the determination must be made whether historical resources are present in the project area. Second, if such resources are present, the proposed project must be analyzed for its potential to cause a "substantial adverse change in the significance" of the resource.

2.2.1.1 Historical Resources

According to Section 15064.5 of the CEQA Guidelines, for the purposes of CEQA, historical resources are:

1. A resource listed in, or formally determined eligible . . . for listing in the CRHR (PRC Section 5024.1, 14 CCR 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historic resources survey meeting the requirements of PRC Section 5024.1(g).

3. Any object, building, structure, site, area, place, record, or manuscript that the lead agency determines to be eligible for national, state, or local landmark listing; generally, a resource shall be considered by the lead agency to be historically significant (and therefore a historic resource under CEQA) if the resource meets the criteria for listing on the CRHR (as defined in PRC Section 5024.1, 14 CCR 4852).

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity (as defined above) does not meet NRHP criteria may still be eligible for the CRHR.

According to CEQA, the fact that a resource is not listed in or determined eligible for the CRHR or is not included in a local register or survey shall not preclude the lead agency from determining that the resource may be a historical resource (PRC 5024.1).

2.2.1.1.1 SUBSTANTIAL ADVERSE CHANGE AND INDIRECT IMPACTS TO HISTORICAL RESOURCES

CEQA Guidelines (14 CCR 15064.5) define a "substantial adverse change in the significance of an historical resource" as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired". Material impairment occurs when a project alters in an adverse manner or demolishes "those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion" in or eligibility for the NRHP, CRHR, or local register. In addition, pursuant to Section 15126.2 of the CEQA Guidelines, the "direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects."

The following guides and requirements are of particular relevance to this study's analysis of indirect impacts to historic resources. Pursuant to CEQA Guidelines (Section 15378), study of a project under CEQA requires consideration of "the whole of an action, which has the potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." CEQA Guidelines (14 CCR 15064[d]) further define direct and indirect impacts:

1. A direct physical change in the environment is a physical change in the environment which is caused by and immediately related to the project.

2. An indirect physical change in the environment is a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect physical change in the environment.

3. An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project.

2.2.1.2 Archaeological Resources

In terms of archaeological resources, Section 21083.2(g) of the PRC defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

If it can be demonstrated that a proposed project will cause damage to a unique archaeological resource, the lead agency may require that reasonable efforts be made to permit any or all of these resources to be

preserved in place or left in an undisturbed state. To the extent that they cannot be left undisturbed, mitigation measures are required (PRC 21083.2[a]–[c]). CEQA notes that if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of the project on those resources shall not be considered to be a significant effect on the environment (CEQA Guidelines, 14 CCR 15064.5[c][4]).

2.2.1.2.1 CALIFORNIA STATE ASSEMBLY BILL 52

Assembly Bill 52 of 2014 (AB 52) amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. Section 4 of AB 52 adds Section 21074(a)(b)(c) to the PRC, which address Tribal cultural resources, cultural landscapes, and historical resources.

PRC Section 21074(a) defines Tribal cultural resources as one of the following:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

   A. Included or determined to be eligible for inclusion in the California Register of Historical Resources.

   B. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Additionally, PRC Section 21074(b) and (c) include in the definition of a Tribal cultural resource the following:

(3) A cultural landscape that meets the criteria of subdivision (s)…to the extent that the landscape is geographically defined in terms of the size and scope of the landscape (PRC Section 21074 [b])

(4) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2…if it conforms with the criteria of subdivision (a) (PRC Section 21074 [c]).

Impacts to Tribal cultural resources should be considered under CEQA. PRC Section 21080.3.2 states that parties may propose mitigation measures "capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource." Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to Tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

2.2.1.2.2 CONSULTATION WITH NATIVE AMERICAN TRIBES

California Native American tribes are defined in AB 52 as any Native American tribe located in California that is on the contact list maintained by the NAHC, whether or not they are federally recognized. AB 52 specifies that California Native American tribes traditionally and culturally affiliated

with a geographic area may have expertise concerning their Tribal cultural resources. Once an application for a project is completed or a public agency makes a decision to undertake a project, the lead agency has 14 days to send formal notification to Native American tribes designated by the NAHC as having traditional and cultural affiliation with a given project area and that had previously requested in writing to be notified by the lead agency (PRC Section 21082.3.1[b][d]). The notification shall include a brief description of the proposed project, the location, contract information for the agency contact, and notice that the Tribe has 30 days to request, in writing, consultation (PRC Section 21082.3.1[d]). Consultation must be initiated by the lead agency within 30 days of receiving any California Native American tribe's request for consultation. Furthermore, consultation must be initiated prior to the release of a negative declaration, mitigated negative declaration, or EIR for a project (PRC Section 21082.3.1[b][e]).

Consultation may include discussion concerning the type of environmental review necessary, the significance of the project's impacts on the Tribal cultural resources, and, if necessary, project alternatives or the appropriate measures for preservation and mitigation that the California Native American tribe may recommend to the lead agency. The consultation shall be considered concluded when either the parties agree to measures to mitigate or avoid a significant effect, if one exists, on a Tribal cultural resource; or a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21082.3.2[b]).

Pursuant to Government Code Sections 6254 and 6254.10, and PRC Section 21082.3(c), information submitted by a California Native American tribe during consultation under AB 52 shall not be included in the environmental document or otherwise disclosed to the public by the lead agency, project applicant, or the project applicant's agent, unless written permission is given. Exemptions to the confidentiality provisions include any information already publicly available, in lawful possession of the project applicant before being provided by the Tribe, independently developed by the project applicant or the applicant's public agent, or lawfully obtained by a third party (PRC Section 21082.3[c]).

2.2.2 California Register of Historical Resources

Created in 1992 and implemented in 1998, the CRHR is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC 21083.2 and 21084.1). Certain properties, including those listed in or formally determined eligible for the NRHP and California Historical Landmarks numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California Points of Historical Interest program, identified as significant in historical resources surveys, or designated by local landmarks programs may be nominated for listing in the CRHR. According to Section 5024.1(c) of the PRC, a resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the State Historical Resources Commission determines that it meets one or more of the following criteria, which are modeled on NRHP 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 values.

- **Criterion 4:** It has yielded, or may be likely to yield, information important in history or prehistory.

Resources nominated to the CRHR must retain enough of their historic character or appearance to convey the reasons for their significance. Resources whose historic integrity does not meet NRHP criteria may still be eligible for the CRHR.

2.2.3 Treatment of Human Remains

The disposition of burials falls first under the general prohibition on disturbing or removing human remains under Section 7050.5 of the California Health and Safety Code (CHSC). More specifically, remains suspected to be Native American are treated under CEQA (14 CCR 15064.5); Section 5097.98 of the PRC illustrates the process to be followed if remains are discovered. If human remains are discovered during construction, no further disturbance to the site shall occur, and the county coroner must be notified (14 CCR 15064.5; PRC 5097.98).

2.3 LOCAL REGULATIONS

2.3.1 City of Indio

The City of Indio's General Plan discusses goals, policies, and implementation actions related to cultural and tribal cultural resources. Those relevant to cultural resources are:

CE-8.1 Site plan review. Ensure adequate site plan review and mitigation measures are implemented for the development of sites with the potential to contain historic, archaeological, and paleontological resources.

CE-8.2 Avoidance of impacts to historic resources. For projects that could affect historic resources, ensure adequate study to identify eligible resources and project-level review to avoid or lessen negative impacts through conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

CE-8.3 Incentivize retention of historic landmarks. Explore opportunities to provide economic and regulatory incentives for the retention and sensitive upgrades and changes to historic landmarks and contributors to designated historic districts.

CE-8.4 Monitoring. Require monitoring on sites where grading has the potential to impact subsurface cultural and paleontological resources during excavation and construction activities.

CE-8.5 Public Education. Support opportunities to promote public awareness of the history and prehistory of the area as the oldest Valley City and the cultural center of the Coachella Valley.

CE-8.6 Coordination with local tribes. Periodically meet with representatives from local tribes to:

- Obtain input prior to making decisions, taking actions, or implementing programs/projects that may impact cultural resources;
- Discuss methods to preserve and protect highly sensitive cultural resources; and
- Ensure that there is agreement regarding the protocol to be followed when cultural resources are discovered (City of Indio 2019)

The City does not appear to have published significance criteria for the designation of local historical resources.

CHAPTER 3. SETTING

3.1 ENVIRONMENTAL SETTING

The project area is located near central Indio in the central portion of the Coachella Valley. The Coachella Valley is considered the westernmost extension of the Colorado Desert, located south of the Mojave Desert in Imperial, Riverside, and San Diego Counties. The Colorado Desert is bordered by the Peninsular Range and the Pacific Coastal Plain on the west and the Colorado River on the east. Coachella Valley is bordered on the north and east by the Little San Bernardino, Cottonwood, and Orocopia Mountains, and bordered on the west by the Santa Rosa and San Jacinto Mountains. The Colorado Desert is an arid region, though the remains of Lake Cahuilla indicate episodic freshwater coverage of the desert during the Holocene. Sediments within the project area's natural channel are floodplain fluvents (Fe) and the surrounding area soils are Quaternary alluvium (CpA, GbA, Is, and MaB,) deposited as large alluvial fans formed through erosion of the San Gabriel Mountains (Dibblee and Minch 2008; SoilWeb 2023). The project area has a gradual southeastern slope and its elevation ranges from approximately 6.7 meters (m) (22 feet) above mean sea level to approximately 2.1 m (7 feet) below mean sea level. The closest major water sources are the Whitewater River which traverses the project area, and the Salton Sea, located 32 kilometers (20 miles) southeast of the project area.

The Coachella Valley climate is semi-arid with seasonal temperature extremes. Summer temperatures can reach 125 degrees Fahrenheit (52 degrees Celsius), with frost in the winter months and snow in the early spring in the surrounding mountains. Elevations on the valley floor range from 488 m (1,600 feet) above sea level at the western end of the valley near Palms Springs to 76 m (250 feet) below sea level at the Salton Sea. The highest peak in the surrounding mountain range is at Mt. San Gorgonio with an elevation of 3,505 m (11,499 feet) (Coachella Valley Resource Conservation District 2022).

The annual average rainfall is 7.6 centimeters (3 inches) and occurs primarily in the winter. In mid-summer months, occasional intense rainfall can result in flash floods and produce severe erosion (Coachella Valley Resource Conservation District 2022).

The predominant plant community in the Coachella Valley and the project area is Creosote Bush Scrub. This plant community occurs on well-drained upland slopes and alluvial fans within the Colorado Desert, and is a dry, mixed evergreen deciduous habitat dominated by shrubs and sparse groundcover. The dominant species are the creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*). Other species within this community include saltbush (*Atriplex* spp.), brittlebush (*Encelia farinosa*), and ocotillo (*Fouquieria splendens*) (Calflora.org 2023; Sawyer and Keeler-Wolf 1995).

Within Coachella Valley, there are a number of mammal, bird, reptile and amphibian species that reside in this harsh arid environment. Large mammal species include desert bighorn sheep (*Ovis canadensis nelsoni*), mountain lion (*Puma concolor*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*). Among the medium to small size class mammals, the species present include the desert kit fox (*Vulpes macrotis arsipus*), black-tailed jackrabbit (*Lepus californicus*), the desert cottontail rabbit (*Sylvilagus audubonii*), and Palm Springs ground squirrel (*Spermophilus tereticaudus chlorus*). Large-bodied birds that may occur include golden eagle (*Aquila chrysaetos*), turkey vulture (*Cathartes aura*), common raven (*Corvus corax*), and greater roadrunner (*Geococcyx californianus*). Numerous small bird species may be present, such as cactus wren (*Campylorhynchus brunneicapillus*) and sagebrush (sage) sparrow (*Artemisiospiza*

belli) (Cornell Lab of Ornithology 2023). Many species of reptiles can occur, including Western diamond-backed rattlesnake (*Crotalus atrox*), Great Basin whiptail (*Aspidoscelis tigris tigris*), desert tortoise (*Gopherus agassizii*), and Coachella fringe-toed lizard (*Uma inornata*).

3.2 CULTURAL SETTING

3.2.1 Prehistoric Period

California's southeastern desert region has a long history of human occupation, with dates at the start of the early Holocene stretching back to ca. 10,000 years B.C. (Moratto 1984:96–97; Schaefer 1994:62; Sutton et al. 2007:233–237). This now-arid region includes the Colorado and Mojave Deserts, located east of the Sierra Nevada, Peninsular, and Transverse ranges. Prehistoric material culture in this region has been categorized according to periods or patterns that define technological, economic, social, and ideological elements. Within these periods, archaeologists have defined cultural patterns or complexes specific to prehistory within the desert region, including the current project area.

Table 1 illustrates the chronological framework developed for the Colorado Desert region. This framework is divided into three major periods: the Paleoindian period (ca. 10,000–6000 B.C.), Archaic period (6000 B.C.–A.D. 870), and Late Prehistoric period (A.D. 870–Historic Contact). The timescales referenced in the following discussion are presented either in radiocarbon years before present (B.P.) (where the "present" is 1950) or calendar dates (years B.C./A.D.), as well as geologic era. Some dates referenced in the text have been calibrated (cal) in order to convert raw radiocarbon years to calendrical dates. Use of the term "cultural complex" instead of "period" denotes a cultural manifestation rather than a temporal one.

Table 1. Cultural Chronology for the Colorado Desert

Period	Subperiod	Cultural Complex	Date Range
Paleoindian period / Western Pluvial Lakes Tradition		Lake Mojave and San Dieguito Complexes	10,000–6000 B.C.
Archaic	Early Archaic period	Pinto Complex	6000–2000 B.C.
	Late Archaic period	Gypsum Complex	2000 B.C.–A.D. 870
Late Prehistoric period		Patayan I–III	A.D. 870–Historic Contact

3.2.1.1 Paleoindian period (CA. 10,000–6000 B.C. [12,000–8000 B.P.])

The precise timing and nature of human migration to North America continues to be a matter of considerable debate (e.g., Adovasio 2002; Dillehay 1997; Jablonski 2002; Swedlund and Anderson 1999), with the first occupation of the continent occurring at the end of the Pleistocene (e.g., Antevs 1955; Major 1988). The environment was cooler and moist, and megafauna such as mammoths, camels, and ground sloths were abundant and exploited by the earliest human migrants. The artifact assemblage typically associated with this period consists of Clovis and Folsom fluted projectile points, and other lanceolate, leaf-shaped, and stemmed points, including the Lake Mojave and Silver Lake projectile points. Fluted projectile points believed to be Clovis occur in several locales throughout California, including

Pleistocene China and Thompson Lakes in the Mojave Desert, though lingering contextual questions prevent affirmation of Clovis technology (Rondeau et al. 2007:66).

Evidence of human occupation in California prior to 6000 B.C. (8,000 B.P.) is relatively sparse and scattered. The earliest accepted dates in southern California come from coastal sites in the Northern Channel Islands, specifically San Miguel and Santa Rosa Islands, which date between 11,500 B.P. and 8,600 B.P. (Erlandson 1991:105; Erlandson et al. 2007:57; Johnson et al. 2002). Evidence for human occupation of the Colorado Desert during the Pleistocene and early Holocene is sparse, though this scarcity could reflect adaptation of highly mobile groups to sparse resources as well as a potential result of unstable landforms during the Holocene. At the onset of the Holocene ca. 10,000 years ago, there was significant warming and drying in the Colorado Desert, and hunter-gatherer groups adapted their subsistence to the changing environment, with lakes and streams in the desert interior gradually drying up.

3.2.1.2 Archaic period (ca. 6000 B.C.–A.D. 870 [8000–1200 B.P.])

Around 6000 B.C., subsistence patterns shifted along with the changing environment, and greater emphasis was placed on plant resources and smaller animal species. Subsistence patterns became more diversified, focusing on gathering in the interior and maritime resources in the coastal regions (Erlandson 1997:4). The Archaic period is characterized by this shift to gathering, which resulted in the increased number of ground stone implements in the artifact assemblage, including metates, manos, and mullers. Within the Colorado Desert, the Archaic period is divided into two subperiods: the Early Archaic period or Pinto complex (6000–2000 B.C.) and the Late Archaic period or Gypsum complex (2000 B.C.–A.D. 870) (Warren 1984; also see Schaefer 1994; Schaefer and Laylander 2007).

During the Pinto complex, occupation sites within the Colorado Desert were most likely temporary, seasonal camps of small, highly mobile groups (Schaefer 1994:64; Warren 1984:414). As with the Paleoindian period, the archaeological record during this time period is sparse, and it has been suggested that populations withdrew to the margins of the desert and/or concentrated around the few oases still present (Warren 1984:413–414). There is greater evidence from the Mojave Desert, with the artifact assemblages for this period characterized by Pinto series projectile points and shaped scrapers, as well as slab metates and manos. The presence of ground stone is the greatest difference from the Paleoindian period. Recent dates indicate that intensive plant processing began as early as ca. 7000 cal. B.C. within the Mojave Desert region, and faunal remains suggest an increase in the reliance on small animals and a decrease in the reliance in artiodactyl species such as pronghorn and deer (Sutton et al. 2007:238).

The Late Archaic/Gypsum period coincides with a period of moist climate called the Little Pluvial, with arid conditions returning in the latter half of the period. The archaeology of this period is characterized by caves sites with a wide range of diagnostic projectile points such as the Gypsum and Elko types, and split-twig figurines (Warren 1984:416–417). Mortars and pestles appear during this period in addition to the continued use of manos and metates. The bow and arrow was introduced at the end of this period, and there was an increase in trade goods such as shell ornaments from the Pacific Coast. Recent excavations within Coachella Valley indicate that occupation of the Colorado Desert was limited to temporary specialized camps around the Holocene Lake Cahuilla (Love and Dahdul 2002:81). These shoreline sites contain the remains of fish, shellfish, and waterfowl. Sites farther away from the shoreline suggest a permanent or semi-permanent occupation (CA-RIV-2936), with the artifact assemblage consisting of multiple occupation layers of hearths and milling implements, as well as Coso obsidian and shell beads from the Gulf of California. The obsidian and shell beads indicate exchange networks during this period. The overall reduction of size in projectile points indicates a shift from the atlatl and dart to the bow and arrow, the use of which continued into the Late Prehistoric period.

3.2.1.3 Late Prehistoric Period (A.D. 870–Historic Contact [1200 B.P.–Historic Contact])

The Late Prehistoric period within southern California is characterized by a shift in subsistence patterns to what is known among Native American groups during the Historic period. The changes in subsistence, foraging, and land use patterns most likely reflect cultural adaptations in response to shifts in environmental conditions and influences from outside Native American groups. The greatest indicator of this period is the presence of ceramics in the archaeological record beginning ca. A.D. 870 within the Colorado Desert (Love and Dahdul 2002; Rogers 1945; Schaefer and Laylander 2007:252). Brownware manufactured from upland clay sources and buffware from lowland sedimentary clays become increasingly common, with artifacts including clay figurines and pipes. Other indicators of the Late Prehistoric period are Cottonwood Triangular and Desert Side-Notched projectile points, a shift from extended inhumations to cremations, networks of trail systems with pot-drops and trailside shrines, and the introduction of small-scale agriculture.

The networks of trails are evidence of the importance of trade, travel, and exchange throughout southern California deserts. Trail systems with the Colorado Desert are associated with trailside shrines, ceramic pot-drops, and rock art (Schaefer 1994:66). Pot-drops near springs and tanks were essential for water access during dry seasons or long distance travel across the desert (Schaefer and Laylander 2007:254–255). Rock art complexes near water sources and pot-drops may indicate a spiritual value placed on these water sources, and mark some trails as representing routes between sacred places. The trail networks facilitated the trade of items such as shell beads and steatite from the Pacific Coast and Gulf of California, wonderstone from Rainbow Rock, and obsidian from Obsidian Butte at the southern end of the Salton Sea; these networks appear to have extended as far as the Great Basin and American Southwest.

The subsistence and settlement patterns in the Colorado Desert were influenced by episodes of infilling and recession of the Holocene Lake Cahuilla, with the final recession around A.D. 1580 (Buckles and Krantz 2023; Laylander 1995; Waters 1983). Native populations followed the receding shoreline and continued to exploit the dwindling resources. Near the end of the Late Prehistoric period and into the Historic period, permanent villages were established on the valley floor and were supported by large walk-in wells and extensive mesquite groves.

3.2.2 Ethnographic Overview

As depicted in Figure 4 the project area is situated within the traditional territory of the Cahuilla (Bean 1978; Kroeber 1925). Evidence suggests the Cahuilla migrated to southern California about 2,000 to 3,000 years ago, most likely from the southern Sierra Nevada ranges of east-central California with other related socio-linguistic (Takic speaking) groups (Moratto 1984:559). The Cahuilla settled in a territory that extended west to east from the present-day city of Riverside to the central portion of the Salton Sea in the Colorado Desert, and south to north from the San Jacinto Valley to the San Bernardino Mountains. Though 60 percent of Cahuilla territory was in the Lower Sonoran Desert environment, 75 percent of their diet came from plant resources acquired in Upper Sonoran and Transition environmental zones (Bean 1978:576).

Cahuilla socio-political organization included three primary levels (Bean 1978:580). The highest level was the cultural nationality, encompassing everyone speaking a common language. Next were two patrimoieties called the Wildcats (*tuktum*) and the Coyotes (‘*istam*); every clan of the Cahuilla belonged to one or the other. The third basic level of socio-political organization was the many political-ritual-corporate units called *sibs*, or patrilineal clans (Bean 1978:580). Lineages within a clan cooperated in many ways, including defense, communal subsistence activities, and religious ceremonies. Each lineage maintained ownership rights to various resource collecting locations, “including food collecting, hunting,

and other areas. The Cahuilla lived in a productive environment well suited to a sophisticated hunting and gathering economy. Studies suggest that aboriginal people in southern California improved the structure and productivity of the environment through controlled burning, selective harvesting and pruning, replanting, seed re-broadcast, and possibly limited irrigation (Bean and Lawton 1993). Limited agricultural practices for growing beans, squash, and corn had been adopted by the Cahuilla prior to Euro-American contact. Bean (1978:578) suggests that their "proto-agricultural techniques and a marginal agriculture" were adopted from the Colorado River groups to the east.

Figure 4. Traditional tribal territorial boundaries based on ethnographic and tribal sources.

Asistencias were established near Cahuilla territory at San Bernardino and San Jacinto by 1819. Interaction with Europeans was less intense in the Cahuilla region than for coastal groups because the topography and paucity of water rendered the inland area inhabited by the Cahuilla unattractive to colonists. By the 1820s, however, the Pass Cahuilla experienced consistent contact with the ranchos of Mission San Gabriel, whereas the Mountain Cahuilla frequently received employment from private rancheros and were recruited to Mission San Luis Rey.

Mexican ranchos were located near Cahuilla territory along the upper Santa Ana and San Jacinto rivers by the 1830s, providing the opportunity for the Cahuilla to earn money ranching and to learn new agricultural techniques. The expansion of immigrants into the region introduced the Cahuilla to European diseases. The single worst recorded event was a smallpox epidemic in 1862–1863. By 1891, only 1,160 Cahuilla remained within what was left of their territory, down from an aboriginal population estimated at 6,000 to 10,000 (Bean 1978:583–584). By 1974, approximately 900 people claimed Cahuilla descent; most resided on reservations.

Between 1875 and 1891, the United States established 10 reservations for the Cahuilla within their territory: Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres-Martinez (Bean 1978:585). Four of these reservations are shared with other Native American groups, including the Chemehuevi, Cupeño, and Serrano. The Cahuilla on the Morongo Reservation established the Malki Museum in 1965, which today is a respected repository for artifacts and ethnographic knowledge. The museum publishes books on Native American lifeways as well as the *Journal of California* and *Great Basin Anthropology*.

3.2.3 Historic Overview

California's historic period is generally divided into three time spans: the Spanish period (1769–1822), the Mexican period (1822–1848), and the American period (1848–present). These are briefly described below.

3.2.3.1 Spanish Period (1769–1822)

Spanish explorer Juan Rodríquez Cabrillo led the first European expedition in the southern California region in 1542, and subsequently, Sebastián Vizcaíno mapped much of the present California and Oregon coastline. The Spanish crown laid claim to California based on the surveys conducted by Cabrillo and Vizcaíno (Bancroft 1885:96–99; Gumprecht 2001:35).

The 1769 overland expedition by Captain Gaspar de Portolá marks the beginning of California's Spanish period. A major emphasis during this period was the construction of missions and associated presidios (military forts) to integrate the Native American population into Christianity and communal enterprise. Incentives were also provided to bring settlers to pueblos or towns, but just three pueblos were established during the Spanish period, only two of which were successful and remain as California cities (San José and Los Angeles). In 1769, Portolá established the San Diego presidio as the first Spanish settlement in Alta California, and Franciscan Friar Junípero Serra founded Mission San Diego de Alcalá, the first of 21 missions established in Alta California. During this period, Spain also deeded ranchos to prominent citizens and soldiers (though very few compared with those deeded in the Mexican period).

In 1819, several *asistencias*, or mission outposts, were developed by the Spaniards in Cahuilla territory. The Cahuilla developed new economic and political strategies to contend with the new immigrants to the region (City of Indio et al. 2019).

3.2.3.2 Mexican Period (1822–1848)

After the end of the Mexican Revolution against the Spain (1810–1821), and the failure of a short-lived Mexican Empire, all former Spanish holdings in North America (including both Alta and Baja California) became part of the newly formed Mexican Republic. The Mexican legislative body in California ended isolationist policies designed to protect the Spanish monopoly on trade, and decreed California ports open to foreign merchants (Dallas 1955:14). Additionally, the missions were secularized which resulted in the subdivision of former mission lands. Governor Pío Pico and his predecessors made more than 600 rancho grants between 1833 and 1846, putting most of the state's lands into private ownership for the first time (Gumprecht 2001).

Extensive land grants were established in the interior during the Mexican period, in part to increase the population inland from the more settled coastal areas where the Spanish had first concentrated their colonization efforts. During the supremacy of the ranchos (1834–1848), landowners largely focused on the cattle industry and devoted large tracts to grazing. Cattle hides became a primary Southern California export, providing a commodity to trade for goods from the east and other areas in the United States and Mexico.

The project area is located in present-day Indio, California, in the central portion of Riverside County. No rancho land grants were made in the vicinity of Indio, or in the eastern portion of Riverside County (Figure 5).

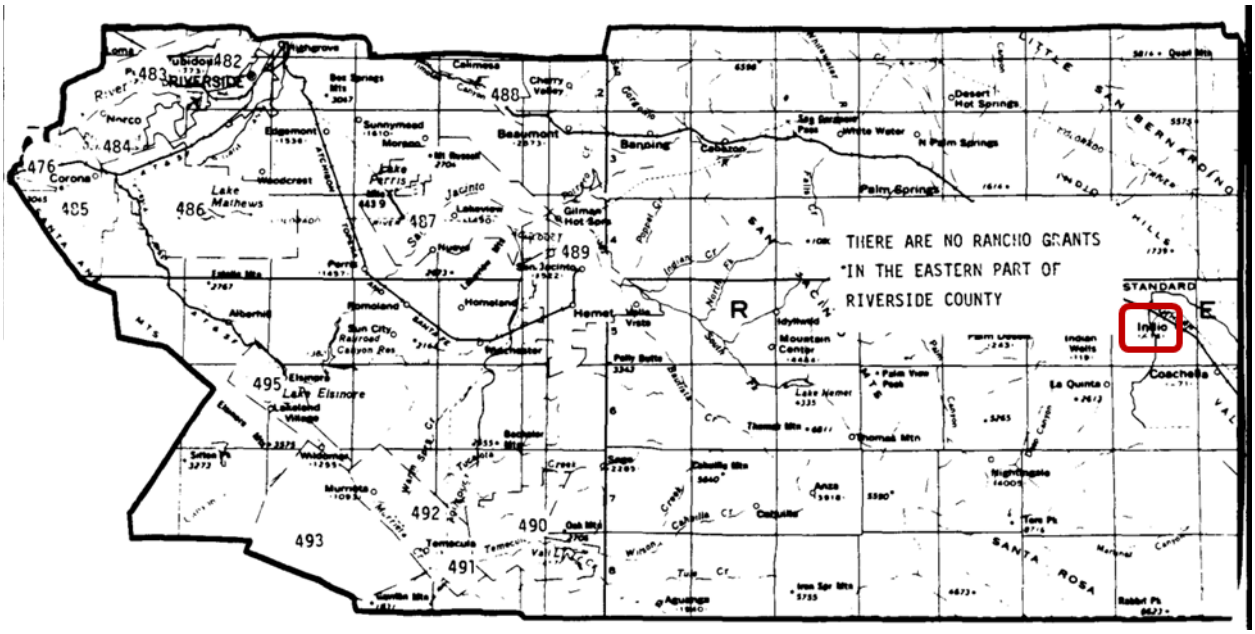

Figure 5. Land grants in Riverside County; Indio circled in red (State Lands Commission, n.d.).

The number of non-Native inhabitants increased with an influx of explorers, trappers, and ranchers during this period. By the 1840s, as part of their strategy to contend with the large number of non-Native settlers, the Cahuilla people formed confederations of clans and remnants of clans (City of Indio et al. 2019). The rising California population contributed to the introduction and rise of diseases foreign to the Native American population, who had no associated immunities.

3.2.3.3 American Period (1848–present)

The 1846–1848 Mexican-American War precipitated several battles in Southern California. On January 13, 1847, the Treaty of Cahuenga effectively ended the war in California, though fierce fighting continued in Mexico, and the war officially ended with the Treaty of Guadalupe Hidalgo in 1848. California became a state with the Compromise of 1850, which also designated Utah and New Mexico (with present-day Arizona) as U.S. territories (Waugh 2003). Horticulture and livestock continued to dominate the Southern California economy through 1850s. The Gold Rush began in 1848, and with the influx of people seeking gold, cattle were no longer desired mainly for their hides but also as a source of meat and other goods. During the 1850s cattle boom, large herds were driven from southern to northern California to feed that region's burgeoning population of miners and merchants. The cattle boom ended for Southern California as neighboring states and territories drove herds to northern California at reduced prices. Operation of the huge ranchos became increasingly difficult, and droughts severely reduced their productivity (Cleland 2005:102–103).

Euro-Americans in the Coachella Valley area were outnumbered by the Cahuilla until approximately 1860, but the situation was reversed by continuously increasing migration and the effects of an 1863 smallpox epidemic on the Native population. The arrival of the railroad led to permanent American settlements in the area by the 1870s, which in turn resulted in the taking of further Native American lands. Reservations were formed in the area by 1877, including the Agua Caliente, Cabazon, Torres, and Martinez reservations (City of Indio et al. 2019; Torres-Martinez Desert Cahuilla Indians n.d.).

3.2.3.4 Regional History

3.2.3.4.1 INDIO

Indio's development history is closely tied to the construction of the transcontinental railroad. In 1876, the Southern Pacific Railroad (SPRR) conducted its first trip through Indio as part of the route to Los Angeles. The first major building in town was reported to be the combination train depot and hotel, constructed ca. 1887. Indio was one of countless towns in Southern California to develop along a railroad route (City of Indio et al. 2019).

Although government surveys were conducted in the Indio area in the mid-1850s, the town's formal survey map was not filed until 1888—it was carved from a 160-acre parcel owned by Albert G. Tingman. Albert arrived in Indio in 1877 to work as a railroad construction boss. Settling there with his wife Hattie, by the mid-1880s, Albert had become Indio's station agent and resident telegrapher. He also opened the town's first store and livery, and served as postmaster (City of Indio et al. 2019).

The Indio General Plan Update EIR describes Indio's early townsite and economy:

> "The original path of the Southern Pacific…is seen in the diagonal swath of the local/business line of I-10. Oriented toward that corridor, the original grid and parcels fanned out southward from the railway line…When the town was first platted, the size and orientation of the parcels were primarily designed for residential use…The town spanned roughly 24 blocks…In the center of the original townsite, in a reflection of the focus on new settlement and tourism, was a "Hotel Block"…By 1896, with a population of 50 residents, Indio was no more than a village…by 1901, that number had grown to 200. In addition to the…Southern Pacific Depot and hotel, the railroad company also constructed bungalows to serve as employee housing. In the early twentieth century, Southern Pacific was one of the town's principal employers." (City of Indio et al. 2019).

Similar to other Coachella Valley communities, agriculture was Indio's primary industry in the course of its development and expansion. Farmers explored different crops and found dates, grapes and melons to be successful. Various sources of water were tapped over the years to support the development of the valley, and the availability of a reliable water supply made the town sustainable. The CVWD was formed in 1918 and took the lead on advocating for water rights for area residents (City of Indio et al. 2019).

Across the United States, automobile use increased during the 1920s and 1930s, prompting road and highway improvements and construction. Some of these projects benefitted Indio, supporting tourism and settlement in the area. Community growth included residential, commercial, and institutional development and services. The City formally incorporated in 1930. During the early 1940s, Indio saw a large influx of transitory inhabitants when it served as a supply center and a recreation destination for soldiers stationed at Camp Young, headquarters for the U.S. military's Desert Training Center. Many military members returned to settle in the Coachella Valley after World War II (City of Indio et al. 2019).

Similar to many Southern California communities, Indio's population dramatically increased in the years following World War II. The resulting construction boom consumed agricultural land and open space in order to develop additional residential and commercial properties, and new roads and highways. As accessibility improved, tourism flourished in the Coachella Valley, and new golf courses, country clubs and hotels were built. Many new buildings were constructed in Mid-Century Modern architectural styles popular during that period. The rate of expansion continued through the twentieth century, as much of the remaining agricultural land gave way to development, and the era of redevelopment impacted and diminished the city's older building stock (City of Indio et al. 2019).

3.2.3.4.2 COACHELLA VALLEY WATER DISTRICT

The CVWD was originally called the Coachella Valley County Water District (CVCWD) before dropping the word "County" in 1980. It was established in 1918 following a vote of valley citizens which was largely in favor of organizing the district. Strong support for the formation of an independent water agency was mainly owing to local residents' concern about others' attempts to capture and divert water from the Whitewater River. Various water companies and entrepreneurs had attempted to divert river water to Banning and the Imperial Valley. Additionally, in the prior decade, the growth of the agriculture industry and increased water well drilling had resulted in a decline in groundwater supply, causing concern and the drive to develop methods to correct the problem (CVWD 2018).

Soon after its formation, the CVCWD filed for the rights to all unclaimed water from the Whitewater River, as well as to obtain land west of Palms Springs to use for groundwater replenishment. The CVCWD also began aggressive lobbying that continued into the 1920s, and resulted in presidents Woodrow Wilson, Warren Harding, and Calvin Coolidge signing orders that enabled the CVCWD to obtain public lands near the Whitewater River to be used for groundwater recharge. In addition, the CVCWD began efforts to obtain water from the Colorado River through the planned All-American Canal. Surveys for possible routes for the canal began about 1920, but it was not until 1928 that the U.S. Congress authorized financing mechanisms for its construction. Following disputes and delays, construction on the Coachella Branch of the All-American Canal finally began in 1938 and was completed in segments. As described by historian and author Remi Nadeau, the Coachella Branch began at a point 14 miles west of Pilot Knob, traversed the upper edge the East Mesa and along the prehistoric shoreline of the Imperial Valley, passed the Salton Sea, and circled around the upper limits of the Coachella Valley. Work on the branch was interrupted for four years during World War II. The final segment was completed in 1948, and the Coachella Valley began receiving water from the Colorado River in March 1949 (CVWD 2018; Nadeau 1997). Figure 6 shows the route of the Coachella Branch of the All-American Canal.

In order to deliver water to valley farms, an underground distribution system was built between 1948 and 1954 consisting of 500 miles of concrete pipelines. Nearly 80,000 acres were reached through a system of 80 distribution laterals. The system was "the first of its type and magnitude constructed by the Bureau of Reclamation" (CVWD 2018). Agriculture continued to grow in the Coachella Valley during the time the All-American Canal and distribution system were being constructed, but in the years immediately after the canal's completion, the amount of irrigated acreage dramatically increased. Area farmers also benefitted from a drainage system developed in the 1950s and 1960s which carried away salts found in shallow groundwater; too much salt buildup would make the soil unusable. This drainage system consisted of a network of pipelines which, as of 2018, totaled approximately 2,500 miles in length (CVWD 2018).

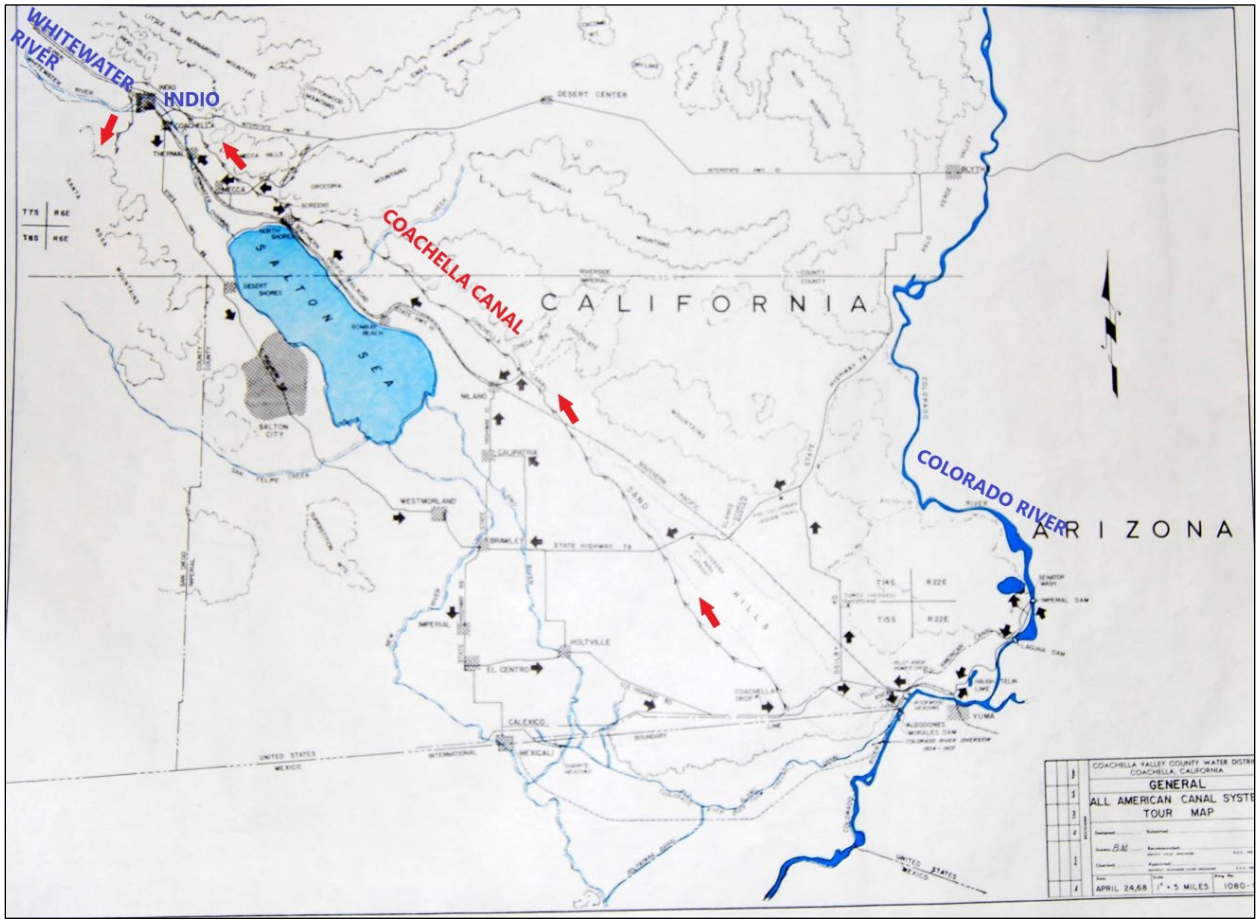

Figure 6. All-American Canal System Map dated 1968. Red arrows depict the Coachella Canal traveling to Indio and then curving toward southwest (Source: CVCWD 1968).

Offering hotels, golf courses and resorts in a unique desert setting, the tourism industry in the Coachella Valley flourished with a variety of clientele ranging from presidents and movie stars to families from area cities seeking a nearby weekend getaway. Major hotels opened as early as the 1920s, and the decades of the 1950s and 1980s were recognized for golf course development (CVWD 2018).

In addition to importing water, groundwater replenishment, and agricultural irrigation and drainage services, CVWD also provides stormwater protection and flood control services. Major floods affecting the Coachella Valley have been recorded as early as 1862, and at least 10 were documented through 1916. Indio was severely affected by the 1916 flood which reportedly left a mile-wide sheet of water across the

community, halting train traffic and leaving passengers stranded in Indio for days. Other notable destructive floods occurred in the valley in 1938, 1965 and 1969. Flooding events are usually the result of storms, runoff from canyons in the surrounding mountains, and flooding of the Whitewater River (CVWD 2018). Although the Coachella Valley Stormwater District was formed in 1915, it was too small and underfunded to develop effective flood control infrastructure for the valley. By 1937, the stormwater district merged with the CVCWD. However, no major flood control efforts were begun until the 1960s (CVWD 2018).

Population growth and increased development in the Coachella Valley catalyzed efforts to improve stormwater protection and flood control services. In the 1950s, developers created several golf courses and luxury residential properties, but by the late 1960s and 1970s, developers were building more affordable homes to appeal to residents in the region who sought a weekend getaway property. Additionally, the completion of I-10 in 1960 improved access to the area, and supported a marked population growth in the valley. Between approximately 1975 and 1990, the Coachella Valley "went crazy" with golf courses (CVWD 2018). Approximately 34 golf courses opened in the 1980s. Real estate developers developed large tracts in the communities of Rancho Mirage, Palms Desert, Indian Wells, and La Quinta, at a lesser expense than property around the Palms Springs area. During the 1980s, the tourism industry surpassed agriculture as the valley's leading industry (CVWD 2018).

The small, independent water companies that had been providing water to residential and non-agricultural businesses were overwhelmed with the rising demand for water services. Consequently, CVWD expanded its services to provide flood control, and water and sewer to residential customers. A stormwater master plan was adopted around this time that included rebuilding the Whitewater River/Coachella Valley Stormwater Channel to bring it up to current standards. Although the goal to complete the 50-mile-long project was set for 1970, heavy flooding in the late 1960s damaged the CVWD's stormwater channels, delaying completion (CVWD 2018). Ultimately, stormwater protection and flood control in the Coachella Valley was accomplished through infrastructure developed by various agencies over the decades including the U.S. Bureau of Reclamation (Reclamation), CVWD, and the U.S. Army Corps of Engineers (CVWD 2018).

As of 2022, the stormwater/flood protection system includes "approximately 135 miles of channels built along the natural alignment of dry creeks that naturally flow from the surrounding mountains into the Whitewater River" (CVWD n.d.). This includes 16 stormwater protection channels, and dikes and levees that collect flood waters on the valley floor. Lastly, the 50-mile-long Whitewater River/Coachella Valley Stormwater Channel, touted as the "backbone" of the stormwater/flood protection system, conveys storm/flood waters to the Salton Sea. The section between Palms Springs and Point Happy (near present-day Miles Ave and Washington Street) is part of a naturally occurring wash that has been improved to carry storm flows, and is referred to as the Whitewater River Storm Channel or WWRSC. Because the riverbed naturally flattened out in areas to the east, the section east of Washington Street continuing downstream to the Salton Sea is engineered and is called the Coachella Valley Storm Channel or CVSC (California Water Boards 2020; Coachella Valley Regional Water Management Group 2010; CVWD n.d.).

CHAPTER 4. BACKGROUND AND ARCHIVAL RESEARCH

At SWCA's request, on May 13, 2022, the Eastern Information Center (EIC) at the University of California, Riverside conducted a confidential search of the CHRIS records to identify previously recorded cultural resources and previous studies completed within a 1-mile radius of the project area. The EIC maintains cultural resources records for Riverside County. The search also included a review of the

NRHP, CRHR, California Points of Historical Interest list, California Historical Landmarks list, Archaeological Resources Directory, and California Inventory of Historic Resources.

In addition to reviewing prior investigations and previously recorded cultural resources, SWCA reviewed the California OHP's Built Environment Resources Directory (BERD), the City of Indio's list of Historic/U.R.M. Buildings, and the map of Previously Identified and Potential Historic Resources prepared for its General Plan Update (City of Indio et al. 2019). SWCA also examined historical maps, aerial photographs, newspaper articles, and other archival documents obtained through various public sources, including the USGS, Environmental Data Resources, Los Angeles Public Library, Huntington Library, University of California, Santa Barbara Library, and Newspapers.com. In addition, the Coachella Valley History Museum was consulted, and records and data on file with the CVWD were reviewed.

4.1 CHRIS RECORDS SEARCH

4.1.1 Previously Conducted Cultural Resources Studies

The CHRIS records search identified 97 cultural resource investigations that have been previously conducted within a 1-mile radius of the project area, 14 of which intersect the project area (Table 2). Of the 14 studies that intersect the project area, one is an overview study (RI-03245), one is a sensitivity model (RI-10406), one is a history and evaluation of the Coachella Canal (RI-06061), one is a summary Historic Property Survey Report for the California Department of Transportation (RI-10811), and the remaining 10 included field investigations. Additional details of the records search are included in Appendix A.

Table 2. Previously Conducted Investigations within a 1.0-Mile Radius of the Project Area

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-00652	Cultural Resources Reconnaissance (Stage II) of Flood Control Alternatives Proposed for the Whitewater River Basin, Riverside County, California	Lando, R., and P.J. Wilke	1979	**Within**
RI-00942	Phase I Cultural Resources Assessment of a 9-Acre Property on Indio Boulevard, Cit [sic]	Brock, J.	2000	Outside (within 1 mile)
RI-00998	Environmental Impact Evaluation: An Archaeological Assessment of an Unnumbered Tract on the West Side of Indio, Riverside County, California	Davis, A., and S. Bouscaren	1980	Outside (within 1 mile)
RI-01220	Letter Report: Inspection of Pipeline Relocation Area in Union Pacific Railroad Corridor, Line Section, Riverside, California	Self, W.	2000	Outside (within 1 mile)
RI-01408	Archaeological Data Recovery at the Myoma Dunes (Tentative Parcel 15590) Riverside County, California	Wilke, P.J.	1983	Outside (within 1 mile)
RI-01409	An Archaeological Assessment of Parcel 15590, Near Myoma in Riverside County	Bowles, L.L., and J. Salpas	1980	Outside (within 1 mile)
RI-01441	Archaeological Survey Report on Tt 16789 Located Near the City of Indio, Riverside County California	Scientific Resource Surveys, Inc.	1981	Outside (within 1 mile)
RI-01442	Archaeological Surface Collection at Two Locations on Tract 23317 Bermuda Dunes, Riverside County, California	Scientific Resource Surveys	1989	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-02044	An Archaeological Assessment of Tentative Parcel 20568, Near Indio In Riverside County, California	Parr, R.E.	1986	Outside (within 1 mile)
RI-02210	Preliminary Cultural Resources Survey Report for the US Telecom Fiber Optic Cable Project from San Timoteo Canyon, California to Socorro, Texas. The California Segment.	Underwood, J., J. Cleland, C.M. Woods and R. Apple	1986	**Within**
RI-02236	An Archaeological Assessment of Approximately 5 Acres Of Land Located In The Coachella Valley, Riverside County, California	Barry, N.	1988	Outside (within 1 mile)
RI-02350	MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California	McCorkle Apple, R., and J.E. Wooley	1988	Outside (within 1 mile)
RI-02424	An Archaeological Assessment of Assessor's Parcel Nos. 609-201-011, 609-201-012, and 609-201-013, Located In The Bermuda Dunes Area Of Riverside County, California	Mccarthy, D.F.	1989	Outside (within 1 mile)
RI-02765	Environmental Impact Evaluation: An Archaeological Assessment of the Proposed Mid-Valley Stormwater Channel Located in the Coachella Valley of Central Riverside County, California	Arkush, B.S.	1990	**Within**
RI-02797	An Archaeological Assessment of Tentative Tract Map 25421 Indio, California	Keller, J.A.	1990	Outside (within 1 mile)
RI-02998	Archaeological Assessment Form Riverside County Planning Department Tentative Parcel Map #26196	Baldwin, J.	1990	Outside (within 1 mile)
RI-03245	Cultural Resources Sensitivity Overview for the Coachella Valley Enterprise Zone	Van Horn, D.M., L.S. White, and R.S. White	1990	**Within**
RI-03379	Archaeological Resource Survey of The Country Club Drive To Jefferson Street, Indio, California	TMI Environmental Services	1991	Outside (within 1 mile)
RI-03380	Archaeological Significance Test Excavation of The Country Club Drive To Jefferson Street Alignment, Indio, California	TMI Environmental Service	1991	Outside (within 1 mile)
RI-03752	Cultural Resources Evaluation: Fred Waring Bridge Project, Indio, Riverside County	Love, B.	1994	Outside (within 1 mile)
RI-03815	Cultural Resources Report: U.S. Home Project, Indio, Riverside County	Love, B., S. Moffitt, and B. Tang	1994	Outside (within 1 mile)
RI-03816	Preliminary Report of Findings: Cultural Resources, U.S. Home Project, Indio, Riverside County, California	Love, B.	1994	Outside (within 1 mile)
RI-03817	Archaeology on the North Shoreline of Ancient Lake Cahuilla: Final Results From Survey, Testing, and Mitigation-Monitoring	Love, B.	1996	Outside (within 1 mile)
RI-03838	Identification and Evaluation of Historic Properties: Indio Boulevard/Clinton Street Intersection Stoplight Project, Indio, Riverside County, California	Love, Bruce	1994	Outside (within 1 mile)
RI-03928	Cultural Resource Survey and Assessment of the Indio 230 kV Transmission Loop Alternate Route #1	Collins, G. Edward, and Jay Von Werlhof	1996	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-04072	Cultural Resources Report: Rv Showcase Specific Plan, City of Indio, Riverside County, California	Love, Bruce, and Bai "Tom" Tang	1998	Outside (within 1 mile)
RI-04409	Historical/Archaeological Resources Survey Report, Tentative Tract Map No. 29706, City of Indio, Riverside County, California	Love, Bruce, Bai "Tom" Tang, Daniel Ballester, Adrian Sanchez Moreno, and Mariam Duhdul	2000	Outside (within 1 mile)
RI-04430	Cultural Resources Inventory Report for Williams Communications, Inc. Fiber Optic Cable System Installation Project, Riverside, CA to the CA/AZ Border, Riverside, San Bernardino, & Imperial Counties, CA, Vol I-III	Jones and Stokes Associates, Inc.	2000	Outside (within 1 mile)
RI-04567	Archaeological Investigation of CA-Riv-6349, Tentative Tract 29323, Northwest Corner of Fred Waring Drive and Jefferson Street, City of La Quinta	Brock, James	2001	Outside (within 1 mile)
RI-04579	A Cultural Resources Assessment of Tentative Tract 30413, A 36-Acres Parcel Located Northeast of the Intersection of Madison Street and Fred Waring Drive, City of Indio, Riverside County, California	White, Robert S., and Laura S. White	2002	Outside (within 1 mile)
RI-04590	Phase I Cultural Resources Assessment for a 126-Acre Property in the City of Indio, Riverside County, California (APN 605-290-02)	Brock, James	2002	Outside (within 1 mile)
RI-04752	Phase I Cultural Resources Assessment for Tentative Tract Map No. 31987, Indio Area of Unincorporated Riverside County, California	Brock, James, and Christine L. Di Ioro	2004	Outside (within 1 mile)
RI-05030	A Phase I Cultural Resources Investigation for the Jefferson Street Commercial Plaza Project Area, Approximately 30 Acres Located in the City of Indio, Riverside County, California	Mckenna et al.	2004	Outside (within 1 mile)
RI-05031	A Phase I Cultural Resources Investigation of the Madison Development Property (Approximately 83 Acres) in the City of Indio, Riverside County, California	Mckenna et al.	2004	Outside (within 1 mile)
RI-05063	A Phase I Cultural Resources Investigation of Approximately 1000 Acres Located in the City of Indio, Riverside County, California	McKenna, Jeanette A., and R. Charles Ferguson	2002	**Within**
RI-05081	Cultural Resources Construction Monitoring of the Desert Trace Project, A 160 Acre Parcel Located in Indio, California	Taylor, Dennis C., and Vanessa A. Mirro	2005	Outside (within 1 mile)
RI-05114	Extended Phase I Survey, Phase II Excavations and Evaluations, and Mitigation Monitoring Program at CA-Riv-6896, A Prehistoric Site in the City of Indio, Riverside County, California	Mckenna et al.	2003	Outside (within 1 mile)
RI-05616	A Cultural Resources Assessment of Tentative Tract 30412, a 51.2 Acre Parcel Located West of Madison Street, City of Indio, Riverside County, CA	White, Robert S., and Laura S. White	2002	Outside (within 1 mile)
RI-05645	Report of Phase I (Survey Level) Archaeological Assessment for 40 Acre Parcel in City of Indio, Riverside County, CA	Demcak, Carol R.	2005	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-05647	Final Report of Phase II (Test Level) Archaeological Investigations at CA-Riv-7846, City of Indio, Riverside County, CA	Demcak, Carol R.	2005	Outside (within 1 mile)
RI-05666	Letter Report: Historic Consultation for Nextel of California Wireless Telecommunications, Project East Indio / CA-8857B, in Indio, Riverside County, California	Thal, Erika	2005	Outside (within 1 mile)
RI-05699	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Name/Number: CA-8855B/ North Indio & CA-8857-B/ East Indio	Thal, Erika	2005	Outside (within 1 mile)
RI-05771	Archaeological Monitoring Report: Sites Ca-Riv-6618, -6682, -7011, and -7012, Tentative Tract No. 29706, City of Indio, Riverside County, California	Dahdul, Mariam, Harry Quinn, and Adrian Sanchez Moreno	2003	Outside (within 1 mile)
RI-05911	Historical/Archaeological Resources Survey Report, Assessor's Parcel No. 606-080-008, the Ice Empire Project, City of Indio, Riverside County, CA	Tang, Bai, Michael Hogan, Mariam Dahdul, Harry Quinn, and Teresa Woodard	2002	Outside (within 1 mile)
RI-05912	Archaeological Testing and Mitigation, Sites CA-Riv-6618, and -6822, Tentative Tract Map No. 29706, City of Indio, Riverside County, CA	Love, Bruce, Harry Quinn, and Mariam Dahdul	2002	Outside (within 1 mile)
RI-05940	Cultural Resources Report, Archaeological Survey and Testing at Tentative Tract Map No. 31358, Monticello III Project, City of Indio, Riverside County, CA	Hogan, Michael, Bai Tang, Harry Quinn, Mariam Dahdul, Josh Smallwood, Adrian Sanchez Moreno, and Daniel Ballester	2003	Outside (within 1 mile)
RI-06061	A History and Evaluation of the Coachella Canal, Riverside and Imperial Counties, California	Schaefer, Jerry, and Sinead Ni Ghabhlain	2003	**Within**
RI-06119	Letter Report: Records Search Results and Site Visit Results for Sprint Telecommunications Facility Candidate Rv59xc005c (Date Palm Hotel), 81909 Indio Boulevard, Indio, Riverside County, CA	Dice, Michael	2003	Outside (within 1 mile)
RI-06200	Historical/Archaeology Resources Survey Report: Assessor's Parcel Numbers 608-020-007 and -012, in the City of Indio, Riverside County, California	Tang, Bai, Michael Hogan, Casey Tibbet, and Daniel Ballester	2004	Outside (within 1 mile)
RI-06206	Historical/Archaeological Resources Survey Report, Assessor Parcel Number 606-070-003, the Ferguson Project, City of Indio, California	Tang, Bai, Michael Hogan, Casey Tibbet, and Daniel Ballester	2004	Outside (within 1 mile)
RI-06208	Letter Report: Archaeological/Paleontological Monitoring of the Earth-Moving Activities, Monticello III Project, City of Indio, Riverside County, California	Hogan, Michael	2004	Outside (within 1 mile)
RI-06222	Historic Building Evaluation: 80783 Indio Boulevard in the City of Indio, Riverside County, California	Tang, Bai, Michael Hogan, and Casey Tibbet	2004	Outside (within 1 mile)
RI-06259	Cultural Resources Survey Report, Union Pacific Railroad, Fingal-Thermal Phase Iii Expansion, Riverside County, California	Chambers Group, Inc.	2006	Outside (within 1 mile)
RI-06390	Letter Report: Addendum to Historical/Archaeological Resources Survey, the Ferguson Project, Avenue 43 and Burr Street, Assessor's Parcel Number (APN) 606-070-015, in the City of Indio, Riverside County, California	Tang, Bai, and Michael Hogan	2005	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-06413	Archaeological Test and Evaluation Report: Site CA-RIV-7561 (33-13834), Tentative Tract No. 30412, City of Indio, Riverside County, California	Hogan, Michael	2005	Outside (within 1 mile)
RI-06435	Historical/Archaeological Resources Survey Report, the Savannah Project, City of Indio, Riverside County, California	Bai Tang, Michael Hogan, Deirdre Encarnacion, and Daniel Ballester	2004	**Within**
RI-06447	Historical/Archaeological Resources Survey Report: the Avante Project, in the City of Indio, Riverside County, California	Tang, Bai, Michael Hogan, Matthew Wetherbee, and Daniel Ballester	2004	Outside (within 1 mile)
RI-07360	Archaeological Evaluation Report 33-011573 (CA-RIV-6896) and 33-011574 (CA-RIV-6897): I-10/Jefferson Street Interchange Improvement Project Indio, Riverside County, California	Moratto, Michael J., Melinda C. Horne, Robert J. Lichtenstein, Dennis McDougall, Michael J. Mirro, and Marilyn J. Wyss	2007	Outside (within 1 mile)
RI-07464	Historical / Archaeological Resources Survey Report: Assessor's Parcel Nos. 60-070-001, -004, and -006 City of Indio, Riverside County, California	Hogan, Michael, and Tang, Bai "Tom"	2007	Outside (within 1 mile)
RI-07673	Cultural Resources Report: Archaeological Survey and Testing at the Jefferson Street Business Park Project, Sites CA-RIV-6382 and -8403, Assessor's Parcel Nos. 606-060-002, 606-080-005, and 691-190-027, City of Indio, Riverside County, California	Dahdul, Miriam, Clarence Bodmer, and Daniel Ballester	2008	Outside (within 1 mile)
RI-07894	Historical/Archaeological Resources Survey Report, Madison Hills Plaza Project, A Portion of Assessor's Parcel No. 691-110-001, City of Indio, Riverside County, California	Tang, Bai, Clarence Bodmer, Lisa Hunt, and Laura Shaker	2008	Outside (within 1 mile)
RI-07933	Letter Report: Proposed Cellular Tower Project in Riverside County, California, Site Number/Name: CA-8857/ East Indio	Thal, Erika	2004	Outside (within 1 mile)
RI-08105	Summary of Findings, Citywide Historic Resources Survey Update, City of La Quinta, Riverside County, California	Tang, Bai "Tom", and Michael Hogan	2006	Outside (within 1 mile)
RI-08106	Archaeological & Paleontological Evaluation Report and Mitigation Plan Indio-78 Parcel, City of Indio, Riverside County, California	Scott, Kim, Steve McCormick, and Sherri Gust	2004	Outside (within 1 mile)
RI-08112	Archaeological Literature Study for the Village at Indio Project, Riverside County, California	Gust, Sherri	2004	Outside (within 1 mile)
RI-08158	A Class III Cultural Resources Investigation for the Proposed Land Transfer Between the Bureau of Reclamation and the Coachella Valley Water District, Riverside County, California	McKenna, Jeanette A.	2004	**Within**
RI-08320	Letter Report: Cultural Resources Search and Site Visit Results for T-Mobile USA Candidate IE04846J (Desert Storage Masters), 42925 Madison Street, Indio, Riverside County, California.	Bonner, Wayne H., and Sarah A. Williams	2009	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-08369	A Phase II Cultural Resources Investigation of CA-RIV-1637, a Prehistoric Archaeological Site Located within the Northgate Development in the City of Indio, Riverside County, California.	McKenna, Jeanette A.	2009	Outside (within 1 mile)
RI-08455	Letter Report: Archaeological Monitoring Program, Northgate Crossing, Indio, Riverside County, CA.	McKenna, Jeanette A.	2009	Outside (within 1 mile)
RI-08540	Identification and Evaluation of Historic Properties, Indio Water Authority Wastewater Treatment Project, Cities of Indio and La Quinta, Riverside County, California	Tang, Bai "Tom", and Michael Hogan	2010	**Within**
RI-08581	Letter Report: Cultural Resources Search and Site Visit Results for T-Mobile USA Candidate IE25962-A (Siesta Grill), 81929 Indio Boulevard, Indio, Riverside County, California	Bonner, Wayne H.	2010	Outside (within 1 mile)
RI-08731	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Number(s)/Name(s): CA-2814/North Indio TCNS# 67733	Allred, Carla	2010	Outside (within 1 mile)
RI-08733	Supplemental Historic Property Survey Report	Moratto, Michael J., , Dicken Everson, and Gabrielle Duff	2011	Outside (within 1 mile)
RI-08762	Archeological Investigations (2002-2010) at Site CA-RIV-6897 Varner Road Improvement Project	Moratto, Michael J., Denis McDougall, Michael Mirro, Douglas R. Harro, Kholood Abdo-Hintzman, Rebecca L. McKim, and Melinda Horne	2011	Outside (within 1 mile)
RI-08845	AT&T Wireless Telecommunications Site RS0231 (Heritage Palms) 80761 Fred Waring Drive, Indio, California 92201	Villacorta, Estella	2010	Outside (within 1 mile)
RI-08853	Letter Report: Cultural Resources Records Search and Site Visit Results for T-Mobile USA Candidate IE25961-A (Siesta Grill)	Bonner, Wayne H., and Sarah Williams	2010	Outside (within 1 mile)
RI-08857	Negative Mitigation Monitoring Report Desert Meadows, APN 608-340-032, City of Indio, California	Loren-Webb, Barbara Ann, and Darryl J. Dang	2012	Outside (within 1 mile)
RI-09190	Cultural Resources Summary for the Proposed Verizon Wireless, Inc., Property at the Anchovy Site, 40655 Jefferson Street, Indio, Riverside County, California 92203	Puckett, Heather R.	2013	Outside (within 1 mile)
RI-09245	Cultural Resources Inventory Within the Proposed Mid-Valley Pipeline Project Area Riverside County, California	Glenn, Brian K.	2006	Outside (within 1 mile)
RI-09269	Phase I Cultural Resources Assessment for the Coachella Valley Water District's Irrigation Lateral 114.3 Replacement Project, City of Indio, Riverside County, California	McDougall, Dennis, Joan George, and Vanessa Mirro	2014	**Within**
RI-09897	Cultural Resources Regulatory Compliance Analysis Bermuda Dunes Country Club Non-potable Water Pipeline Extension Project Bermuda Dunes Area, Riverside County, California CRM TECH Contract No. 3151	Tang, Bai "Tom"	2016	Outside (within 1 mile)

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-09974	Data Recovery at Prehistoric Site CA-RIV-6896/6897 (33-011573/33-011574)	Moratto, Michael J., and Dennis McDougall	2017	Outside (within 1 mile)
RI-10005	Re: Cultural Resource Monitoring for the Varner Road Pipeline Improvement Project, City of Indio, Riverside County, California	Lichtenstein, Robert J.	2014	Outside (within 1 mile)
RI-10101	Proposed Wireless Device Monopole and Equipment Cabinet; Dune Site, 80975 Indio Blvd., Indio, California, 92201.	Knox Mellon	2002	Outside (within 1 mile)
RI-10207	A Cultural Resources Assessment of The Jefferson Street Improvement Project, Avenue 54 To Indio Boulevard, Coachella Valley, Riverside County	White, Robert S., Laura S. White, and David M. Van Horn	1999	Outside (within 1 mile)
RI-10231	Palm Desert Groundwater Replenishment Project.	Haas, H., and B. Vargas	2017	Outside (within 1 mile)
RI-10296	Section 106 Review Tcns #85459 Proposed 195-Foot Self Supporting Lattice Telecommunications Structure (199-Foot Overall Height With Appurtenances) 52 Eighty, Llc-Ca-030 (Indio) 43549 Wheel Road Indio, Riverside County, California Eca Project #N-564	Bazzill, Dina M., and Autumn DuBois	2012	Outside (within 1 mile)
RI-10325	Supplemental Cultural Resource Assessment for the Coachella Valley Water District's Bermuda Dunes Country Club Non-Potable Water Connection Project, City Of Indio, Riverside County, California	George, Joan, and Vanessa Mirro	2017	Outside (within 1 mile)
RI-10342	Cultural Resources Technical Report City of La Quinta General Plan (2010 Update)	Tang, Bai "Tom", and Deirdre Encarnacion	2010	Outside (within 1 mile)
RI-10374	Phase I Cultural Resources Assessment for the Coachella Valley Water District's Whitewater River – Coachella Valley Stormwater Channel Project, Riverside County, California	Stowe, Luke	2013	**Within**
RI-10406	Archaeological Sensitivity Model for the Whitewater River Stormwater Channel, Riverside County, California	Mirro, Michael	2012	**Within**
RI-10461	Archaeological Investigations and Monitoring for the Construction of the Devers-Palo Verde No. 2 Transmission Line Project, Riverside County, California	Eckhardt, William T., Matthew M. DeCarlo, Doug Mengers, Sherri Andrews, Don Laylander, and Tony Quach	2015	Outside (within 1 mile)
RI-10569	Identification and Evaluation of Historic Properties: Non-Potable Water Connection to Bermuda Dunes Country Club, City of Indio, Riverside County, California	Tang, Bai, Ben Kerridge, Daniel Ballester, Harry M. Quinn, and Nina Gallardo	2016	Outside (within 1 mile)
RI-10727	Cultural Resource Records Search and Site Survey	Denardo, Carole	2019	Outside (within 1 mile)
RI-10762	"Historic Property Survey Report for the Herbert Hoover Elementary School Pedestrian	Mills, Evan	2019	Outside (within 1 mile)
RI-10811	Historic Property Survey Report - Interstate 10 / Monroe Street Interchange Improvement Project, 08-EA 0K730, Riverside County, California	George, Joan, Applied EarthWorks	2019	**Within**

Report Number	Title of Study	Author and Affiliation	Year	Proximity to Project Area
RI-10812	Archaeological Survey Report for the Interstate 10 / Monroe Street Interchange Improvement Project, City of Indio, Riverside County, California E-FIS 0800-00368 (EA 08-0K730)	George, Joan,, Applied EarthWorks	2019	**Within**

4.1.2 Previously Recorded Cultural Resources

The CHRIS records search identified 84 previously recorded cultural resources within a 1-mile radius of the project area (Table 3), three of which intersect the project area. One is an archaeological site (P-33-007425/CA-RIV-005799), and the other two are built environment resources: the Coachella Canal (P-33-005705/CA-RIV-012999 and the CVSC (P-33-017259/CA-RIV-010847). Additionally, one archaeological resource, a multicomponent site (P-33-001768/CA-RIV-001768) is immediately adjacent to the west of the project area. These resources are discussed in further detail below.

Table 3. Previously Recorded Cultural Resources within a 1.0-Mile Radius of the Project Area

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-001634 CA-RIV-001634	Prehistoric site; historic	Prehistoric – pot sherds, mano fragments, clay fragments, flaked stone tools, ground stone, fire-affected rock, corn cobs Historic – trash scatter, ceramics, glass, beverage cans, and crown caps	Not evaluated	P.J. Wilke, San Bernardino County Museum, 1972; J. Underwood, J. Cleland, C.M. Woods and R. Apple, Dames & Moore, 1987; R.S. White, Archaeological Associates Ltd., 1990	Outside (within 1 mile)
P-33-001637 CA-RIV-001637	Prehistoric site	Lithics, ceramics, projectile points, ground stone, beads, shell, bone, fire-affected rock, carbon	Not evaluated	S. McWilliams, 1970; S. McWilliams, 1979; R.S. White, Archaeological Associates Ltd., 1990; G. Alcock, EIC, Department of Anthropology, UC Riverside, 1991); J. Baldwin, 1991); G. Alcock, EIC, Department of Anthropology, UC Riverside, 1991; G. Alcock, EIC, Department of Anthropology, UC Riverside, 1991; J. Baldwin, 1991; J.A. McKenna, McKenna et al., 2004; K. White, EIC, Department of Anthropology, UC Riverside, 2007; J.A. McKenna, McKenna et al., 2009	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-001638 CA-RIV-001638	Prehistoric site	Manos and metate fragments, pottery, flake waste, midden, sherds, lithic scatter, stone and bone material	Not evaluated	Mc William, 1970 Mc William, 1979 M. Desautels, Scientific Resource Surveys, Inc., 1982	Outside (within 1 mile)
P-33-001766 CA-RIV-001766	Prehistoric site	Sherds, human coprolite, bone, flakes, fire-affected rock, hearths, burned house remains, points, shell beads, fish remains	Not evaluated	P. Wilke and MW, 1980	Outside (within 1 mile)
P-33-001767 CA-RIV-001767	Prehistoric site	Hearths, burned rock, ceramics, fish and bird bone, projectile points	Not evaluated	P. Wilke and MW, 1980; J. Underwood, J. Cleland, C.M. Woods and R. Apple, Dames & Moore, 1987; J. McKenna and C. Ferguson, 2002; Mc Kenna et al., 2004	Outside (within 1 mile)
P-33-001768 CA-RIV-001768	Multicomponent site	Sherds, fire-affected rock, fish, bird, and mammal bone, flakes, historic and modern trash	Not evaluated	P. Wilke, 1980; J. Underwood, J. Cleland, C. Woods and R. Apple, Dames & Moore, 1987.	Adjacent
P-33-001970 CA-RIV-001970	Prehistoric site	Sherd scatter, burned bone, burned ceramic sherds, mano and metate fragments, cranial fragments, lithic debitage, and bird, fish and mammal bone	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, 1994 A. Davis and S. Bouscaren, 1980	Outside (within 1 mile)
P-33-001974 CA-RIV-001974	Prehistoric site	Sherd scatter, metate and mano fragments, schist, fire-affected rock, and fish, bird and mammal bone, lithic debitage, possible human cremations	Status Code 7: Not evaluated or needs re-evaluation	A. Davis and S. Bouscaren, 1980; B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-002789 CA-RIV-002789	Prehistoric site	Sherd scatter, obsidian flake	Status Code 7: Not evaluated or needs re-evaluation	T.T. Taylor, 1984; B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-003867 CA-RIV-003867	Prehistoric site	Sherds, mano fragments, quartz flakes, fire-affected rock, and fish and small mammal bone	Not evaluated	B.S. Arkush, Archaeological Research Unit, UC Riverside, 1990	Outside (within 1 mile)
P-33-005330 CA-RIV-005330	Prehistoric site	Ceramic sherds	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM Tech, 1994	Outside (within 1 mile)
P-33-005331 CA-RIV-005331	Prehistoric site	Sherds, quartzite flakes, quartz debitage, mano and metate fragments, fish bone	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM Tech, 1994	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-005334 CA-RIV-005334	Prehistoric site	Jasper flake, sherd scatter, chert flake	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM Tech, 1994	Outside (within 1 mile)
P-33-005335 CA-RIV-005335	Prehistoric site	Sherd scatter and quartz core	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM Tech, 1994	Outside (within 1 mile)
P-33-005336 CA-RIV-005336	Historic site	Trash scatter, cans, glass fragments, automobile tires, appliances	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005337 CA-RIV-005337	Prehistoric site	Sherd scatter, bone fragments, mano fragments, lithic debitage	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005339 CA-RIV-005339	Prehistoric site	Ceramic sherds, quartz debitage, metate fragments	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005340 CA-RIV-005340	Prehistoric site	Sherds, fire-affected rock, mano fragments, medium-size mammal bone fragments	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005341 CA-RIV-005341	Prehistoric site	Sherds, fire-affected rock, mano fragments, mammal bone fragments, lithic debitage	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005342 CA-RIV-005342	Prehistoric site	Sherds, lithic debitage, fire-affected rock, mano and metate fragments	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005343 CA-RIV-005343	Prehistoric site	Sherds, lithic debitage, a burn area, fire-affected rock, burned and unburned clay, dark soil discoloration	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005344 CA-RIV-005344	Prehistoric site	Sherds, lithic debitage, fire-affected rock, schist pieces	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005345 CA-RIV-005345	Prehistoric site	Bone fragments, lithic debitage	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005346 CA-RIV-005346	Prehistoric site	Several concentrations of bone fragments, ceramic and rim sherds, fire-affected rock, metate fragments, rock cobbles, clay chunks and fragments, schist	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-005347 CA-RIV-005347	Prehistoric site	Sherds, mano fragments, small cobbles, quartz debitage, hammerstone	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005348 CA-RIV-005348	Prehistoric site	Ceramic sherds	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005349 CA-RIV-005349	Prehistoric site	Ceramic sherds	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005350 CA-RIV-005350	Prehistoric site	Sherd scatter and fire-affected rock	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005353 CA-RIV-005353	Prehistoric site	Sherd scatter, obsidian flake, chalcedony flake	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005354 CA-RIV-005354	Historic site	Agricultural complex – well, berms, irrigation and stand pipes, abandoned date palm grove	Status Code 7: Not evaluated or needs re-evaluation	B. Love and S. Moffit, CRM TECH, 1994	Outside (within 1 mile)
P-33-005554	Prehistoric isolate	Single pot sherd	Not evaluated	B. Neiditch, 1988	Outside (within 1 mile)
P-33-005555	Prehistoric isolate	Single pot sherd	Not evaluated	B. Neiditch, 1988	Outside (within 1 mile)
P-33-005556	Prehistoric isolate	Single pot sherd	Not evaluated	B. Neiditch, 1988	Outside (within 1 mile)
P-33-005560	Prehistoric isolate	Single pot sherd	Not evaluated	Brooke S. Arkush, 1990	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-005705 CA-RIV-012999	Historic-era structure	Coachella Canal and distribution system	Eligible for NRHP	C. Folkes, Riverside County Historical Comm., 1983; S. Ni Ghabhlain, ASM Affiliates, Inc., 2003; S. Ni Ghabhlain and S. Stringer-Bowsher, Applied EarthWorks, 2007; R. Jones and D. Brockmann, 2013; J. Smallwood, Applied EarthWorks, Inc., 2013; J. Smallwood, Applied EarthWorks, Inc., and S. Schafer, 2013; T. Baurley and J.M. Sanka, L&L Environmental, 2015; J. Smallwood, Applied EarthWorks, Inc., 2015; J. Smallwood, Applied EarthWorks, Inc., 2015; J. George, Applied EarthWorks, Inc., 2016; J. Castells, Applied EarthWorks, Inc., 2017	**Within**
P-33-007425 CA-RIV-005799	Prehistoric site	Ceramic scatter, milling fragments, fire-affected rock, river cobble, shell, hearth areas, structured depressions, burned small mammal and bird bone, burned tortoise shell, fish vertebra, small teeth, burned clay, metate and mano fragments, broken granite and quartz fragments, unfired clay balls, depressed areas Historic trash component – rugs, dishes, jars, auto parts, rusty nails	Not evaluated	G.E. Collins, Imperial Irrigation District, 1995	**Within**

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-009498 CA-RIV-006381	Historic structure	Union Pacific/Southern Pacific Railroad	Unknown	S. Ashkar, Jones & Stokes, 1966; C. Chasteen, Myra L. Frank & Associates, 2003; C. Taniguchi, Galvin & Associates, 2005; S. Wilson and K. Chimel, ICF Jones & Stokes, 2009; S. Kremkau, SRI, 2012; T. Baurley and J.M. Sanka, L&L Environmental, Inc., 2015; D. Leonard, HDR, 2016; P. Moloney, R. Elder, W. Blodgett, Applied EarthWorks, Inc., 2017	Outside (within 1 mile)
P-33-009499 CA-RIV-006382	Prehistoric site	Sparse surface scatter of brown ware fragments (1999) No artifacts were found in 2007 through either survey or excavations	Not eligible for NRHP or CRHR	M. Avina, Jones and Stokes Associates, Inc., 1999; D. Ballester, CRM Tech, 2007	Outside (within 1 mile)
P-33-010795 CA-RIV-006514H	Historic site	Mid-twentieth century refuse deposit, glass, metal, ceramics, granite boulders	Not evaluated	J. Brock, Archaeological Advisory Group, 2000	Outside (within 1 mile)
P-33-010905 CA-RIV-006618	Prehistoric site	Ceramic sherds, animal bone fragments, chipped stone, fire-affected clay, ground stone fragment	Found to not qualify as a historical resource under CEQA	D. Ballester and A. Sanchez Moreno, CRM Tech, 2000; D. Ballester, CRM Tech, 2002	Outside (within 1 mile)
P-33-011437 CA-RIV-006822	Prehistoric site	Pot sherds, shell beads, animal bone fragments, ground stone fragment, chipped stone debitage, lithic biface fragment	Eligible for CRHR under Criterion 4	J.J. Eddy, CRM TECH, 2005	Outside (within 1 mile)
P-33-011476	Historic-era building	La Hacienda Nursery, 80-900 Miles Ave, Indio	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011477	Historic-era building	Single-family residence, 81-492 Francis Ave, Indio	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011478	Historic-era building	Single-family residence, 81-493 Francis Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-011479	Historic-era district	Grouping of eight single-family residences	6Y, ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011480	Historic-era building	Single-family residence, 81-351 Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011481	Historic-era building	Multi-family residence, 81-363, 81-365 Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011482	Historic-era building	Multi-family residence, 81-367-81-369 Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011483	Historic-era building	Multi-family residence, 81-381 Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011484	Historic-era building	Multi-family residence, 81-395, 81-395 ½ Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011485	Historic-era building	Single-family residence, 81-413 Miles Ave	6Y, ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011486	Historic-era building	Single-family residence, 45-045 Ash Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011487	Historic-era building	Multi-family residence, 81-465, 81-465 ½ Miles Ave	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, CRM TECH, 2002	Outside (within 1 mile)
P-33-011488	Historic-era site	Date Palm Trailer Park and A.J. Shamblin Home	No longer extant	B. Tang, CRM TECH, 2002; B. Loren-Webb, L&L Environmental Inc., 2009	Outside (within 1 mile) but no longer extant

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-011571	Historic-era building	Single-family residence, 45-040 Birch Ave	6Y, ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local	B. Tang, CRM TECH, 2002	Outside (within 1 mile) but no longer extant
P-33-011572	Historic-era building	Single-family residence, 81-411 Miles Ave	6Y, ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local	B. Tang, CRM TECH, 2002	Outside (within 1 mile) but no longer extant
P-33-011573 CA-RIV-006896	Prehistoric site	Five loci; ceramic sherds, dispersed hearth feature, shell bead, lithic tools and debitage, faunal material, human cremation	Eligible for NRHP under Criterion D; historically significant cultural resource pursuant to CEQA.	D. Ballester, CRM Tech, 2002; D. McDougall, C. Inoway, D. Bircheff, M. Horne, Applied EarthWorks, Inc., 2003; R. J. Lichtenstein, Applied EarthWorks, Inc., 2006; R. Lichtenstein, T. Everette. S. Wadsworth, D. Largo, D. McDougall, K. Mclean, L. Burgos, Applied EarthWorks, Inc., 2011	Outside (within 1 mile)
P-33-011574 CA-RIV-006897	Prehistoric site	Organic material, charcoal, fire-affected rock, faunal material, hearth feature, sherds, lithic debitage, ground stone pieces, shell	Eligible for NRHP under Criterion D	D. Ballester, CRM TECH, Inc, 2002; D. McDougall, C. Inoway, D. Bircheff, M. Horne, Applied Earthworks, Inc, 2003; R. Lichtenstein, T. Everette. S. Wadsworth, D. Largo, D. McDougall, K. Mclean, L. Burgos, Applied Earthworks, Inc., 2006	Outside (within 1 mile)
P-33-011636 CA-RIV-006915	Prehistoric site	Ceramic sherds, quartz flake, fire-affected rock	Not evaluated	B. Love, B. Tang, H.M. Quinn, M. Dahdul, CRM Tech, 2002	Outside (within 1 mile)
P-33-012280 CA-RIV-007011	Prehistoric site	Ceramic sherds	6Z, ineligible for NRHP, CRHR and local designation	M. Dahdul, CRM TECH, 2002	Outside (within 1 mile)
P-33-012281 CA-RIV-007012	Prehistoric site	Sherds fire-affected rocks and clay, animal bones	6Z, ineligible for NRHP, CRHR and local designation	D. Ballester, CRM TECH, 2002	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-012526 CA-RIV-007126/H	Prehistoric site; Historic site	Prehistoric – sherds, ground stone fragments, chipped stone pieces, animal bone fragments, rocks Historic – glass fragments, ceramic kitchenware	Eligible for CRHR	D. Ballester and L.H. Shaker, CRM TECH, 2003	Outside (within 1 mile)
P-33-012527	Prehistoric isolate	Fragment of a biface mano	Not evaluated	D. Ballester, CRM TECH, 2002	Outside (within 1 mile)
P-33-012528	Prehistoric isolate	Ceramic sherds	Not evaluated	D. Ballester, CRM TECH, 2002	Outside (within 1 mile)
P-33-012529	Prehistoric isolate	Ceramic sherds	Not evaluated	D. Ballester, CRM TECH, 2002	Outside (within 1 mile)
P-33-013295	Historic-era building	Swingle Ranch House, 44566 Swingle Ave	4S2, May become eligible for NRHP with more research	J. Brock and C. di Iorio, Archaeological Advisory Group, 2004	Outside (1 mile)
P-33-013795 CA-RIV-007553	Prehistoric site	Bifacial mano, metate fragments, mano/pestle fragments, possible tarring pebble, burned bone, charcoal, clay	Not evaluated	C. Demcak, ARMC, 2004	Outside (within 1 mile)
P-33-013826	Historic-era building	Carrillo Residence, 43541 Madison Street	6Z1, Found ineligible for NRHP with no potential for any listing	L.S. White, Archaeological Associates, 2002	Outside (within 1 mile)
P-33-013834 CA-RIV-007561	Prehistoric site	Ceramic sherds, chipped stone debitage, ground stone fragments, animal bone, fire-affected clay, rock	One component of site is eligible for CRHR under Criterion 4	L.S. White, Archaeological Associates, 2002; John J Eddy, CRM TECH, 2003	Outside (within 1 mile)
P-33-013940	Historic-era site	Scatter of domestic refuse, structural debris, concrete septic tank	Not evaluated	R.P. Easter Nixon and J. George, Applied EarthWorks, Inc., 2004	Outside (within 1 mile)
P-33-014376	Historic-era building	Single-family residence, 80783 Indio Boulevard	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, M. Hogan, C. Tibbet, CRM TECH, 2004	Outside (within 1 mile)
P-33-014377	Historic-era building	Date packinghouse, 80783 Indio Boulevard	6Z, ineligible for NRHP, CRHR and local designation	B. Tang, M. Hogan, C. Tibbet, CRM TECH, 2004	Outside (within 1 mile)
P-33-014398 CA-RIV-007829	Prehistoric site	Ceramic sherds, chert tool, possible test core of red jasper	Status Code 7: Not evaluated or needs re-evaluation	J. Smallwood, CRM TECH, 2005	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-014740 CA-RIV-007846	Prehistoric site	Mano, mano fragment, cores, hammerstone, pestle fragment, pot sherds	Not evaluated	C. Demcak, ARMC, 2005	Outside (within 1 mile)
P-33-016252 CA-RIV-008403	Prehistoric site	Cremated bone fragments (human), ceramic sherds, chipped stone pieces, projectile points, shell beads, scraper, schist	Ineligible for NRHP and CRHR	D. Ballester, CRM Tech, 2007; D. Ballester, CRM Tech, 2007	Outside (within 1 mile)
P-33-016672 CA-RIV-008729	Prehistoric site	Ceramic sherds, mano fragment, fire-affected rock, faunal remains	Status Code 7: Not evaluated or needs re-evaluation	D. Ballester, CRM Tech, 2007	Outside (within 1 mile)
P-33-016785	Historic-era site	Group of four utility poles	Not evaluated	J. M. Sanka, Michael Brandman Associates, 2007	Outside (within 1 mile)
P-33-016786	Historic-era building	Single-family residence, 80999 Fred Waring Drive	Not evaluated	J. M. Sanka, Michael Brandman Associates, 2007	Outside (within 1 mile)
P-33-016787	Historic-era building	Single-family residence, directly west of 80999 Fred Waring Drive	Not evaluated	J. M. Sanka, Michael Brandman Associates, 2007	Outside (within 1 mile)
P-33-017111 CA-RIV-008908	Prehistoric site	Ceramic sherds, lithic flakes, fire-affected clay fragments, shells	Not evaluated	L. Hunt, CRM TECH, 2008	Outside (within 1 mile)
P-33-017259 CA-RIV-010847	Historic-era structure	Coachella Valley Stormwater Channel	6Z, ineligible for NRHP, CRHR and local designation	D. Ballester, CRM TECH, 2008; D. McDougall, Applied Earthworks, 2009; P. Stanton, Statistical Research, Inc., 2012; C. Inoway, Applied Earthworks, 2012; J. Smallwood, Applied EarthWorks, Inc., 2016; D. Ballester, CRM TECH, 2016	**Within**
P-33-017348	Historic-era building	Multi-family residence, 42801 Burr Street	6Z, ineligible for NRHP, CRHR and local designation	J. Smallwood, CRM TECH, 2005; B. Tang, CRM TECH, 2005	Outside (within 1 mile)
P-33-017349	Historic-era building	Single-family residence, 42803 Burr Street	6Z, ineligible for NRHP, CRHR and local designation	J. Smallwood, CRM TECH, 2005; B. Tang, CRM TECH, 2005	Outside (within 1 mile)

Primary Number/ Trinomial	Resource Type	Resource Description	Eligibility Status	Recorder, Affiliation, Year	Proximity to Project Area
P-33-028059 CA-RIV-012669	Prehistoric site	Multiple loci, flaked and ground stone artifacts, ceramics, baked clay fragments, shell ornaments, modified bone, lithic material, burned and unburned faunal remains, burned human bone, macrobotanical remains	2S2, Determined eligible for NRHP and CRHR by State Historic Preservation Office (SHPO)	D. McDougall and M. Moratto, Applied Earthworks, Inc., 2016	Outside (within 1 mile)

4.1.2.1 P-33-001768/CA-RIV-001768 – Multicomponent site

While not within the project area, site P-33-001768/CA-RIV-001768 is recorded immediately west of the project area. This resource consists of an archaeological site originally recorded by Wilke in 1980 and relocated by Underwood et al. in 1987. Wilke described the site as being located east of the Coachella Canal, west of Madison Street, south of Avenue 42, and north of I-10. He described the site as a scatter of prehistoric and historic materials including burned rock clusters, ceramics, and fish, bird, and mammal bone. Wilke noted the site was badly disturbed with much historic and modern trash. In 1987, Underwood et al. relocated the site and described it as consisting of fire-affected rock, a dense concentration of Tizon Brown Ware and Lower Colorado Buff Ware covering an area of about 10 m^2; a few flakes of black metavolcanic and red/brown jasper; and large amounts of fish, bird, and mammal bone. Underwood et al. also noted the site was largely disturbed. The site has not been previously evaluated for the NRHP or CRHR.

4.1.2.2 P-33-005705/CA-RIV-012999 – Coachella Canal

This resource consists of the Coachella Canal, which was constructed between 1938 and 1948, and its distribution system, which was completed in 1954. The canal was constructed to deliver water to the Coachella Valley and a portion of Imperial County. In its entirety, the canal is 123.5 miles long between the diversion from the All-American Canal and the terminal reservoir, Lake Cahuilla (Ní Ghabhláin and Stringer-Bowsher 2009; Schaefer and Ní Ghabhláin 2003). Various segments of the canal have been recorded over the years as part of different projects. As summarized in 2015 by Josh Smallwood of Applied EarthWorks: subsequent to an evaluation report completed by ASM Affiliates, Inc., in 2003, the U.S. Bureau of Reclamation "formally determined the portions of the Canal between Siphons 7 and 14, and Siphons 15 and 32 to be eligible for the NRHP under Criteria A and C." However, the State Historic Preservation Office (SHPO) concurred only with its eligibility under Criterion A. The resource's (local and state) significance under Criterion A stems from its role in the development of the Imperial and Coachella Valleys: it provided a reliable water supply from the Colorado River and All-American Canal and laid the foundation for growth in the Coachella Valley's desert terrain. The resource's period of significance is 1938 to 1954 (Smallwood 2015).

Between 2007 to 2009, ASM Affiliates, Inc., recorded and evaluated the segment of the Coachella Canal between Siphon 32 and its terminus at Lake Cahuilla (which includes the canal segment within the current project area), and recommended the Coachella Canal and its distribution system eligible for the NRHP under Criteria A and C. There had been no concurrence from SHPO on that eligibility finding as of the date of Smallwood's DPR forms (Ní Ghabhláin and Stringer-Bowsher 2009; Smallwood 2015).

4.1.2.3 P-33-007425/CA-RIV-005799 – Prehistoric site

Site P-33-0007425/CA-RIV-005799 is located to the west of the northern portion of the project area, with a very small portion of the original boundary overlapping the project area, but outside of the grading limits. This resource consists of an archaeological site recorded by G.E. Collins in 1995. Its boundaries were established as the dirt road along the western edge of the grading footprint on the east, Avenue 42 on the south, the Coachella Canal on the west, and a wash and road on the north. The site consisted of a light scatter of ceramics, milling fragments, fire-affected rock, broken river cobble, various types of shell, three hearth areas, eight structured depressions, and an intrusive historic trash component. Ceramics included Colorado Buff, Tizon, and Salton Buff. Also noted were burned bird and small mammal bone, burned tortoise shell, fish vertebra, small faunal teeth, burned clay fragments, metate and mano fragments, broken granite and quartz fragments, unfired clay balls/nodules, and many depressed areas with associated ceramics and burned bone. Collins noted the body of the site was in good condition although trash dumping and previous road and agricultural disturbances had occurred at the north end of the site. Trash was also observed to be scattered throughout the site. The site has not been previously evaluated for the NRHP or CRHR.

4.1.2.4 P-33-017259/CA-RIV-010847 – Coachella Valley Stormwater Channel (CVSC)

This resource consists of the Coachella Valley Stormwater Channel or CVSC. The CVSC generally follows the natural course of the Whitewater River from Point Happy (near present-day Miles Avenue and Washington Street southwest of the current project area) to the Salton Sea. The CVSC functions as part of the area's stormwater/flood protection system in conjunction with the WWRSC, the name given to the northern section of the Whitewater River between Palms Springs and Point Happy. Together, the CVSC and WWRSC are approximately 50 miles long and convey storm/flood waters to the Salton Sea. Various segments of the CVSC have been recorded as part of different projects, including the segment within the current project area (Ballester 2016). In 2016, Ballester recommended the segment of the CVSC from Point Happy to the community of Thermal (southeast of Indio) ineligible for listing in the NRHP and CRHR (Ballester 2016). An approximately 1,300-foot-long segment of the CVSC is located at the southeast end of the current project area.

4.2 THOUSAND PALMS CHANNEL

4.2.1 Historical Resource Status

Based on background research, and a review of records search results and the BERD, the Thousand Palms Channel is not listed in the NRHP or the CRHR, nor has the structure been identified as a contributor to a historic district. It appears the channel has not been previously evaluated for potential historic significance.

4.2.2 Development History

The Thousand Palms Channel is an earthen channel that conveys flood flows from the nearby mountains to the WWRSC/CVSC, the "backbone" of CVWD's stormwater protection system. As of 2022, there are 16 stormwater protection channels within CVWD's boundaries, totaling approximately 135 miles of channels developed along the natural alignment of dry creeks that flow from the surrounding mountains to the Whitewater River. Along with the Thousand Palms Channel, other CVWD tributary stormwater facilities include the West Magnesia Channel, Palm Valley Channel, Wasteways 2 and 3, La Quinta Evacuation Channel, Deep Canyon Channel, and Avenue 64 Evacuation Channel. CVWD also operates stormwater systems that intercept regional floods and convey them to tributary stormwater facilities; examples include the East Side Dike, Dike No. 4, and the Bear Creek Detention System. In addition, CVWD operates stormwater facilities or systems that discharge directly to the Salton Sea, such as Wasteway No. 1 (CVWD 2022).

Flowing through the Coachella Valley to the Salton Sea, the Whitewater River's course is channelized downstream of the city of Palm Springs. The section between Palms Springs and Point Happy (near present-day Miles Ave and Washington Street southwest of the project area) is part of a naturally occurring wash that has been improved to carry storm flows and is referred to as the Whitewater River Storm Channel or WWRSC. Because the riverbed naturally flattened out in areas to the east, the section east of Washington Street continuing downstream to the Salton Sea has more human-made elements and is called the Coachella Valley Storm Channel or CVSC (Coachella Valley Regional Water Management Group 2010; CVWD n.d.). As a whole, the WWRSC/CVSC is approximately 50 miles long (CVWD 2022).

Near central Indio, the Thousand Palms Channel begins at one of the southern edges of the Sun City Shadow Hills community, which was developed in the early 2000s. The unlined channel's flows travel over the Coachella Canal, Madison Street, and Avenue 42 in a southeast direction, then under I-10 to meet the CVSC near Indio Boulevard (USGS 1963, 1968).

The Thousand Palms Channel has also been referred to as the Thousand Palms Canyon Wash Channel, indicative of its origin as a natural landform, a wash. As the largest drainage from the Indio Hills to the north, the Thousand Palms Wash formed an alluvial fan spanning toward the southwest and draining toward the southeast (Shvidchenko et al. 2006) (Figure 7). Aerial photographs show that in 1939, the area where the channel is presently located was still predominantly undeveloped land and the wash was a natural topographic feature (Figure 8). Agricultural fields were situated to the south and southeast, near the Whitewater River (U.C. Santa Barbara Library 1939).

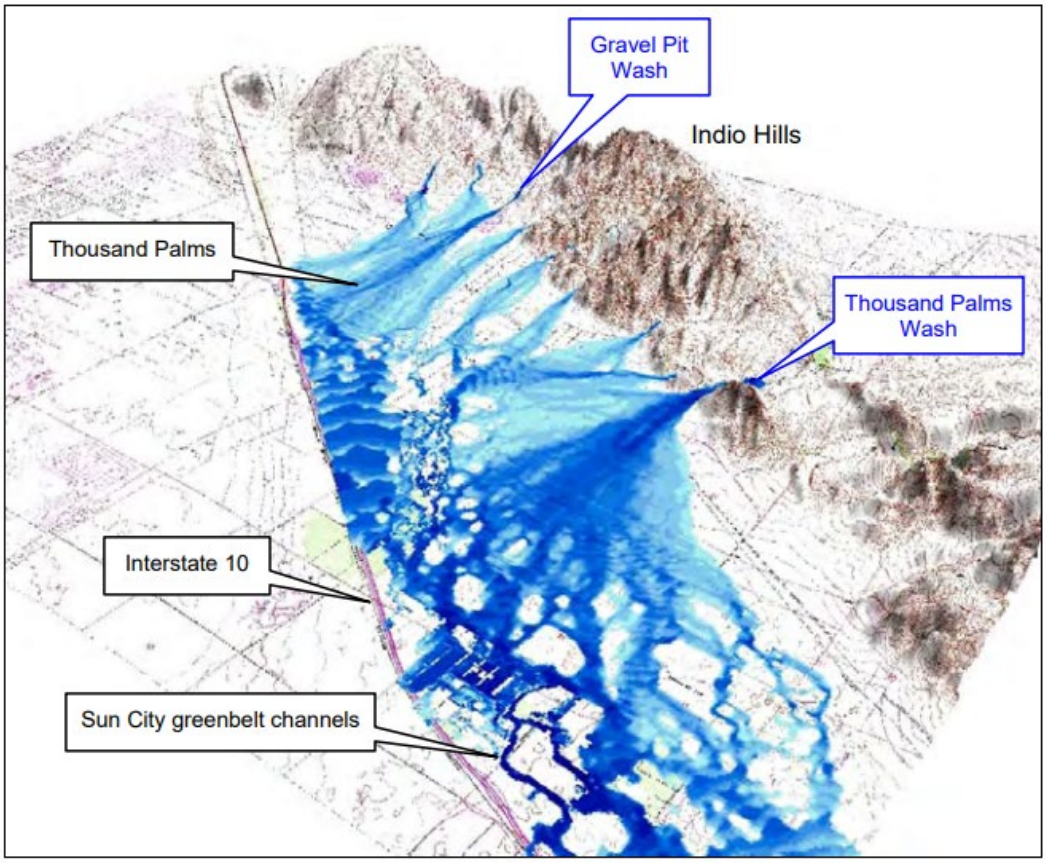

Figure 7. Thousand Palms Wash (far right) between the Indio Hills and I-10, shown in a simulation of 100-year flood event inundation limits (Source: Shvidchenko et al. 2006).

Figure 8. In 1939, the Thousand Palms Wash (northwest of the CVSC/WWRSC, railroad and highway) is seen as a natural topographic feature (Source: U.C. Santa Barbara Library 1939).

As evidenced by Reclamation records, the subject segment of the wash was modified to better serve as a drainage channel by 1946. Dikes were created and riprap installed along the channel edges to channelize the wash to better contain and direct drainage flows (U.S. Bureau of Reclamation 1946a) (Figure 9). A siphon and drop structure were constructed where the Coachella Canal intersects the north end of the wash/Thousand Palms Channel. The siphon's function is to allow water in the Coachella Canal to flow underneath the wash/Thousand Palms Channel, and the drop structure's function is to control the velocity of flows in the wash/Thousand Palms Channel as they travel over the Coachella Canal to continue southbound. This minimizes erosion and deposition of debris in the canal by flash-flood flows (Schaefer and Ní Ghabhláin 2003).

It appears the features constructed in the wash/Thousand Palms Channel itself were relatively minor. The wash was graded and riprap was installed on the north side of the siphon. Energy-dissipating concrete blocks (baffle) were installed on the south side of the siphon (Camacho 2022; U.S. Bureau of Reclamation 1946a, 1946b) (Figure 10). Aerial photographs show other human-made features present on the channel bottom by 1949, likely earthen energy-dissipating dikes (Environmental Data Resources [EDR] 2022) (Figure 11). It appears the dikes wore down over the years; they are barely discernible amidst vegetation growth in the channel on a 1965 aerial photograph. Subsequently, maintenance completed by the early 1970s cleared the vegetation from the channel bottom (EDR 2022). In 1985, the channel's outlet to the CVSC was modified; it appears the curve of the outlet was angled farther north and new dikes were created along the channel edges (CVWD 1985).

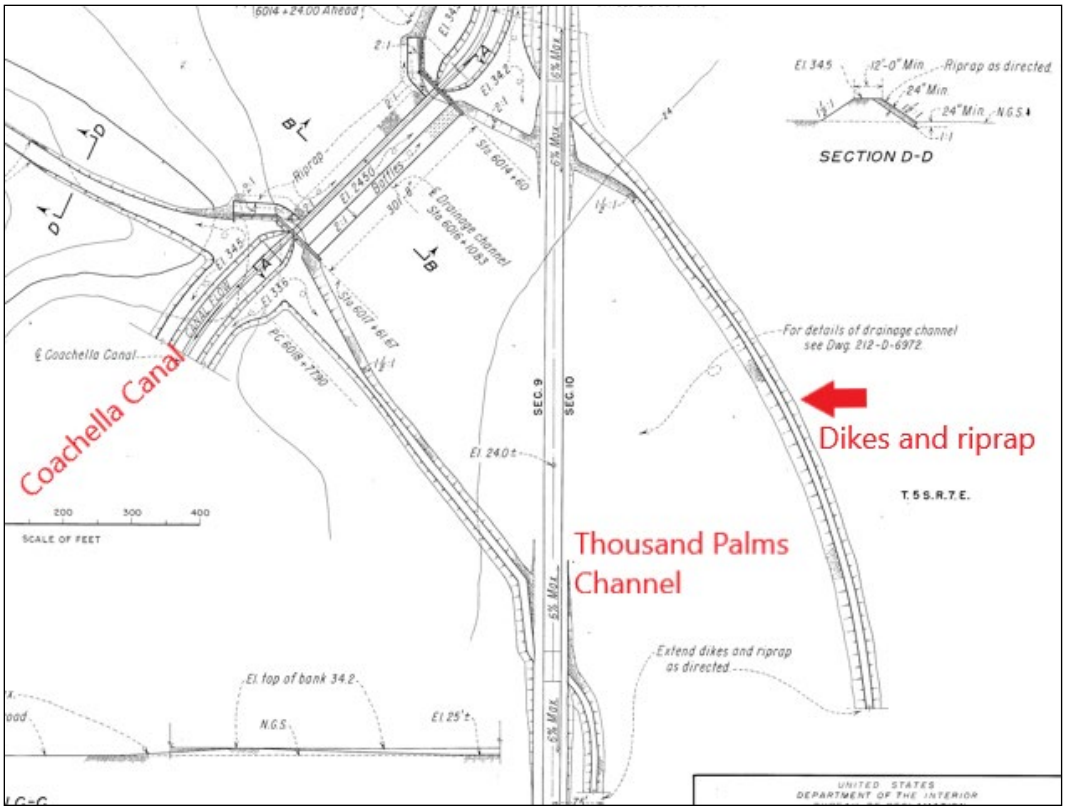

Figure 9. A 1946 design drawing for the Coachella Canal siphon shows modifications to the Thousand Palms Channel (generally called a drainage channel), included extending dikes and riprap along the channel edges (Source: Reclamation 1946a).

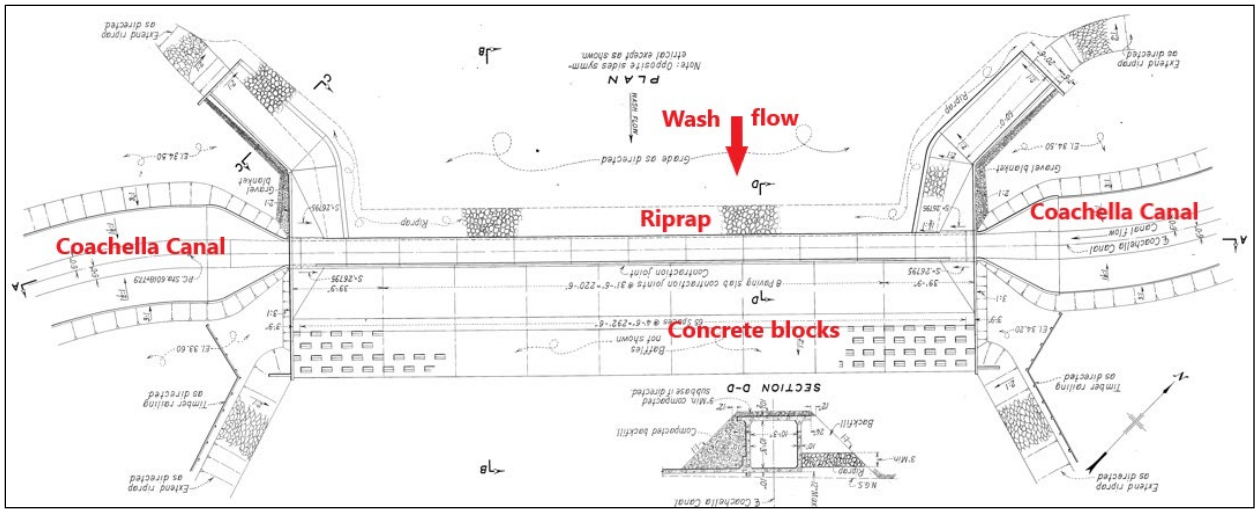

Figure 10. Another 1946 design drawing for the Coachella Canal siphon shows modifications to the Thousand Palms Channel (called a wash here) included grading, and installation of riprap and baffle/concrete blocks (Source: Reclamation 1946b).

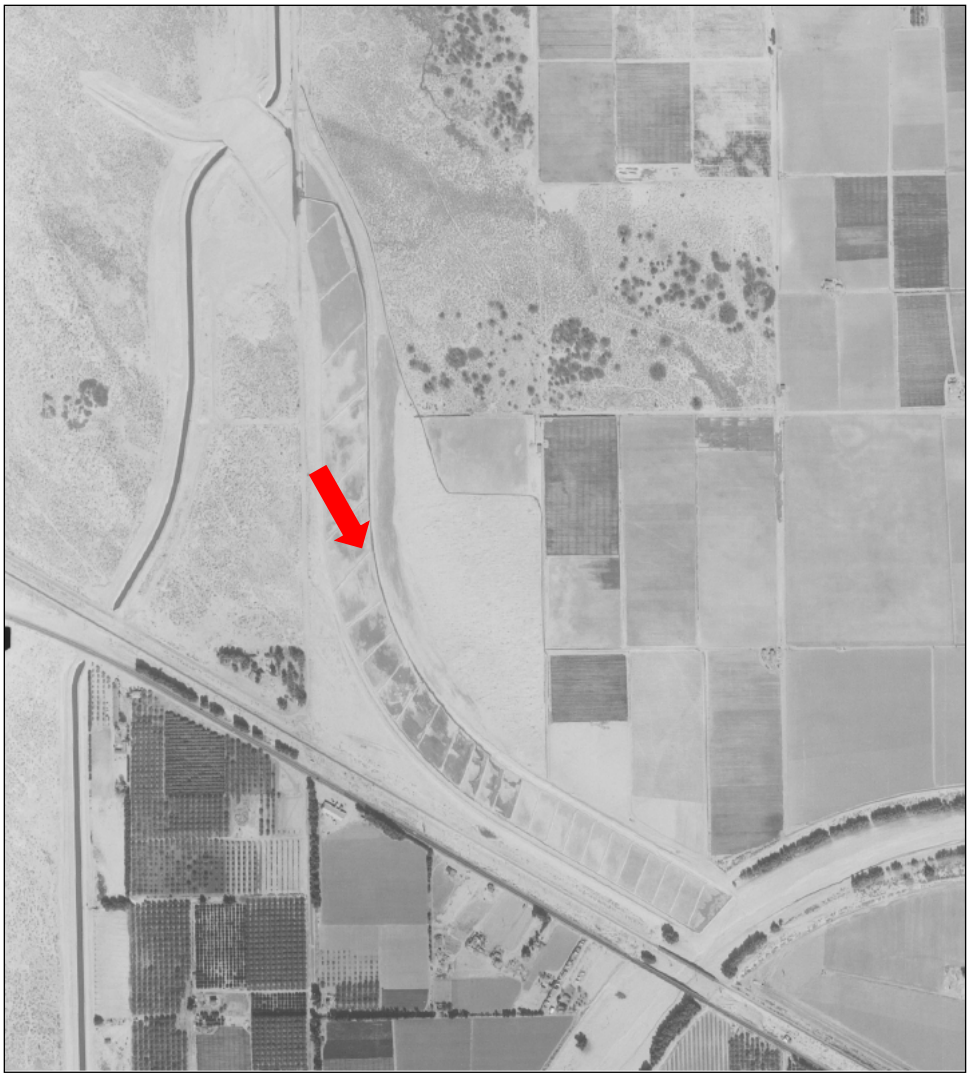

Figure 11. A 1949 aerial photograph shows what appear to be energy-dissipating dikes along the Thousand Palms Channel bottom, indicated by red arrow (Source: EDR 2022).

Research to date and available CVWD data did not reveal when CVWD assumed the operation and maintenance of the Thousand Palms Channel, and CVWD records do not provide a comprehensive history of maintenance or modifications beyond what is described above (Camacho 2022). In addition, consultation with the Coachella Valley Historical Society did not uncover any consequential information about the channel. Available data indicate the U.S. Bureau of Reclamation completed the early improvements to channelize the segment of the wash ca. 1946, and sometime before 1985 transferred operation of the Thousand Palms Channel to CVWD. It is possible the transfer occurred ca. 1954, when the Bureau of Reclamation transferred to CVWD the underground water distribution system constructed in the Coachella Valley as part of the All-American Canal system, or ca. 1981, when operation of the Coachella Canal was transferred to CVWD.

CHAPTER 5. ARCHAEOLOGICAL ASSESSMENT

5.1 SACRED LANDS FILE SEARCH

At SWCA's request, the NAHC conducted a SLF search for the project area. The NAHC provided negative SLF search results on March 20, 2023. The NAHC also noted that the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area, and recommended contacting Native American tribes who may have knowledge of cultural resources in the project area. The NAHC provided a list of contacts whom it recommended contacting (see Appendix B). SWCA provided the SLF search results and contact list to Kimley-Horn on March 23, 2023. Consultation with Native American tribes will be completed by the CVWD.

5.2 FIELD METHODS

On April 13 and 14, 2023, SWCA archaeologists Omar Rice and Alec McKinney conducted a cultural resources survey for the project. The survey consisted of walking the project area using parallel transects spaced no more than 15 meters (m) apart. A Samsung computer tablet paired with a Geode GPS antenna was used to locate the project area and maintain transect accuracy. The ground surface was examined for the presence of prehistoric artifacts (e.g., flaked stone tools, tool-making debris, or stone milling tools), ecofacts (e.g., shell, fire-affected rock, or bone), historic-era artifacts (e.g., metal, glass, or ceramics), sediment discoloration that might indicate the presence of a cultural midden, depressions, and other features that might indicate the former presence of structures or buildings (e.g., post holes or foundations) or occupations (e.g., hearths or bedrock milling features).

5.3 FIELD RESULTS

Ground surface visibility was excellent throughout most of the project area, except for the northeastern portion, which was covered in a layer of woody detritus (Figure 12 and Figure 13). Extensive ground disturbance was noted throughout the project area as the result of agricultural, road grading, and construction activities, as well as from the natural erosion caused by the earthen channel (Figure 14 through Figure 17).

Figure 12. Project area overview, from Avenue 42 facing north.

Figure 13. Project area overview, from northeastern extent facing south.

Figure 14. Project area overview, along Avenue 42 facing east.

Figure 15. Project area overview, central portion facing southeast.

Figure 16. Project area overview, southern portion facing east.

Figure 17. Project area overview, freeway overpass facing west.

During the archaeological field survey, a total of nine prehistoric ceramic fragments (Artifacts 1 through 9) were recorded within push berms at six locations in the northern portion of the project area (CONFIDENTIAL Figure 18). The ceramic fragments consisted of three grayware body sherds (Artifacts 1, 2, and 4), three redware body sherds (Artifacts 5, 6, and 7), one redware rim sherd (Artifact 3), and two brownware body sherds (Artifacts 8 and 9) (Figure 19 through Figure 27). All nine artifacts are outside of the previously recorded boundary of P-33-0007425/CA-RIV-005799. Of the nine artifacts, seven are outside of the established construction grading limits (Artifacts 1, 2, 3, 4, 6, 7 and 8), while the remaining two artifacts (Artifact 5 and Artifact 9) are within the grading limits. Artifact 5 is also within a proposed access road alignment.

Due to their likely association with P-33-0007425/CA-RIV-005799, the site boundary was updated to include the nine artifacts (see Appendix C). As a result of the site boundary update, the site overlaps the northwestern portion of the APE. While site P-33-0007425/CA-RIV-005799 has not been evaluated in its entirety and a recommendation of eligibility cannot be made for the site as a whole, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is heavily disturbed with the artifacts displaced from their original context by agricultural and road grading activities. No evidence of site P-33-001768/CA-RIV-001768 was observed within the project area.

CONFIDENTIAL Figure 18. Results of the archaeological survey showing the updated boundary of P-33-0007425/CA-RIV-005799.

Figure 19. Artifact 1 - Grayware body sherd, detail.

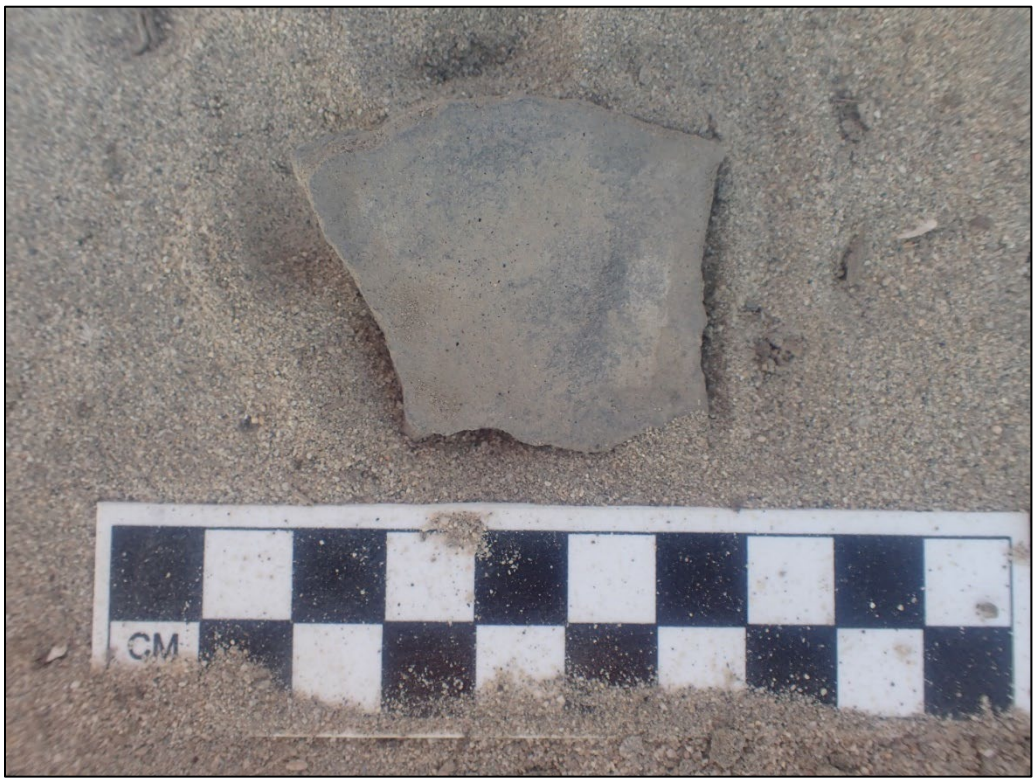

Figure 20. Artifact 2 - Grayware body sherd, detail.

Figure 21. Artifact 3 - Redware rim sherd, detail.

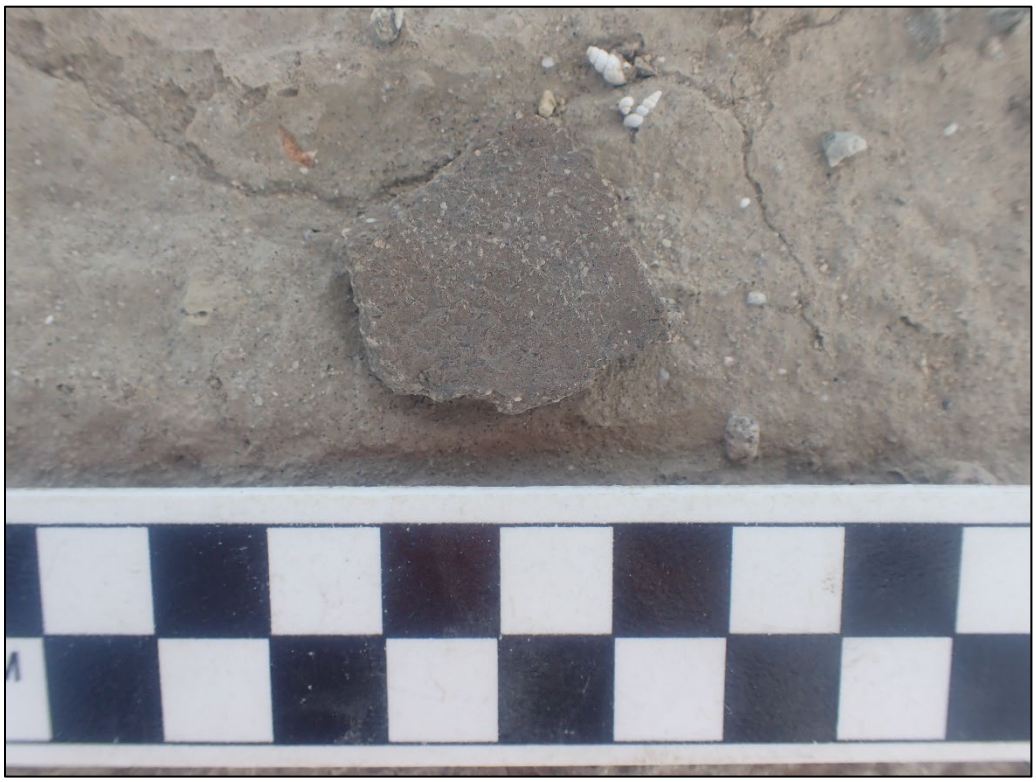

Figure 22. Artifact 4 - Greyware body sherd, detail.

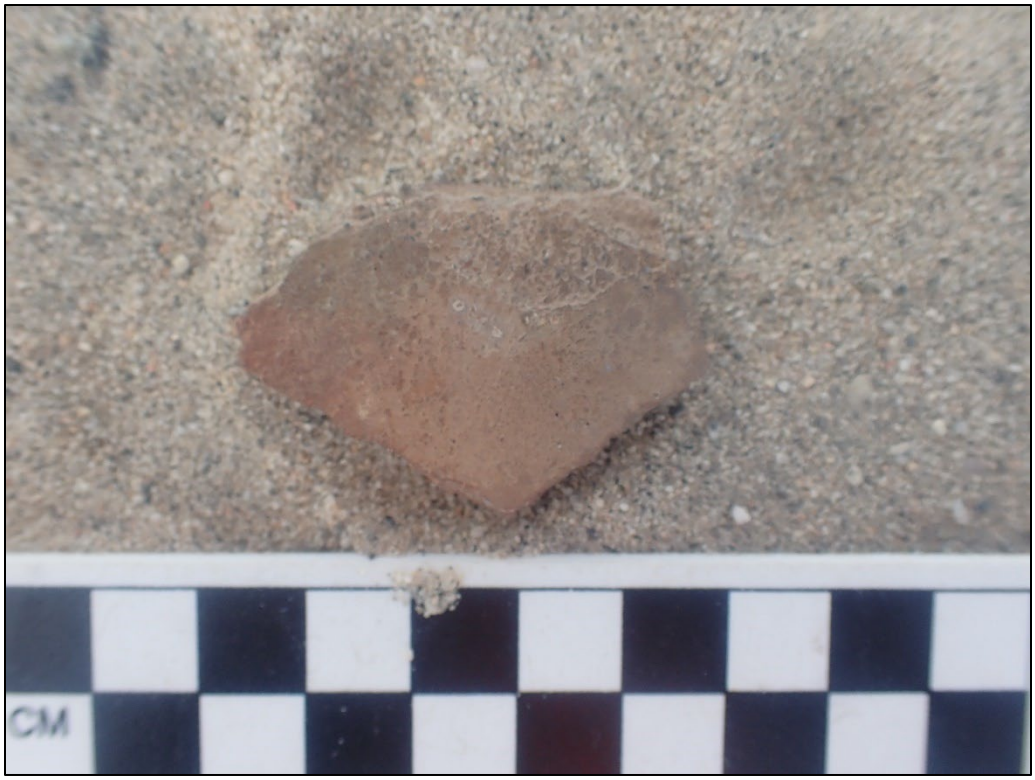

Figure 23. Artifact 5 - Redware body sherd, detail.

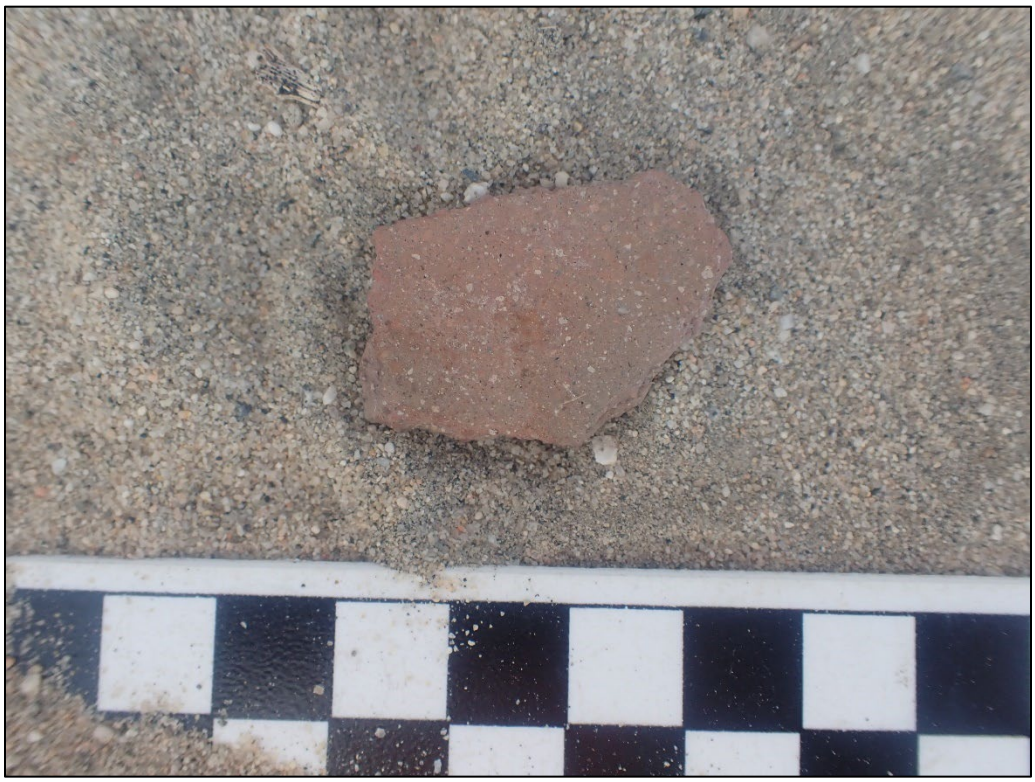

Figure 24. Artifact 6 - Redware body sherd, detail.

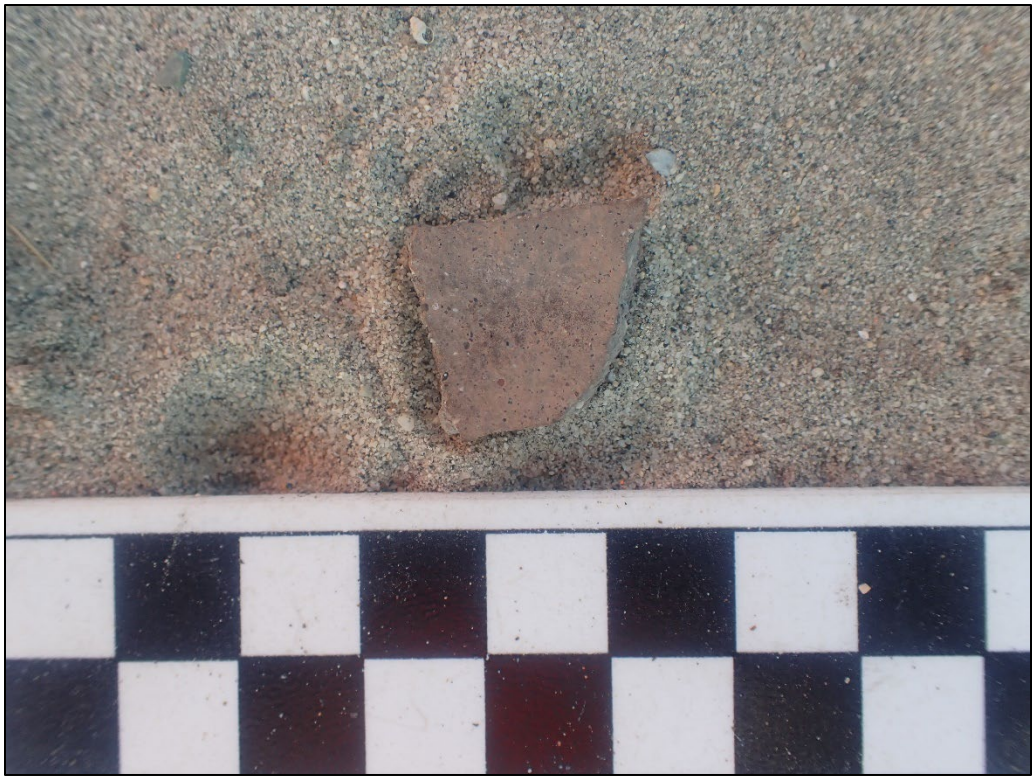

Figure 25. Artifact 7 - Redware body sherd, detail.

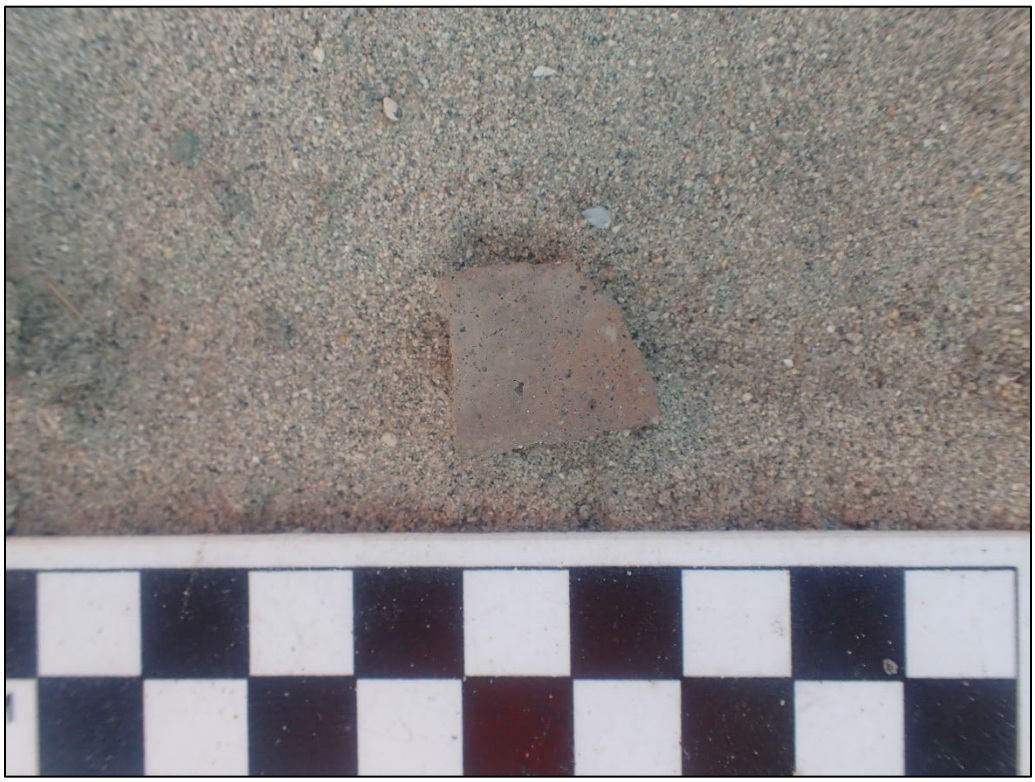

Figure 26. Artifact 8 - Brownware body sherd, detail.

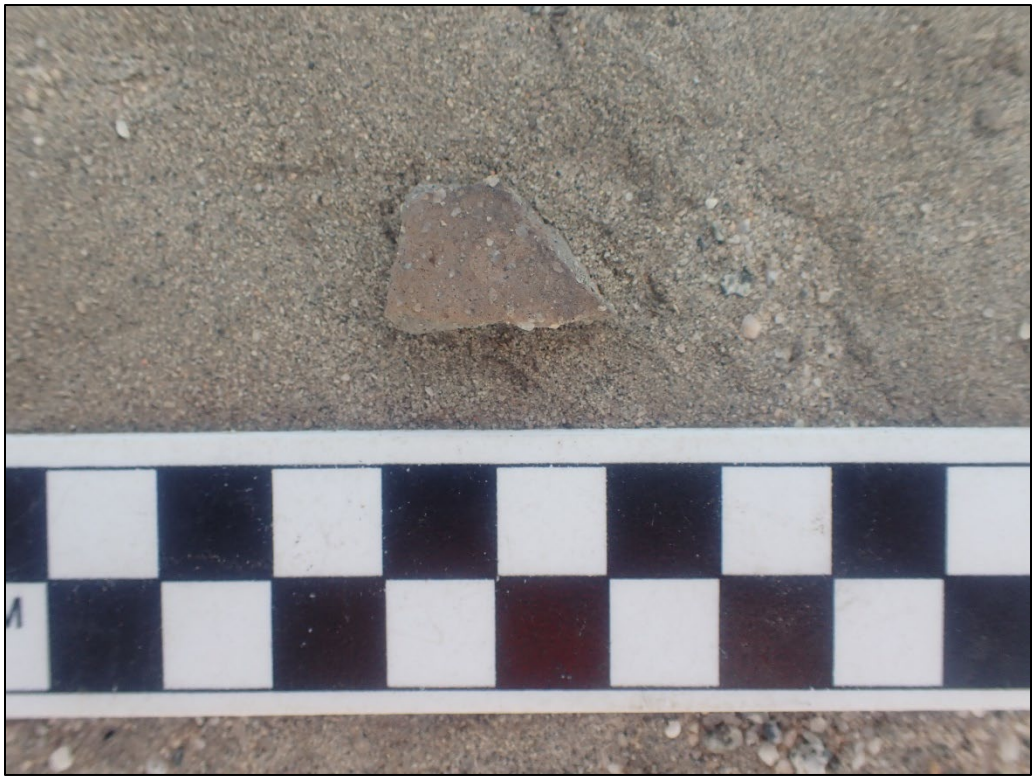

Figure 27. Artifact 9 - Brownware body sherd, detail.

5.4 EVALUATION OF P-33-0007425/CA-RIV-005799

Site P-33-0007425/CA-RIV-005799 was described as a light scatter of ceramics, ground stone tools, shell, faunal bone, evidence of hearth areas, and eight structured depressions. It was noted that while the central portion of the site was in good condition, intrusive historic trash was observed at the north end of the site.

As detailed in Section 5.3 above, a total of nine prehistoric ceramic fragments (Artifacts 1 through 9) were recorded at six locations in the northern portion of the project area during the field survey. Of the nine artifacts, two artifacts (Artifact 5 and Artifact 9) are within the grading limits and Artifact 5 is also within a proposed access road alignment. While the prehistoric ceramic fragments were located east of the existing boundary of P-33-0007425/CA-RIV-005799, their description indicates they are likely associated with the site and the site boundary was updated to include the nine artifacts. While site P-33-0007425/CA-RIV-005799 has not been evaluated in its entirety and a recommendation of eligibility cannot be made for the site as a whole, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is heavily disturbed with the artifacts displaced from their original context by agricultural and road grading activities.

All prehistoric ceramic fragments were recorded within the push berms along the unpaved unnamed road through the northern-most portion of the project area, and paved Madison Street. There were no indications of intact features such as hearths, dwellings, or other site cultural constituents associated with site P-33-0007425/CA-RIV-005799 within the project area. The following sections provide a research design and evaluation of the portion of the site P-33-0007425/CA-RIV-005799 within the project area. It should be stressed that this evaluation does not pertain to the entire site, the majority of which occurs outside the project area and will not be impacted by the project.

5.4.1 Research Design

The purpose of this research design is to provide a framework to assess whether a known prehistoric resource is likely to contain important information and thus meet the thresholds of significance (i.e., eligible for inclusion in the CRHR under Criteria A/1, B/2, C/3, and/or D/4 and exhibits integrity). Prehistoric research themes pertinent to the project include site formation processes, age and probable cultural affiliation, subsistence and settlement strategies, and trade/exchange patterns.

5.4.1.1 Prehistoric Research Domains

5.4.1.1.1 SITE FORMATION PROCESSES

To assess the research potential and significant of a site, three components of archaeological deposits are important; namely, horizontal extent, vertical depth, and integrity. Integrity of archaeological deposits is a key factor in determining CRHR eligibility, and a variety of cultural and natural post-depositional processes potentially affect the character and condition of an archaeological site. The integrity of a site can be seriously affected by natural (e.g., burrowing rodents, erosion) or cultural (e.g., historic plowing, trenching or discing, or prehistoric site-maintenance activities) transformations, or both. During these processes artifacts potentially move horizontally or vertically out of their original context, and differences between stratigraphic layers may become blurred. Understanding these processes is important because much of the information learned from archaeological sites is not contained solely by the artifacts themselves, but by their context and relationship to other artifacts recovered from the site.

Rodents, insects, and other burrowing mammals (e.g., bears) are known bioturbative agents that move artifacts horizontally and vertically. Research demonstrates that each species of burrowing animal has a characteristic behavior pattern, relating to the animal's size, burrow depth, rate of burrowing, density of the underlying sediments, and the material each brings into their burrows.

Site structure also varies among geomorphic settings and should be considered in any evaluation of site integrity. A bedrock milling site, for example, presents an entirely different set of research questions than shell midden deposits. Steep ridgelines are usually nondepositional environments that tend to be erosional areas where weathering and gravity force sediments or artifacts down slope. Hillsides represent colluvial environments. The steepness of the slope affects the degree of deposition: steep hill sides may be in a net loss situation where erosion and limited (if any) deposition occur; flatter areas near the toe of a slope often represent net gain situations where deposition and buried deposits may occur; and in midslope areas a sort of equilibrium is achieved between erosion and deposition. Drainages can act as collectors of sediment and thus buried deposits, or when active can transport archaeological assemblages to completely new settings or erode sites from their present site context.

Data Requirements

An assessment of the integrity of a site must be made to determine if it has been seriously affected by disturbance due to natural (e.g., burrowing rodents, erosion) or cultural (e.g., construction, discing) processes. Assessment would include determination of the horizontal and vertical extent of the site, evidence of any post-depositional processes, and the integrity of subsurface deposits. The identification of intact features such as middens, hearths or fire-affected rock (FAR) clusters, storage pits, earth ovens, burials or cremations, the remains of structures, or discrete activity areas (e.g., lithic reduction) would make important contributions to this research issue.

5.4.1.1.2 CHRONOLOGY AND DATING

Chronology is of basic importance to any archaeological research endeavor because it provides a context for addressing many other research issues. Thus, the precision and accuracy of dates are critical since they form the baseline for the other research topics. For example, chronological data could potentially contribute to our understanding of the nature and timing of population movements in the area, and to other sites in the local or broader region. Chronological determinations may also assist in refining regional or local cultural historical sequences.

Absolute dating techniques are preferable to relative dating of diagnostic artifacts, since absolute dating (e.g., radiocarbon) is an independent assessment of the age of the site. Obsidian hydration is an alternative means of dating that can provide relatively reliable results provided the source of the material is known and multiple samples are submitted in order to omit any outliers. Ideally, relative dating results from the site would support absolute dating results.

If there is no material appropriate for radiocarbon dating (e.g., charcoal, wood, burned floral remains, bone, shell, organic-rich soil) recovered at a site, a relative chronology may be established by linking temporally diagnostic artifact types (e.g., projectile points, shell beads, etc.) present at the site to the regional cultural resources chronology. This latter relative dating method would be much less precise, however. The presence of suitable materials for radiocarbon and relative dating is preferable; if present, the obtained ages could be used in conjunction with diagnostic time-marker artifacts to assess the overall age of a site.

Data Requirements

The presence of organic materials suitable for radiocarbon dating (e.g., charcoal, wood, burned floral remains, faunal bone, marine shell, organic-rich soil), temporally diagnostic artifacts (e.g., projectile points, shell beads), and obsidian artifacts for sourcing and hydration analysis would make important contributions to this research issue.

5.4.1.1.3 SUBSISTENCE AND SETTLEMENT STRATEGIES

The content of an archaeological site provides information regarding its cultural affiliations, temporal periods of use, its functionality, and other aspects of its occupation history. Generally, the range and variability of artifacts present in a site may permit reconstruction of various aspects of prehistoric culture, including, among other topics, ethnic affiliation, diet, and social structure, as well as the role of the site within the broader regional landscape pattern. Site function (e.g., habitation, temporary camp, task-specific procurement or processing site, etc.) is integral to evaluating the role of the site within a broader regional landscape pattern.

Beyond the depositional and cultural historical considerations, the recording and excavation of sites potentially provides valuable information regarding prehistoric behaviors. Here the focus is on elucidating aspects of the subsistence economy and settlement strategies on a seasonal basis. Such analyses provide a context to better understand the diet of the prehistoric inhabitants at a site, as well how they positioned themselves in relation to the biotic resource structure (plants, animals) on a seasonal basis. Understanding the season during which, for example, plant resources were ripe and available for processing can shed valuable information on settlement strategies. Such analyses provide clues to which resources were available, when the project area likely had the most food resources seasonally available, and can provide an estimate as to where sites might fall in the overall settlement pattern or seasonal round.

The project area may only take in part of a prehistoric population's territory and the sites within the project area may only represent a portion of a much larger settlement system. Understanding settlement

patterns would require chronological control to ascertain which sites were occupied during the same periods. In addition to preservation of faunal and botanical material (e.g., pollen, macrobotanical remains) that would help identify the local resource base, specialized studies of certain tool types provide important information useful for expanding on the subsistence strategies employed at a site. Ground stone, for example, can be analyzed for the presence and variety of starches, phytoliths, pollen, and protein residues. These analyses potentially indicate whether ground stone tools (e.g., mano, metate, mortar) were used to process plants (seeds, roots, tubers) or animals, and to provide insights about the past climate. Protein residue analysis conducted on chipped stone tools provides insights into the types of animals (usually identified to the family level, sometimes to the species level) a tool was used to process. In addition, the presence of local or non-local chipped stone artifacts may be evidence of intra-regional interaction (e.g., exchange/trade, long distance travel).

Data Requirements

The identification of features such as a midden, hearths or FAR clusters, storage pits, house floors, burials or cremations, the remains of structures, temporally diagnostic artifacts, non-local artifacts (obsidian, marine shell beads), faunal and fish bone, worked bone tools, or landscape-site associations would make important contributions to this dual research issue regarding site function and settlement pattern. Recovery of material from stratigraphically intact and temporally controlled contexts for laboratory analyses, such as artifact use-wear analysis, identification of macrobotanicals and pollen, or protein and blood residue analysis of stone tools or milling stones, would be required to address this research issue. Functional differences in recovered ground and chipped stone tools may provide additional evidence of diet since ground stone tools were generally used for grinding seeds and acorns and processing small mammals, whereas chipped stone tools (scrapers, choppers, projectile points, etc.) were used for plant and faunal procurement and processing.

5.4.1.1.4 TRADE AND EXCHANGE

For the hunter-gatherers who once lived in the vicinity of the project, trade was an important adaptive strategy that allowed acquisition of raw materials and goods not otherwise available in their home territory. Trade and exchange has been documented throughout California during the prehistoric and ethnohistoric periods, including between the coast and the desert region.

During the latter part of the Archaic period, for example, here is an increased presence of exotic trade goods, including shell beads/ornaments from the Pacific coast and the Gulf of California, obsidian from the Coso volcanic field, and wonderstone from Rainbow Rock. During the Late Prehistoric period, the trade/exchange in shell beads from the coast and Gulf of California and wonderstone from Rainbow Rock continues. Steatite from the coast and obsidian from the Obsidian Butte source at the southern end of today's Salton Sea, previously covered by the waters of Holocene Lake Cahuilla, is introduced during this period. The extensive network of trail systems, with trailside shrines, ceramic pot-drops, and rock art, attests to the importance of trade, travel, and exchange networks during the Late Prehistoric period. During the Ethnohistoric period, the Cahuilla continued to trade with neighboring groups for a variety of items. Trade of plant and animal materials may have mitigated food shortages, although except for durable items like lithics, evidence is not readily preserved in the archaeological record.

The goal of an analysis of trade and exchange would be to understand the nature of resource procurement and distribution networks operating in the overall economic system of the region during the Prehistoric period.

Data Requirements

The presence of non-local cultural material, such as obsidian, steatite items, marine shell (shell beads and ornaments), and ceramics, would be required to address this research issue. Recovery of material for laboratory analyses (e.g., x-ray fluorescence sourcing of obsidian) would be beneficial, preferably from stratigraphically intact and temporally controlled contexts.

5.4.2 Results

5.4.2.1 Criteria A/1

The portion of site archaeological site P-33-0007425/CA-RIV-005799 within the project area does not have a strong association with events or patterns that have made a significant contribution to the broad patterns of national, state, or local history. While the site is possibly linked in a general way to the prehistoric-era themes discussed, the link is not strong, the site has been heavily affected by previous construction activity, and the site does not provide any insight into these themes. As such, the site is not able to convey a significant period or pattern of development. Therefore, the portion of the resource within the project area does not appear to be eligible under NRHP Criterion A or CRHR Criterion 1.

5.4.2.2 Criteria B/2

Research to date did not reveal the project area to have an association with the lives of significant persons in our past. No individuals associated with the property have been found to be historically significant in national, state, or local history. Therefore, the portion of P-33-0007425/CA-RIV-005799 within the project area does not appear to be eligible under NRHP Criterion B or CRHR Criterion 2.

5.4.2.3 Criteria C/3

The portion of site P-33-0007425/CA-RIV-005799 within the project area consists of an unstructured shell and artifact scatter in a disturbed context with no intact features. As a result, the site does not maintain any integrity and does not appear to be eligible under NRHP Criterion C or CRHR Criterion 3.

5.4.2.4 Criteria D/4

The portion of site P-33-0007425/CA-RIV-005799 has not yielded, nor does it appear to possess potential to yield, information important in history or prehistory. The majority of the site within the immediate vicinity of the project area occurs within disturbed, heavily impacted sediments in a secondary (i.e., displaced) context. Two of the artifacts are within the grading limits of the project area, but within the disturbed paved road berm. Lacking in archaeological meaningful associations, the portion of the site within the project area has little potential to provide data that would further an understanding of the history of the project area. Therefore, the portion of the site within the project area does not appear to be eligible under NRHP Criterion D or CRHR Criterion 4.

5.4.3 Evaluation Results

While site P-33-0007425/CA-RIV-005799 has not been evaluated in its entirety and a recommendation of eligibility cannot be made for the site as a whole, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is heavily disturbed and likely displaced from its original context by agricultural activity and the construction of one dirt and one paved road. As such, it is recommended to be a non-contributing element to the site's eligibility for the NRHP and CRHR, were it to be formally

evaluated for listing. Therefore, the portion of the site in the project area is not considered to be a historical resource or a unique archaeological resource for purposes of CEQA.

CHAPTER 6. BUILT ENVIRONMENT ASSESSMENT

6.1 FIELD METHODS

As part of the field survey, built environment features in the project area were inspected and documented. This included two previously recorded built environment resources identified in the project area—the Coachella Canal (P-33-005705/CA-RIV-012999), and the CVSC/WWRSC (P-33-017259/CA-RIV-010847)—and one previously unrecorded built environment resource (the Thousand Palms Channel), which was surveyed and recorded on California DPR 523 series forms (Appendix C). Digital photographs and field notes were collected to document the existing conditions and record any observable changes. As previously noted, the project boundaries were revised after the survey was completed; however, the current project footprint is smaller than the original footprint and is completely inside the original project boundaries.

6.2 FIELD RESULTS

6.2.1 Coachella Canal (P-33-005705/CA-RIV-012999)

An approximately 600-foot segment of the Coachella Canal is located in the project area. This segment is located at the northern end of the project area where the Coachella Canal crosses under the Thousand Palms Channel via a concrete siphon. The top width of the Coachella Canal segment in the project area spans from approximately 35 feet wide (Figure 28) to approximately 15 feet wide at the location of the siphon (Figure 29 and Figure 30). The sloped channel walls are lined with concrete, and a concrete wall is located at each edge of the Thousand Palms Channel where the siphon funnels the water underground (Figure 31).

Figure 28. Coachella Canal intersecting Thousand Palms Channel on the northeast side where water flows in; view facing southwest (Sun City is seen in the background on the right).

Figure 29. Coachella Canal intersecting Thousand Palms Channel on the southwest side where water flows out; view facing south.

Figure 30. Coachella Canal where its siphon intersects the Thousand Palms Channel.

Figure 31. Closeup of concrete wall at edge of Thousand Palms Channel where siphon travels underground, and security fence.

6.2.2 CVSC/WWRSC (P-33-017259/CA-RIV-010847)

An approximately 1,300-foot-long segment of the CVSC/WWRSC is located in the project area between I-10 to the north, and Indio Boulevard and 43rd Avenue to the south. Oriented in a southwest-northeast direction, the segment of the CVSC in the project area is characterized by an earthen channel with sloped sides that are primarily hard earth with some rock, a channel bottom incised by running water, a small amount of vegetation, and unpaved service roads (Figure 32).

Figure 32. CVSC/WWRSC at the southeast end of the project area; view facing northeast.

6.2.3 Thousand Palms Channel

The Thousand Palms Channel spans between one of the southern edges of the Sun City Shadow Hills community to the CVSC (Figure 33 through Figure 39). The alignment of the Thousand Palms Channel generally curves from northwest to southeast. As an unlined or "soft-bottom" channel, it has an earthen bed and banks, and berms and levees which do not have scour protection. The Thousand Palms Channel is relatively shallow. Its total length is approximately 5,700 feet, and its width varies from roughly 350 to 650 feet wide (CVWD 2021; Google Earth).

The northern end of the Thousand Palms Channel travels over the Coachella Canal's reinforced concrete siphon. A drop structure was created in the Thousand Palms Channel at this location to stabilize the channel and protect the siphon from scour and erosion. The drop structure is a USBR Type IX Baffled Block Structure. Figure 36 shows examples of the concrete baffle blocks.

The alignment of the wash/channel directs flows over Madison Street and Avenue 42 (Figure 37), then travels beneath I-10 (see Figure 38). In the area of the channel south of I-10, some rock was observed along the edge of the channel (see Figure 39). Open space and agricultural land flank the channel on the east and west sides.

Figure 33. North end of the Thousand Palms Channel, view facing northeast toward Sun City (the intersection of the Coachella Canal is seen at right).

Figure 34. North end of the Thousand Palms Channel, view facing northwest toward Sun City (the intersection of the Coachella Canal is seen at right).

Figure 35. North end of the Thousand Palms Channel, view facing east (Sun City property is seen at left).

Figure 36. Closeup of concrete blocks or baffles of the drop structure.

Figure 37. The Thousand Palms Channel alignment crosses Avenue 42, view facing east.

Figure 38. Thousand Palms Channel, view facing southeast toward I-10.

Figure 39. Thousand Palms Channel, area south of I-10, view facing southeast.

6.3 EVALUATION

6.3.1 Thousand Palms Channel

6.3.1.1 Criteria A/1

The Thousand Palms Channel does not appear to be eligible for listing in the NRHP or CRHR under Criteria A/1. While it is associated with a larger regional flood control system supporting the area's development, the Thousand Palms Channel is a relatively small, secondary element to the larger system that, in and of itself, is not eligible. Originating from a natural landform—a wash—the Thousand Palms Channel is presently an approximately 1-mile-long unlined, earthen channel with minimal human-made elements that conveys storm/flood waters to the CVSC/WWRSC. The CVWD's stormwater facilities include 16 stormwater protection channels, and the Thousand Palms Channel is one short segment of many miles of system components. The subject channel does not individually play a significant role in the flood control system, nor is it critical to the overall system's function or operation. Lastly, research to date has not indicated the channel is directly associated with any events significant in our history. Therefore, the Thousand Palms Channel does not appear individually eligible for listing in the NRHP under Criterion A, or the CRHR under Criterion 1.

6.3.1.2 Criteria B/2

Research conducted to date has not indicated that the Thousand Palms Channel has direct associations with any persons important to local, state, or national history. Therefore, the channel does not appear eligible for listing in the NRHP under Criterion B or the CRHR under Criterion 2.

6.3.1.3 Criteria C/3

The Thousand Palms Channel does not appear to be eligible for the NRHP or CRHR under Criteria C/3. As previously discussed, the channel originates from a natural landform that was incorporated into the CVWD's flood control system. The approximately 1-mile-long unlined channel has an earthen bed and banks, and minimal human-made features such as a concrete drop structure, baffles, and riprap. Available data indicates the improvements to channelize the segment of the Thousand Palms Wash were constructed by the Bureau of Reclamation ca. 1946, and modifications were completed in 1985 by CVWD. The channel does not exhibit distinctive characteristics of a type, period, or method of construction, nor does it represent a significant and distinguishable entity whose components lack individual distinction. Research to date does not indicate the channel's human-made features are the work of a notable engineer, designer or architect. Therefore, the Thousand Palms Channel is recommended not eligible under NRHP Criterion C and CRHR Criterion 3.

6.3.1.4 Criteria D/4

The potential to yield information important to prehistory or history is typically applied to archaeological resources; however, built environment resources can be historically significant if they are a source of important information on construction techniques, materials, engineering or similar historical themes. The Thousand Palms Channel is a natural landform, a wash, with minimal human-made features as described above. The type of channel and its construction materials and techniques are well documented in the historic record and would not be deemed significant under NRHP Criterion D or CRHR Criterion 4.

CHAPTER 7. SUMMARY AND RECOMMENDATIONS

One previously recorded archaeological resource (P-33-007425/CA-RIV-005799) was identified overlapping a small section of the northern portion of the project area disturbance footprint. Additionally, one previously recorded multicomponent resource (P-33-001768/CA-RIV-001768) was identified immediately adjacent to the west of the project area. Previous recordings of the resources noted extensive disturbance and the presence of historic-age and modern refuse. During the archaeological field survey, a total of nine prehistoric ceramic fragments were recorded at six locations in the northern portion of the project area. All nine artifacts are outside of the previously recorded boundary of P-33-0007425/CA-RIV-005799 but within the boundary of the proposed access road. No artifacts were observed within the portion of the previously recorded site boundary that overlaps the project area's direct footprint. There was no evidence of P-33-001768/CA-RIV-001768 within the project area.

Archaeological resource P-33-007425/CA-RIV-005799 was recorded and partially evaluated as part of the current study. While the resource has not been evaluated as a whole, the portion within the project area is recommended ineligible for listing in the NRHP and CRHR under all criteria. It does not qualify as a historical resource pursuant to CEQA.

Two previously recorded and one newly recorded built environment resources were identified in the project area. Of the two previously recorded resources, one was found eligible for the NRHP with SHPO concurrence: the Coachella Canal (P-33-005705/CA-RIV-012999), which was recommended eligible for the NRHP under Criteria A and C. However, the SHPO concurred only with its eligibility under Criterion A. The Coachella Canal's significance stems from its role in the development of the Imperial and Coachella Valleys through the establishment of a reliable water supply. The 123.5-mile-long canal laid the foundation for growth in the Coachella Valley's desert terrain allowing for the development of a highly productive agricultural economy. The canal's period of significance is 1938 to 1954 (Castells

2017; Schaefer and Ní Ghabhláin 2003; Smallwood 2015). Therefore, the Coachella Canal is a historical resource pursuant to CEQA. An assessment of impacts to the historical resource is provided below.

The CVSC/WWRSC (P-33-017259/CA-RIV-010847) was previously evaluated and recommended ineligible for the NRHP and CRHR; therefore, it is not a historical resource pursuant to CEQA.

The Thousand Palms Channel was recorded and evaluated as part of the current study, and is recommended ineligible for the NRHP and CRHR under all criteria. It does not qualify as a historical resource pursuant to CEQA.

7.1 IMPACTS ANALYSIS

7.1.1 CEQA Guidelines

According to Section 15064.5(b) of the CEQA Guidelines, a project involves a "substantial adverse change" in the significance of a historic resource when one or more of the following occurs:

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

  a. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register of Historical Resources; or

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

  c. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Under CEQA, a proposed development must be evaluated to determine how it may impact the potential eligibility of a structure or a site for designation as a historic resource.

7.1.2 Analysis of Direct Impacts

While site P-33-0007425/CA-RIV-005799 has not been evaluated in its entirety and a recommendation of eligibility cannot be made for the site as a whole, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is recommended not eligible for listing in the NRHP/CRHR and, therefore, not considered to be a historical resource or a unique archaeological resource under the NRHP or CRHR. As a result, the proposed project would not cause a significant direct adverse impact to a historical resource.

As discussed above, the Coachella Canal is a historical resource pursuant to CEQA. While previous documentation for the canal did not identify character-defining features of the resource, noted features of the canal segment in the current project area include its alignment, width and depth, concrete lining, and concrete siphon traveling beneath the Thousand Palms Channel.

As part of the proposed project, the existing Coachella Canal and siphon would be protected in place (see Figure 40), maintaining its current alignment, dimensions, concrete lining, and concrete siphon as is. The Thousand Palms Channel drop structure at this location would be extended farther downstream and to a lower level to provide scour protection associated with the Thousand Palms Channel design.

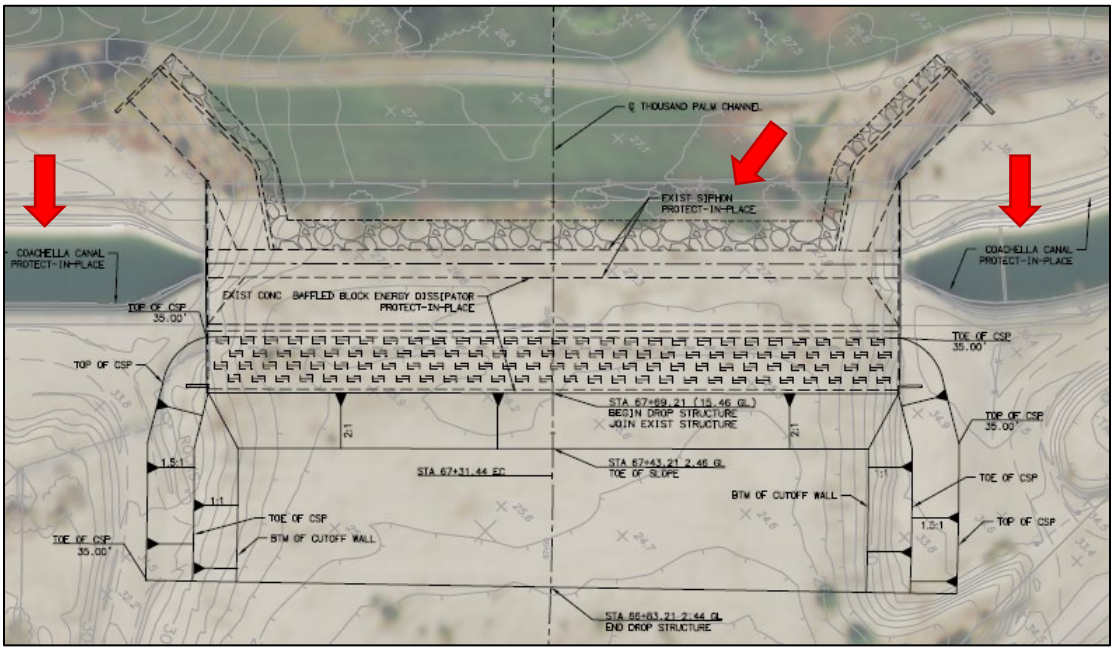

Figure 40. Proposed design of Thousand Palms Stormwater Channel Drop Structure over the Coachella Canal siphon which will be protected in place (red arrows). Source: Q3 Consulting.

The proposed project would protect in place the existing features of the Coachella Canal, would expand the existing Thousand Palms Channel drop structure over the canal, and would channelize the Thousand Palms Channel with concrete side slopes. While this would create a slight change in the setting of the Coachella Canal, the proposed improvements to the drop structure are similar in design and materials to what is existing. This would not result in material impairment of the historical resource. The Coachella Canal would maintain the physical characteristics that convey its historical significance, and would remain eligible for the NRHP under Criterion A. The proposed project would not cause a significant direct adverse impact to the historical resource.

7.1.3 Analysis of Indirect Impacts, Adjacent Historical Resources

No other built environment historical resources are located adjacent to the project area. Therefore, the proposed project would not result in an adverse indirect impact.

CHAPTER 8. CONCLUSION

The CHRIS records search identified one archaeological resource overlapping a small section of the northern portion of the project area (P-33-007425/CA-RIV-005799) and one a multicomponent resource immediately adjacent to the west of the central portion of the project area site (P-33-001768/CA-RIV-001768). Previous recordings of the resources noted extensive disturbance and the presence of historic-age and modern refuse. The SLF search completed by the NAHC did not identify any recorded Sacred Lands within, or within the vicinity of, the project area.

Due to heavy disturbance and displacement of artifacts, the portion of P-33-0007425/CA-RIV-005799 located within the current project area is recommended to be a non-contributing element to the site's eligibility for the NRHP and CRHR, were it to be formally evaluated for listing. Therefore, the portion of the site in the project area is not considered to be a historical resource or a unique archaeological resource for the purposes of CEQA.

Because the primary components of the site are located immediately west of the APE, however, SWCA recommends: 1) the preparation of a Cultural Resources Monitoring and Treatment Plan (CRMTP) in consultation with the agency and any consulting Native American tribal groups, 2) artifact collection within the APE, and 3) tribal and archaeological monitoring of all ground-disturbing construction work north of Avenue 42. The archaeological monitor should be overseen by a Qualified Archaeologist, defined as one who meets the Secretary of the Interior's Professional Qualification Standards in archeology.

The CRMTP will include the qualifications of key staff, monitoring protocols, provisions for evaluating and treating cultural materials, and reporting requirements. Prior to any construction activities, it is recommended that the nine artifacts within the project area be collected and treated in accordance with the CRMTP. The implementation of these recommendations will ensure that any adverse effects to historic properties are avoided.

Based on the preceding analysis, SWCA finds that the project will result in ***less-than-significant impacts to archaeological resources***.

If archaeological resources are exposed during construction, work in the immediate vicinity of the find must stop until a qualified archaeologist can evaluate the significance of the find. Construction activities may continue in other areas. If the discovery proves significant under CEQA (14 CCR 15064.5[f]; PRC 21082), additional work such as testing or data recovery may be warranted. While it is considered to be very unlikely, the discovery of human remains is a possibility during ground disturbances. Section 7050.5 of the State of California Health and Safety Code states that no further disturbance shall occur until the Riverside County Coroner has made a determination of origin and disposition pursuant to Section 5097.98 of the PRC. The Riverside County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

The Thousand Palms Channel is not eligible for the NRHP or CRHR; thus, it is not a historical resource for the purposes of CEQA. As discussed above, the Coachella Canal is considered a historical resource for the purposes of CEQA. As the proposed project would protect in place the Coachella Canal and siphon, the project would not have a significant direct adverse impact on the historical resource. There are no other built environment historical resources adjacent to the project area that would be indirectly

impacted. Therefore, the proposed project would result in ***less-than-significant impacts to built environment historical resources***.

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APPENDIX A

CHRIS Records Search Results

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APPENDIX B

Native American Heritage Commission Sacred Lands File Search Results

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APPENDIX C

California Department of Parks and Recreation 523-Series Forms

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