

ORANGE COUNTY SANITATION DISTRICT

Appendix D

CULTURAL RESOURCES REPORTS

(Prepared by CRM TECH)

December 13, 2003 – Historical /Archaeological Resources Survey Report

December 13, 2003 – Paleontological Resources Assessment Report

HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT

**REINSTATEMENT OF CARBON CANYON DAM SEWER
AND PUMP STATION ABANDONMENT PROJECT**

Near the City of Brea
Orange County, California

Submitted to:

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Submitted by:

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December 13, 2002

CRM TECH Contract #943
USGS Yorba Linda, Calif., 7.5' Quadrangle
Sections 8 and 17, T3S R9W, San Bernardino Base Meridian
Site30-120002

MANAGEMENT SUMMARY

In November and December, 2002, at the request of RBF Consulting, CRM TECH performed a cultural resources study for the proposed Reinstatement of Carbon Dam Sewer and Pump Station Abandonment project located near the City of Brea, Orange County, California. The project involves the construction of two sewer pipeline segments measuring approximately 3,300 feet in total length, traversing through Sections 8 and 17, T3S R9W, San Bernardino Base Meridian. The study is part of the environmental review process for the proposed pipeline route. The Orange County Sanitation District, as Lead Agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA).

The purpose of the study is to provide the Orange County Sanitation District with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out a systematic field survey.

The historical/archaeological resources records search indicated that a historic-era archaeological site, designated 30-120002, was previously recorded within the northeastern portion of the project area. During the field survey, however, dense vegetation covered the entire ground surface in this area, making it difficult to find any remnants of the site. There is also a possibility that the site may have been impacted during the construction of an existing sewer pipeline in the area. No other artifacts, features, sites, objects, structures, or buildings of any potential historical/archaeological interest were encountered within or adjacent to the project area during the field survey.

Although no cultural resources were encountered during the survey, the previously recorded Site 30-120002 may still be present in an area that was not intensively surveyed. Due to the potential of encountering archaeological features or artifact deposits from the late 19th and early 20th centuries in that area during future earth-moving activities, archaeological

monitoring during construction within the northeastern portion of the project area is recommended.

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INTRODUCTION

In November and December, 2002, at the request of RBF Consulting, CRM TECH performed a cultural resources study for the proposed Reinstatement of Carbon Dam Sewer and Pump Station Abandonment project located near the City of Brea, Orange County, California (Fig. 1). The project involves the construction of two sewer pipeline segments measuring approximately 3,300 feet in total length, traversing through Sections 8 and 17, T3S R9W, San Bernardino Base Meridian (Fig. 2). The study is part of the environmental review process for the proposed pipeline route. The Orange County Sanitation District, as Lead Agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.).

CRM TECH performed the present study to provide the Orange County Sanitation District with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area, as mandated by CEQA. In order to identify and evaluate such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out an intensive-level field survey. The following report is a complete account of the methods, results, and final conclusion of the study.

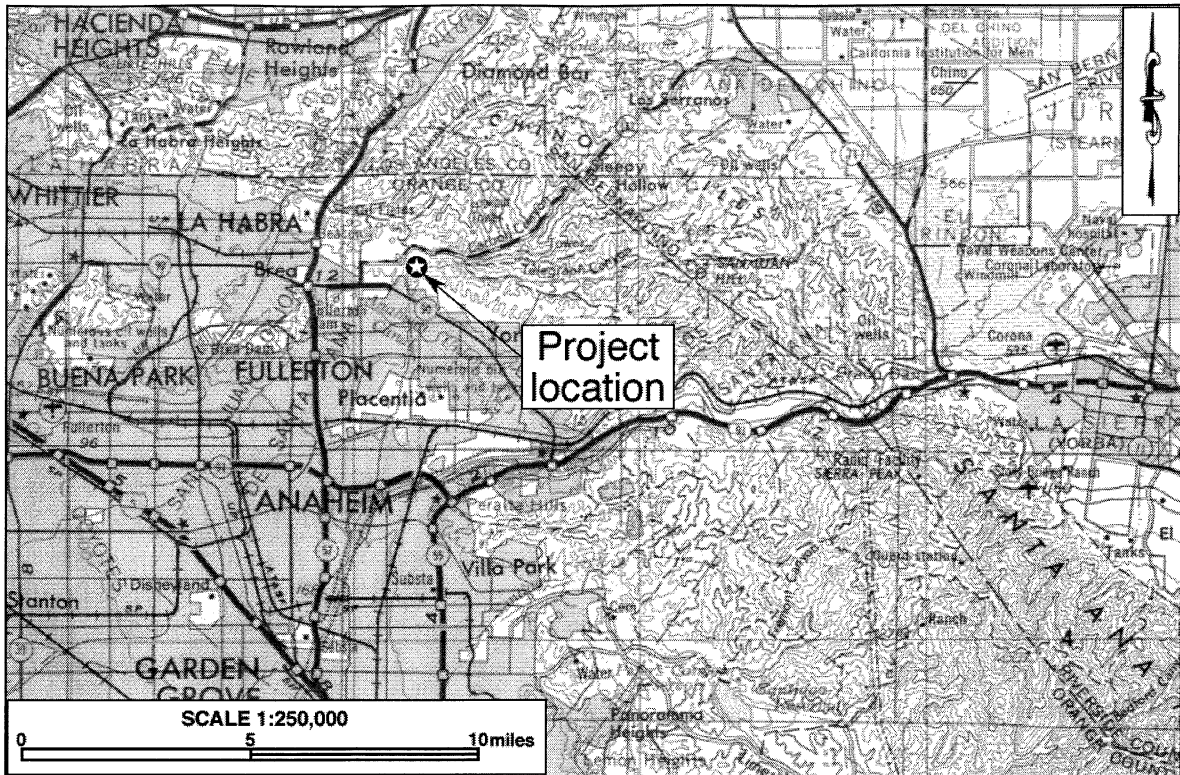


Figure 1. Project vicinity. (Based on USGS Santa Ana, Calif., 1:250,000 quadrangle [USGS 1979])

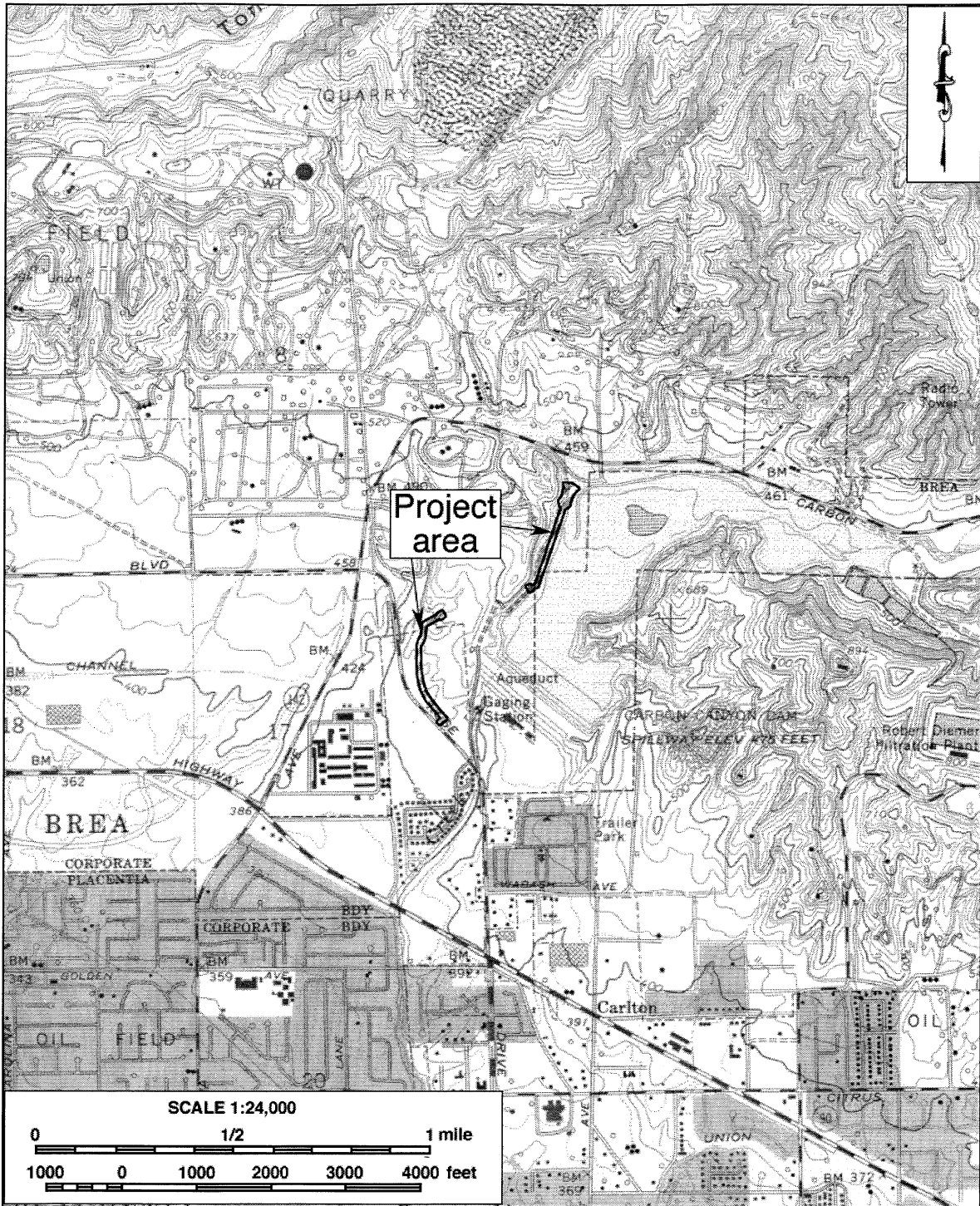


Figure 2. Project area. (Based on USGS Yorba Linda, Calif., 1:24,000 quadrangle [USGS 1981])

CURRENT NATURAL SETTING

The project area is situated southwest of the Chino Hills, near the Carbon Canyon Dam, at elevations ranging around 420-500 feet above mean sea level. The northeastern segment of the proposed pipeline route is located within an area that has been leveled in the past. Soils at this locality are identified as alluvium, and a dense growth of vegetation covers the surface (Fig. 3). An access road was noted in the southern portion of a proposed drilling pit located at the northernmost end of this segment of the pipeline. The southwestern segment of the pipeline crosses a large gully in the north and a terrace in the south. The gully contains dense vegetation growth while the terrace has been plowed and farmed.

RESEARCH METHODS

RECORDS SEARCH

The South Central Coastal Information Center (SCCIC) at the California State University, Fullerton, provided the records search service for this study. The SCCIC is the official cultural resource records repository for Ventura, Los Angeles, and Orange Counties, and a part of the California Historical Resource Information System, established and maintained under the auspices of the Office of Historic Preservation.



Figure 3. Overview of the current natural setting of the northeastern portion of the project area. (Photo taken on November 13, 2002)

During the records search, Catharine M. Wood, SCCIC Staff Archaeologist, checked the Center's recorded historic and prehistoric archaeological sites in or near the project area, and existing cultural resources reports and historic maps pertaining to the vicinity. Previously identified historical/archaeological resources include properties designated as California Historical Landmarks or Points of Historical Interest, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resource Information System.

HISTORICAL RESEARCH

Historical background research for this study was conducted by CRM TECH historian Bai "Tom" Tang (see App. 1 for qualifications) on the basis of published literature in local and regional history and historic maps depicting the project vicinity. Among maps consulted for this study were the U.S. General Land Office's (GLO) land survey plat maps dated 1868 and 1876, and the U.S. Geological Survey's (USGS) topographic maps dated 1901, 1935, and 1942. These maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, also located in Riverside.

FIELD SURVEY

On November 13, 2002, CRM TECH archaeologist/paleontologist Harry M. Quinn (see App. 1 for qualifications) carried out the on-foot field survey of the project area. The northeast segment of the pipeline could not be intensively surveyed because dense vegetation growth impeded access to this location. Quinn did manage, however, to carry out a reconnaissance-level inspection of the area by following an access road situated above the project area and by walking along a riding and hiking trail below it. Spot checks of the proposed pipeline alignment were made in this area when possible. The southwestern segment of the project area was surveyed by walking along both sides of the proposed pipeline route. In this way, the ground surface for this portion of the project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years ago or older). The results of the survey are discussed below.

RESULTS AND FINDINGS

RECORDS SEARCH RESULTS

According to records on file at the South Central Coastal Information Center, the entire northeastern section of the project area was covered by previous cultural resources studies, and one historic-era site was identified within its boundaries (Fig. 4). The site, designated 30-120002, was described as a scatter of late 19th century historic-era refuse, probably associated with the remains of the old townsite of Olinda (Martz 1977). Outside the project boundaries but within a one-mile radius, SCCIC records show over 15 previous cultural resources studies covering various tracts of land and linear features (Fig. 4). As a result eight archaeological sites were recorded within the scope of the records search. One of these was prehistoric – i.e., Native American – in nature and consisted of a scatter of chipped stone and groundstone artifacts. A second site contained both prehistoric and historic-era components and was described as chipped stone and groundstone scatters along with shell fragments and an early

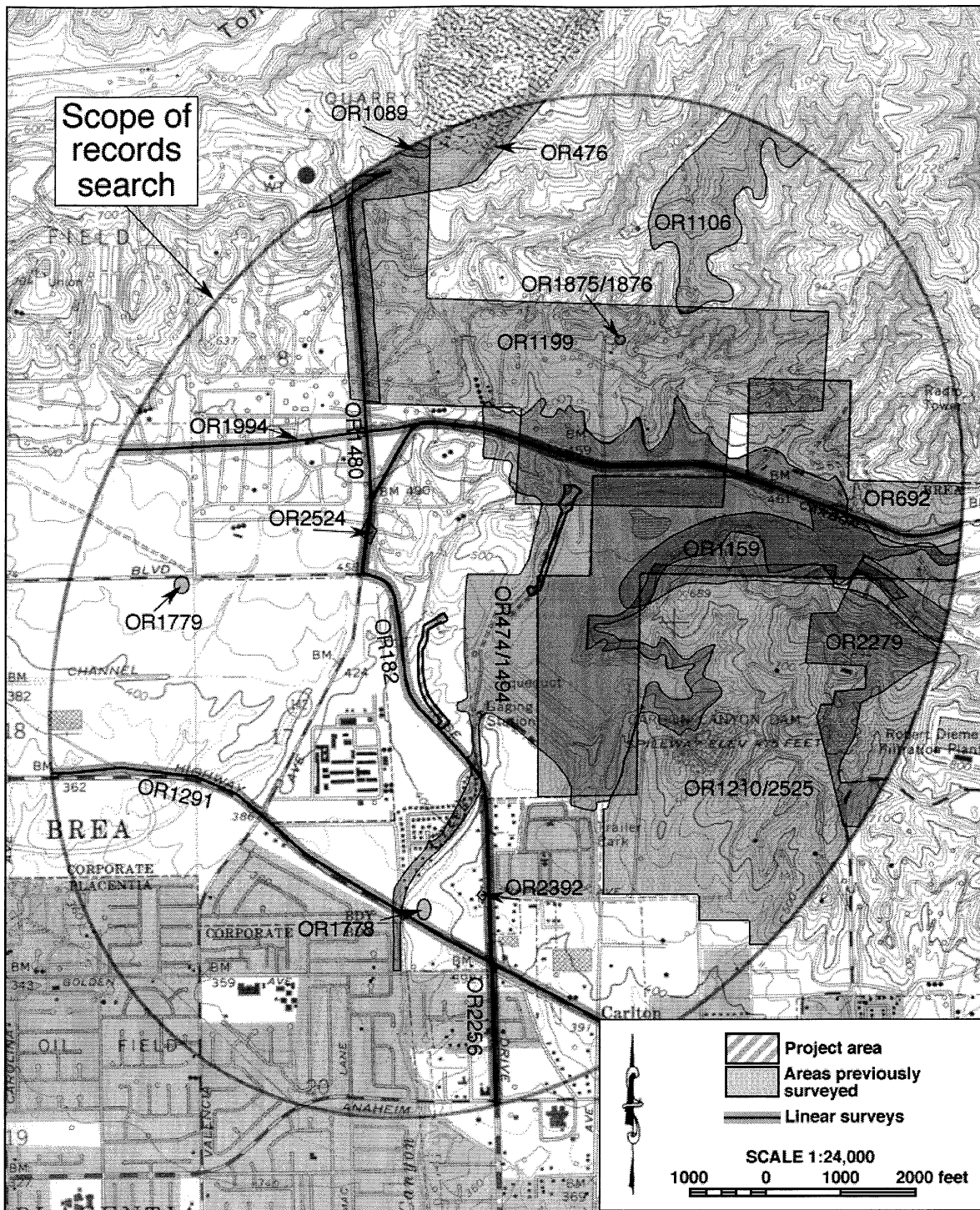


Figure 4. Previous cultural resources surveys in the vicinity of the project area, listed by SCCIC file number. Locations of historical/archaeological sites are not shown as a protective measure.

20th century refuse deposit also associated with the former town of Olinda. The other sites dated to the historic period and included trash scatters, the remnants of a red brick floor, and structural remains. None of these eight sites were situated within or adjacent to the project boundaries and, thus, none of them needs further consideration during the present study.

HISTORICAL RESEARCH RESULTS

Historic maps consulted for this study suggest that no development activities occurred along the project route between the 1850s and 1870s (Figs. 5, 6). By 1894, a road was established traversing just east of the northeastern section of the proposed pipeline route, and a spur line of the Southern California Railroad, also located east of the project area, crossed through the northernmost tip of the subject property (Fig. 7). The railroad line continued northwest

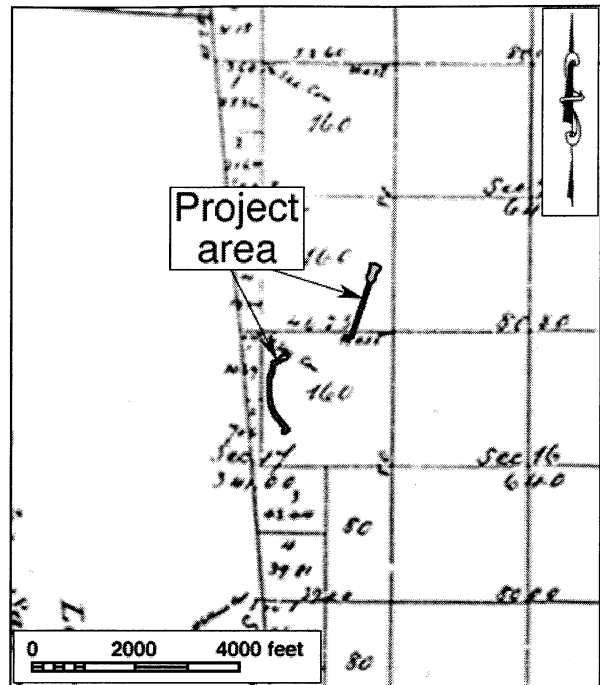


Figure 5. The project area and vicinity in 1853-1858. (Source: GLO 1868)

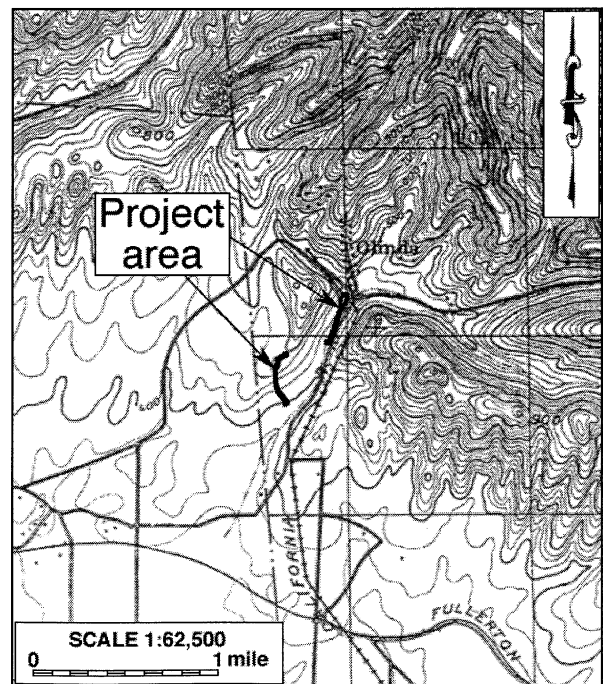
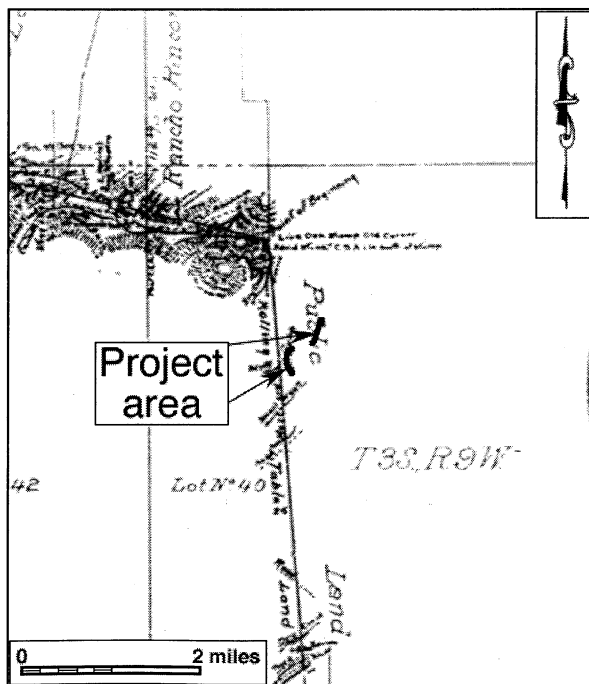


Figure 6. The project area and vicinity in 1875. (Source: GLO 1876)

Figure 7. The project area and vicinity in 1894. (Source: USGS 1901)

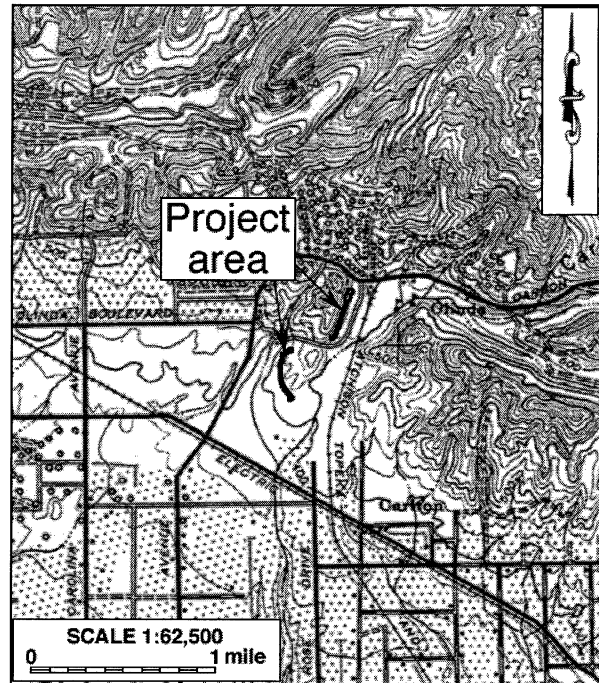
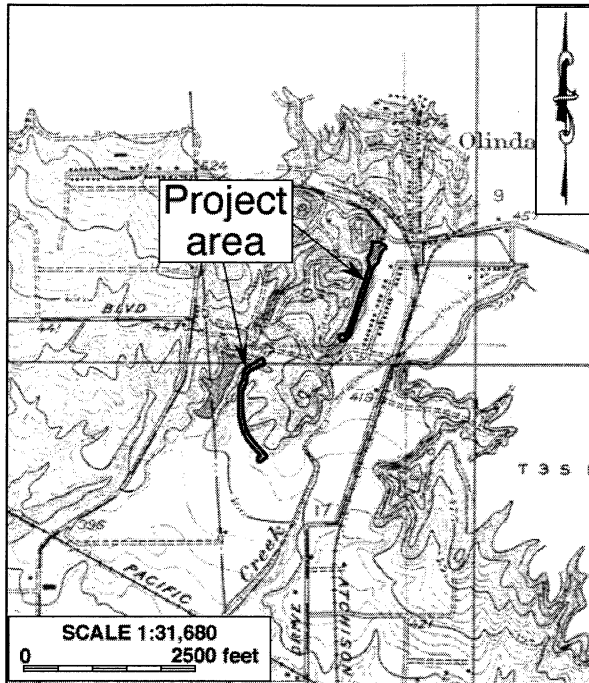


Figure 8. The project area and vicinity in 1932. (Source: USGS 1935)

Figure 9. The project area and vicinity in 1939. (Source: USGS 1942)

of the project area for approximately 1,500 feet, where it ended. The railroad as well as the roads in the vicinity most likely served the town of Olinda, which was located a short distance to the north of the project area (Fig. 7). A number of buildings appeared east and north of the proposed pipeline route by the early 1930s (Fig. 8), but most of these appear to have been removed by the late 1930s (Fig. 9). Numerous oil wells were shown to be present north of the project area in 1939.

FIELD SURVEY RESULTS

The field inspection of the project area did not locate Site 30-120002, the previously recorded archaeological site identified in the northeastern portion of the project area. Remnants of the site may still be present but not visible due to the dense vegetation growth covering the ground surface. It is also possible that the site could have been disturbed by the previous installation of a sewer line along which the proposed alignment follows.

DISCUSSION

The purpose of this study is to identify any cultural resources within or adjacent to the project area, and to assist the Orange County Sanitation District in determining whether such resources meet the official definitions of "historical resources," as provided in the California Public Resources Code, in particular CEQA.

According to PRC §5020.1(j), "'historical resource' includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California." More specifically, CEQA guidelines state that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the Lead Agency (Title 14 CCR §15064.5(a)(1)-(3)).

Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that "a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) 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.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

During the course of this study, it was found that a historic-era archaeological site, 30-120002, had been previously recorded within the northeastern segment of the project area. No remains of the site could be seen during the present field survey due either to dense vegetation covering the ground surface and/or to previous ground disturbance of this portion of the subject property. No other potential "historical resources" were identified within or adjacent to the project area. However, since the presence or absence of Site 30-120002 could not be ascertained, it could not be determined whether a "historical resource" or potential "historical resource" is located within the project boundaries.

RECOMMENDATIONS

CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

As stated above, the present study was unable to ascertain the continued presence of Site 30-120002 within the project area due to the dense ground cover. In order to properly identify and evaluate potential "historical resources" that may be affected by the proposed project, additional inspection will be necessary during or after the removal of ground cover. Based on these considerations, CRM TECH presents the following recommendation to the Orange County Sanitation District.

- Archaeological monitoring should be required during any grading, grubbing, trenching, excavations, and/or other earth-moving activities in the northeastern portion of the project area.

CONCLUSION

The foregoing report has provided background information on the project area, outlined the methods used in the current study, and presented the results of the various avenues of research. The historical/archaeological resources records search indicated that a historic-era archaeological site, designated 30-120002, was previously recorded within the northeastern portion of the project area. During the field survey, however, dense vegetation covered the entire ground surface in this area, making it difficult to find any remnants of the site. There is also a possibility that the site may have been impacted during the construction of an existing sewer pipeline in the area. No other artifacts, features, sites, objects, structures, or buildings of any potential historical/archaeological interest were encountered within or adjacent to the project area during the field survey.

Although no cultural resources were encountered during the survey, the previously recorded Site 30-120002 may still be present in an area that was not intensively surveyed. Due to the potential of encountering archaeological features or artifact deposits from the late 19th and early 20th centuries in that area during future earth-moving activities, archaeological monitoring during construction within the northeastern portion of the project area is recommended.

REFERENCES

GLO (General Land Office, U.S. Department of the Interior)

1868 Plat Map: Township No. 3 South Range No. 9 West, San Bernardino Meridian; surveyed in 1853-1858.

1876 Plat of the Rancho San Juan Cajon de Santa Ana, San Bernardino Meridian; surveyed in 1875.

Martz, Patricia

1977 Archaeological site record, 30-120002. On file, South Central Coastal Information Center, California State University, Fullerton.

USGS (United States Geological Survey, U.S. Department of the Interior)

1901 Map: Anaheim, Calif. (15', 1:62,500); surveyed in 1894, culture revised in 1900.

1935 Map: Olinda, Calif. (1:31,680); surveyed in 1932.

1942 Map: Anaheim, Calif. (15', 1:62,500); aerial photos taken in 1939.

1979 Map: Santa Ana, Calif. (1:250,000); 1959 edition revised.

1981 Map: Yorba Linda, Calif. (7.5', 1:24,000); 1964 edition photorevised in 1978.

**APPENDIX 1:
PERSONNEL QUALIFICATIONS**

**PRINCIPAL INVESTIGATOR/HISTORIAN
Bai "Tom" Tang, M.A.**

Education

- 1988-1993 Graduate Program in Public History/Historic Preservation, UC Riverside.
1987 M.A., American History, Yale University, New Haven, Connecticut.
1982 B.A., History, Northwestern University, Xi'an, China.
- 2000 "Introduction to Section 106 Review," presented by the Advisory Council on
Historic Preservation and the University of Nevada, Reno.
- 1994 "Assessing the Significance of Historic Archaeological Sites," presented by the
Historic Preservation Program, University of Nevada, Reno.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside, California.
1993-2002 Project Historian/ Architectural Historian, CRM TECH, Riverside, California.
1993-1997 Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993 Project Historian, Archaeological Research Unit, UC Riverside.
1990 Intern Researcher, California State Office of Historic Preservation,
Sacramento.
- 1990-1992 Teaching Assistant, History of Modern World, UC Riverside.
1988-1993 Research Assistant, American Social History, UC Riverside.
1985-1988 Research Assistant, Modern Chinese History, Yale University.
1985-1986 Teaching Assistant, Modern Chinese History, Yale University.
1982-1985 Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Honors and Awards

- 1988-1990 University of California Graduate Fellowship, UC Riverside.
1985-1987 Yale University Fellowship, Yale University Graduate School.
1980, 1981 President's Honor List, Northwestern University, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources
Inventory System (With Special Reference to Condition 14 of NPS 1990 Program Review

Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

Membership

California Preservation Foundation.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST

Michael Hogan, Ph.D., RPA*

Education

- 1991 Ph.D., Anthropology, University of California, Riverside.
- 1981 B.S., Anthropology, University of California, Riverside; with honors.
- 1980-1981 Education Abroad Program, Lima, Peru.

- 2002 "Historic Artifact Workshop," presented by Richard Norwood.
- 2002 "Wending Your Way through the Regulatory Maze," presented by the Association of Environmental Professionals.
- 1992 "Southern California Ceramics Workshop," presented by Jerry Schaefer.
- 1992 "Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Awards and Honors

- 1987-1988 Humanities Graduate Students Research Grant, U. C. Riverside.
- 1986-1987 Humanities Graduate Students Research Grant, U. C. Riverside.
- 1986-1987 Chancellor's Patent Fund, U. C. Riverside.
- 1982-1983 Graduate Council Fellow, Regents Fellowship Program, U. C. Riverside.
- 1981 Phi Beta Kappa.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside, California.
- 1999-2002 Project Archaeologist/Field Director, CRM TECH, Riverside.
- 1996-1998 Project Director and Ethnographer, Statistical Research, Inc., Redlands.
- 1992-1998 Assistant Research Anthropologist, University of California, Riverside
- 1992-1995 Project Director, Archaeological Research Unit, U. C. Riverside.
- 1993-1994 Adjunct Professor, Riverside Community College, Mt. San Jacinto College, University of California, Riverside, Chapman University, and San Bernardino Valley College.
- 1991-1992 Crew Chief, Archaeological Research Unit, U. C. Riverside.

1984-1998 Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author, co-author, and contributor to numerous cultural resources management reports since 1986 while with the Archaeological Research Unit, Statistical Research, Inc., and CRM TECH.

Memberships

* Register of Professional Archaeologists.
Society for American Archaeology.
Society for California Archaeology.

PROJECT ARCHAEOLOGIST/PALEONTOLOGIST Harry M. Quinn, M.S.

Education

1978 Certificate in Archaeology, University of California, Los Angeles.
1968 M.S., Geology, University of Southern California, Los Angeles.
1964 B.S., Geology, Long Beach State College, Long Beach.
1962 A.A., Los Angeles Harbor College, Wilmington.

- Graduate work oriented toward invertebrate paleontology; M.S. thesis completed as a stratigraphic paleontology project on the Precambrian and Lower Cambrian rocks of Eastern California.

Professional Experience

1998-Present Project Archaeologist/Paleontologist, CRM TECH, Riverside, California.
1992-1998 Independent Geological/Archaeological/Environmental Consultant, Pinyon Pines.
1994-1996 Environmental Geologist, E.C.E.S., Inc, Redlands, California.
1988-1992 Project Geologist/Director of Environmental Services, STE, San Bernardino, California.

1966-1988 Geologist/Senior Geologist, Texaco, Inc., Los Angeles; Tenneco Oil Exploration and Production, Englewood, Colorado; Loco Exploration, Inc., Aurora, Colorado, Jirsa Environmental Services, Norco.

Memberships

Society of Vertebrate Paleontology; American Association of Petroleum Geologists; Canadian Society of Petroleum Geologists; Rocky Mountain Association of Geologists, Pacific Section; Society of Economic Paleontologists and Mineralogists; San Bernardino County Museum; Society for American Archaeology; Society for California Archaeology; Archaeological Survey Association of Southern California; Coachella Valley Archaeological Society (President, 1993-1994, 2000; Vice President, 1992, 1995-1999, 2001; Basic Archaeology Training Course Instructor, 1996-2000; Environmental Assessment Committee Chair, 1997-1999); Coachella Valley Historical Society; Malki Museum; Southwest Museum; El Paso Archaeological Society; Ohio Archaeological Society; West Virginia Archaeological Society; Museum of the Fur Trade; Cahokia Mounds Association.

Publications

Five publications in Geology concerning an oil field study, a ground water and earthquake study, a report on the geology of the Santa Rosa Mountain area, and papers on vertebrate and invertebrate Holocene Lake Cahuilla faunas. Ca. 55 articles in archaeology and history in various journals. Co-author of more than 100 cultural resources reports.

PROJECT ARCHAEOLOGIST/REPORT WRITER Mariam Dahdul, M.A.

Education

2002 M.A., Anthropology, California State University, Fullerton.

1993 B.A., Geography, California State University, Fullerton.

2002 "Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside.

Professional Experience

2000- Project Archaeologist, CRM TECH, Riverside.

Laboratory and Field Experience

- 2001 Archaeological field school under the direction of Dr. Brian Byrd. Test excavations of sites at the San Elijo Lagoon Reserve, including flotation of soil samples and sorting and cataloguing of artifacts.
- 2000 Archaeological field class under the direction of Dr. Claude Warren. Excavated units at Soda Lake in the Mojave Desert and produced lake bottom stratigraphic profiles.
- 1999-2000 Assisted in the catalogue of artifacts at the CSU, Fullerton archaeology laboratory.
- 1999 Field survey course under the direction of Dr. Phyllisa Eisentraut; surveyed and mapped prehistoric site in the Mojave Desert.

PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT

**REINSTATEMENT OF CARBON CANYON DAM SEWER
AND PUMP STATION ABANDONMENT PROJECT**

Near the City of Brea
Orange County, California

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Bai Tang, Principal Investigator
Michael Hogan, Principal Investigator

December 13, 2002

CRM TECH Contract #943
USGS Yorba Linda, Calif., 7.5' Quadrangle
Sections 8 and 17, T3S R9W, San Bernardino Base Meridian