Appendix D

Cultural Resources

Appendix D.1

Cultural Resources Survey

CULTURAL RESOURCES SURVEY OF THE

JAMES DONLON BOULEVARD EXTENSION PROJECT,

CONTRA COSTA COUNTY, CALIFORNIA

by

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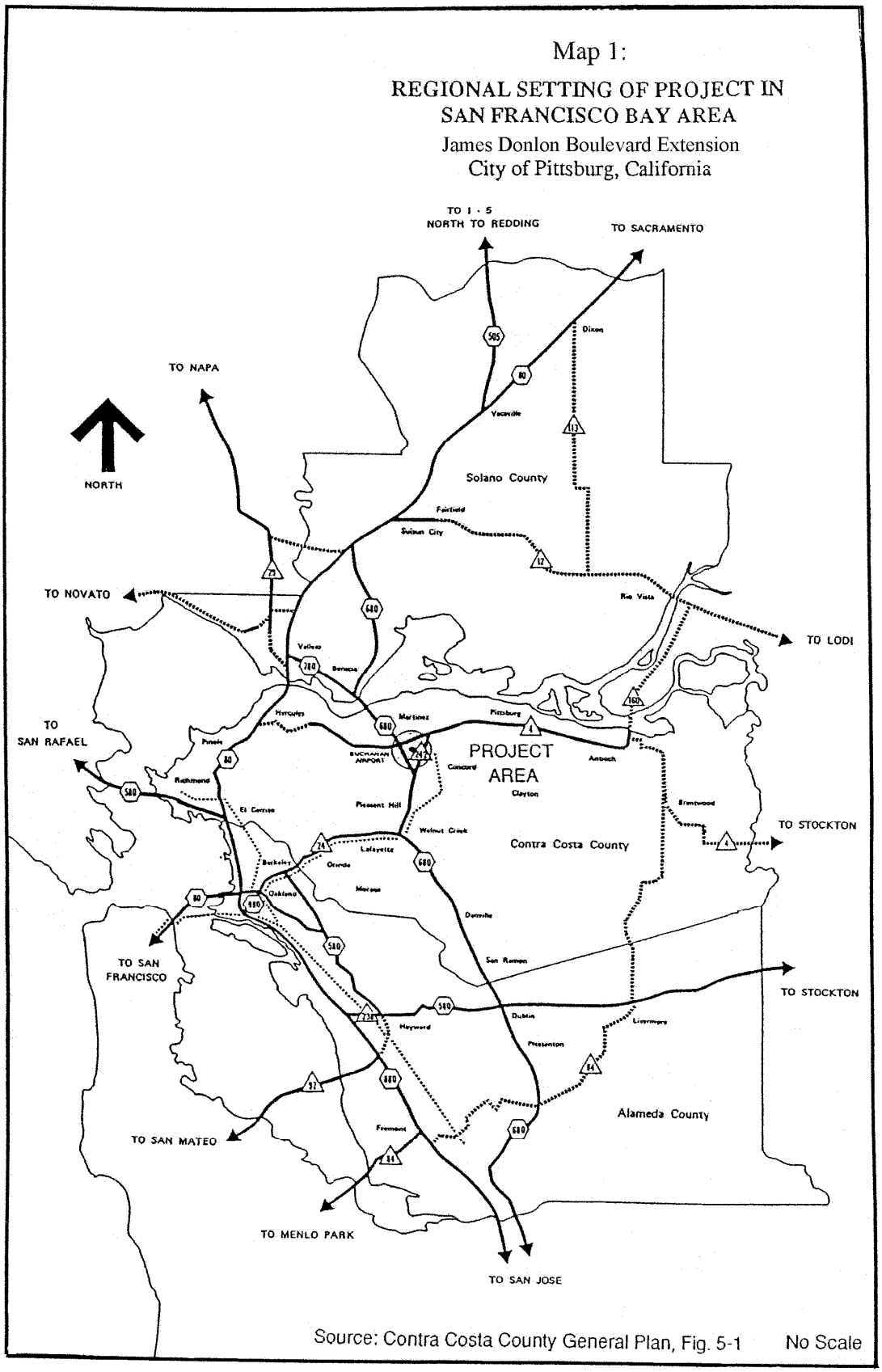
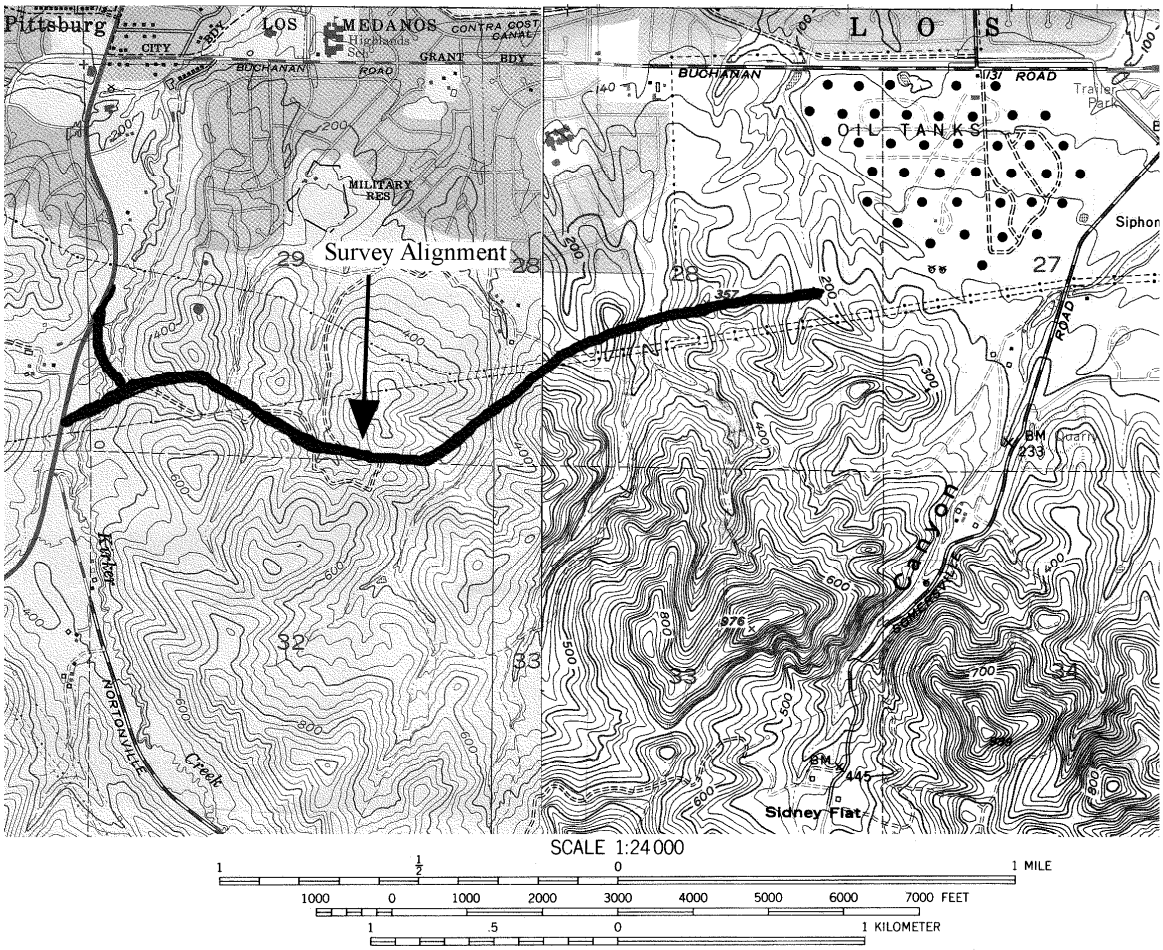
REGIONAL SETTING OF PROJECT IN SAN FRANCISCO BAY AREA

James Donlon Boulevard Extension
City of Pittsburg, California



Source: Contra Costa County General Plan, Fig. 5-1 No Scale



Map 2: Survey Alignment
(USGS 7.5' Clayton and Antioch South Quadrangles)

Map 3: Area of Potential Effects

INTRODUCTION

The City of Pittsburg (City) proposes the construction of a roadway extension from James Donlon Boulevard westward to Kirker Pass Road in an area of unincorporated Contra Costa County.

The California Environmental Quality Act (CEQA) requires that the effects of such projects on cultural resources be assessed. Prior to selection of the present road extension alignment, three alternative road alignments were considered. In order to assess the effects of the potential project on cultural resources, in 2002 RBF Consulting of Walnut Creek, California requested that Archaeological/Historical Consultants (AH/C) conduct a cultural resources study of three alternative alignments. Subsequently, an Archaeological Survey of the proposed alternative alignments was completed in July 2002. The results of that survey were reported in an Archaeological Survey Report (Baker 2002; see Appendix 1). In 2007, the final road alignment was chosen and AH/C was requested to conduct a final field study to assure that all of the chosen alignment had been inspected during the initial survey. This Report documents the results of the 2007 study.

The archaeological survey took place on July 10, 2007 by:

Suzanne Baker (M.A., Anthropology/Archaeology; Register of Professional Archaeologists certified; 32 years of archaeological experience in California) was the Principal Investigator and Field Director.

Michael Smith (29 years of archaeological field experience in California) was the participating archaeological technician.

1.0 PROJECT DESCRIPTION AND AREA OF POTENTIAL EFFECT (APE)

The present study area is located just south of the city of Pittsburg, in unincorporated Contra Costa County (Map 1). The James Donlon Boulevard Extension alignment and the subject of this study falls within Sections 28 and 29 (T2N, R1E) on the Clayton and Antioch South 7.5' USGS topographic quadrangles (Map 2).

The Extension would commence at the Somersville Road/James Donlon Boulevard intersection and end in a sweeping horizontal curve at its intersection with Kirker Pass Road. A portion of the Extension has already been constructed from Somersville Road to Ventura Drive within the Black Diamond residential development, leaving 2.17 miles to be constructed under this project. From its current eastern terminus, the Extension would extend past existing and proposed residential development projects on either side of the roadway. The Extension would then merge from a four-lane road down to a two-lane road and continue to near its intersection with Kirker Pass Road, where it would again expand to a four-lane road. The roadway would follow the natural topography of the land and meet City and California Department of Transportation (Caltrans) standards and regulations for highway design for vehicles traveling up to 60 miles per hour.

The portion of the Extension constructed to a four-lane configuration, at the Kirker Pass Road intersection on the western end and within the proposed Sky Ranch Development on the eastern end of the project, would be designed to urban highway standards with curbs, gutters, median curbs, sidewalks and streetlights. The portion of the Extension constructed to a two-lane configuration, in the center of the project, would be designed to rural road highway standards. The intersection configuration at Kirker Pass Road and the Extension would consist of two lanes eastbound, two lanes westbound, a dedicated west-to-north right turn pocket, and an east-to-north left turn pocket.

There are several large electrical transmission lines that traverse the project area. It would be necessary to relocate several of the transmission towers to implement the proposed project. Additionally, landslide deposits have been identified within the project area. Landslide remediation would be required prior to the implementation of the proposed project.

The Area of Potential Effect includes the road alignment, as well as a number of adjacent areas up to approximately 500' in width where adjacent slopes and drainages may be affected by construction, including use as cut and fill locations (see Map 3).

2.0 PROJECT SETTING

The project area is located about three miles south of Suisun Bay and what were extensive adjoining tidelands. The study area is adjacent to these flatlands. The topography of the project area consists mainly of steep rolling hills with 30-50% slopes in some areas. The alignment will pass along slopes and across at least six drainages, which flow mainly south to north. Kirker Creek at the west end of the alignment is the only perennial stream; the others are unnamed seasonal drainages.

The hills of the project are composed mainly of poorly consolidated sandstones and shales of both marine and non-marine origin. The Wolfskill Formation predominates, with narrow bands of Neroly, Cierbo, and Markley sandstones, as well as tuffs and shales of the Lawlor and Meganos Formations (Brabb *et al.* 1971).

Vegetation in the project area consists almost entirely of grassland with here and there a few scattered oak trees or small oak groves, as well as sparse riparian vegetation within the drainages. The project area is and has been used almost entirely for cattle grazing throughout most of its history.

3.0 CULTURAL SETTING

At the time of European contact, the project area is believed to have been within the ethnographic territory of the Chupcan, one of the groups that spoke the Bay Miwok language. A background section on the prehistory, ethnohistory, and history of the project area was presented in the original Phase 1 Archaeological Survey Report of the Proposed Buchanan

Road Bypass Project (Baker 2002; see Appendix 1) and will not be repeated here. With regard to its ranching history, it should suffice to say here that the present project area has been in ranch land since at least 1885 and held and operated from 1901 to 1963 by the Abrams brothers and, since then, by an Abrams cousin, Wayne Thomas (see Baker 2002 and Kostura 2002a; 2002b; see Appendices 1 and 2).

4.0 ARCHIVAL RESEARCH

An archival search for historic and archaeological information took place in 2002 at the Earth Sciences and Bancroft Libraries of University of California, Berkeley, the Contra Costa County Recorders Office, and the Contra Costa County Historical Society. In addition, a record search for prior archaeological studies was conducted at the Northwest Information Center, California Historical Resources Information System, at Sonoma State University (see Baker 2002). Because no development has taken place in the last five years within the present study area, it was felt unnecessary to conduct a new record search.

The 2002 record search determined that an historic farm complex (C-252) with "a standing home, barns, and sheds associated with a cattle ranch" and a blacksmith stable had been noted but not recorded adjacent to Somersville Road (Flynn 1981a; 1981b). During the 2002 survey, A/HC revisited the area and determined that there were no standing structures or visible archaeological features remaining sufficient to record as an archaeological site (Baker 2002). This area is, in any case, outside of the present project area and a housing subdivision has been built in the vicinity since 2002.

The 2002 record search also indicated that a prehistoric site, CA-CCO-437, had been recorded in 1981 along the midline of Sections 27 and 28 (Flynn 1981a; Flynn and Rossman 1981; see also Baker 2002). Artifacts consisted solely of five grinding implements, including two pestles, two manos, and a hopper mortar, within an approximately 725m by 150m area. No midden soil, chipped stone tools, or chipping detritus were seen. The artifacts were apparently collected during that survey (Flynn and Rossman 1981; Flynn 1981a). Flynn (1981a) believed that these tools were lost or discarded by prehistoric people who used them in processing seeds harvested from the grasslands or marshlands that originally existed nearby. Following this study, Holman (1983) conducted a re-inspection of the area of the prehistoric site. He essentially confirmed Flynn's previous findings that there was no evident midden deposit and he observed no other indicators of prehistoric cultural activity. In 1999 Windmiller (1999) conducted test excavations within the estimated site boundaries of CA-CCO-437 on the property north of and adjoining the 2002 Buchanan Road Bypass study boundary. Twenty-one backhoe trenches were excavated along a 2500' length of the reported location of the site. No artifacts or other cultural deposits were found in the trenches or on the surface. Windmiller (2002) returned to the site in 2002 and re-inspected the entire site area. Again, no prehistoric cultural materials were observed.

During our 2002 survey, the recorded site location for CA-CCO-247 (P-220) was once again inspected. North of the fence at the north boundary of the study area, the site had been extensively disturbed by recent grading. South of the fence within the 2002 study area,

several low hilltops had been graded flat near the site's recorded location, but probably not recently. Two possible hammerstones--cobbles exhibiting end and edge battering--were found in the recorded location of the site. One was located about eight meters south of the north boundary fence near its intersection with a north-south running fence. Both cobbles appeared battered on both ends and one also had edge battering. This latter cobble measured 13.5cm x 8.5cm x 5.5cm in size. Battering appeared patterned and unlike what would have resulted from contact with machines and, since these were found within a reported site location, it is likely that the battering was culturally derived and that the stones were associated with prehistoric site activities. They were, however, marginal as artifacts. No other cultural materials and no midden soil were observed (Baker 2002). Since 2002, a subdivision and road have been constructed in the area of the recorded site location of CA-CCO-247. The eastern terminus of the present James Donlon Boulevard Extension alignment is east of the site location.

Two linear features, P-07-002564 and P-07-002565--both short segments of old roads—were found during the 2002 survey in the southern part of Section 28. It is likely that these road segments were associated with 19th century transportation to and from the historic mining area to the south of the project area, especially the communities of Nortonville and Somersville, although no specific historic information related to the roads was found. Although both segments, especially P-07-002564, appeared to have relatively good integrity, it was felt they were unlikely to qualify for the National Register of Historic Places or California Register on their own. If, however, more segments of these roads were eventually found and recorded and their integrity and historic associations determined, it was possible that they might be considered contributing elements of a larger historic feature (Baker 2002). Neither of these segments is, however, crossed by the present Extension alignment, which is well to the north, and both are outside of the 2007 study area. It appears that a subdivision, constructed since 2002 now covers or comes very close to the location of P-07-002565.

A dilapidated windmill (P-07-000220) was also recorded in the northeast quarter of the southeast quarter of Section 28. Built by the Aeromotor Company of Chicago, it could have dated to between 1904 and 1964, but based on it condition was probably erected in the 1950s. Such windmills were built in large numbers and are not unique. It was believed that the windmill on its own lacked importance and would therefore not be eligible for the National Register (Baker 2002). It was not observed during the 2007 survey and may have been removed during subdivision construction.

Finally, as part of the 2002 cultural resources survey, the Abrams Ranch Complex, located in the northwest quarter of the southwest quarter of Section 28, was recorded and evaluated for the National Register and California Register (Kostura 2002a; 2002b; see Appendix 2). The complex was constructed after 1901 and before 1950 and some of the buildings are still used by the landowner, Wayne Thomas. The historic building complex was judged to be eligible for the National Register and California Register "because of its importance as a good example of early 20th century ranch buildings, illustrative of western Contra Costa County's ranching history" and because of its good integrity (Kostura 2002a:7).

The selected road alternative passes approximately 200 meters (~600') east and south of the ranch complex.

5.0 NATIVE AMERICAN CONSULTATION

Native American consultation regarding the project was undertaken in 2002. At that time Robert Ulibarri of RBF Consulting assumed responsibility for providing Native American liaison. He contacted Chuck Striplen of the Federated Indians of Graton Rancheria of Santa Rosa, the only Federally recognized tribe that includes Bay, Plains, and Coastal Miwok people in their membership. No particular concerns about the project were stated.

6.0 ARCHAEOLOGICAL SURVEY

6.1 Methodology

Suzanne Baker and Michael Smith of Archaeological/Historical Consultants conducted a final survey of the selected Extension alternative on July 10, 2007. The center line of the alignment had been staked and was easy to follow. An approximately 100' wide corridor (50' on either side of the center line) was surveyed on foot in zigzagging transects. The present alignment closely follows the central alternative of the original three alternative alignments previously inspected in 2002 (Baker 2002). Adjacent areas, particularly slopes, tops of hills, and other flat locations, which will be used as cut and fill areas (shown on Map 3), were more cursorily inspected, mainly to verify whether these had been previously inspected. Virtually all of these areas had been covered during the 2002 survey.

The ground was inspected for evidence of cultural modification, including midden soils, flaked and groundstone tools and detritus, and historic artifacts and features. In addition, bedrock outcrops were examined for possible mortars and rock art.

Ground surface visibility was often poor since there was a short, but dense, dry grass cover in most locations. Grass was kicked aside at intervals and most open areas were inspected. There was little other vegetation except for a few scattered oaks. The area is now used for cattle grazing. Soils ranged from a dark grey or brown sandy silt or clay silt. There was little rock or bedrock evident except in the western portion of the project area where sandstone outcrops—eroded and wind sculpted—occur.

6.2 Results of Reconnaissance

No prehistoric or historic cultural resources were found within the chosen alignment for the James Donlon Boulevard Extension Project.

7.0 CONCLUSIONS AND RECOMMENDATIONS

An archaeological survey of the chosen alignment for the James Donlon Boulevard Extension Project, conducted in July 2007, found no new prehistoric or historic archaeological sites or historic built resources.

The present James Donlon Boulevard Extension alignment passes well north of the two historic road segments (P-07-002564 and P-07-002565) recorded in 2002. Neither should be affected by road construction. The latter segment may already have been obscured by a housing subdivision constructed since 2002.

The historic Abrams Ranch is believed to be eligible for the National Register of Historic Places and the California Register because of its local importance as a good example of early 20th century ranch buildings that illustrate western Contra Costa County ranching history. The alignment for the James Donlon Boulevard Extension passes above the ranch at a distance of approximately 200 meters (~600') to the east and south of the ranch complex. Road construction should cause no direct physical impacts to the buildings, which have been largely unchanged since the early 20th century. The road will be situated on the north slope of the hill above the ranch complex. It will to some extent affect the visual setting of the property; however, at the time of evaluation in 2002, the ranch setting was considered "only fair due to the encroachment of a housing subdivision just to the north of the ranch buildings" (Kostura 2002a:7). This evaluation of the property was based on the presence and integrity of the buildings at the site. We believe that impacts to the setting of the ranch will not affect the potential eligibility of the Abrams Ranch Complex to the National Register and California Register. A record of the present setting does exist, in that a photograph of the setting facing south was taken for the site record (Kostura 2002b; see Appendix 2). To ensure that impacts are less than significant, we recommend that any road construction and auxiliary activities avoid the Abrams Ranch complex. In addition, the ranch complex should not be used as a construction staging area.

Finally, the recorded location of prehistoric site CA-CCO-247 (P-220) is outside of the alignment of the present project area. If, however, subsurface prehistoric or historic cultural materials are found during the course of road construction, construction should be immediately halted and a qualified archaeologist called to evaluate the find. If the alignment changes, additional survey may be necessary.

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APPENDIX 1:

2002 ARCHAEOLOGICAL SURVEY REPORT,
PROPOSED BUCHANAN ROAD BYPASS PROJECT

PHASE 1 ARCHAEOLOGICAL SURVEY REPORT,

PROPOSED BUCHANAN ROAD BYPASS PROJECT,

CONTRA COSTA COUNTY, CALIFORNIA

by

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September 2002

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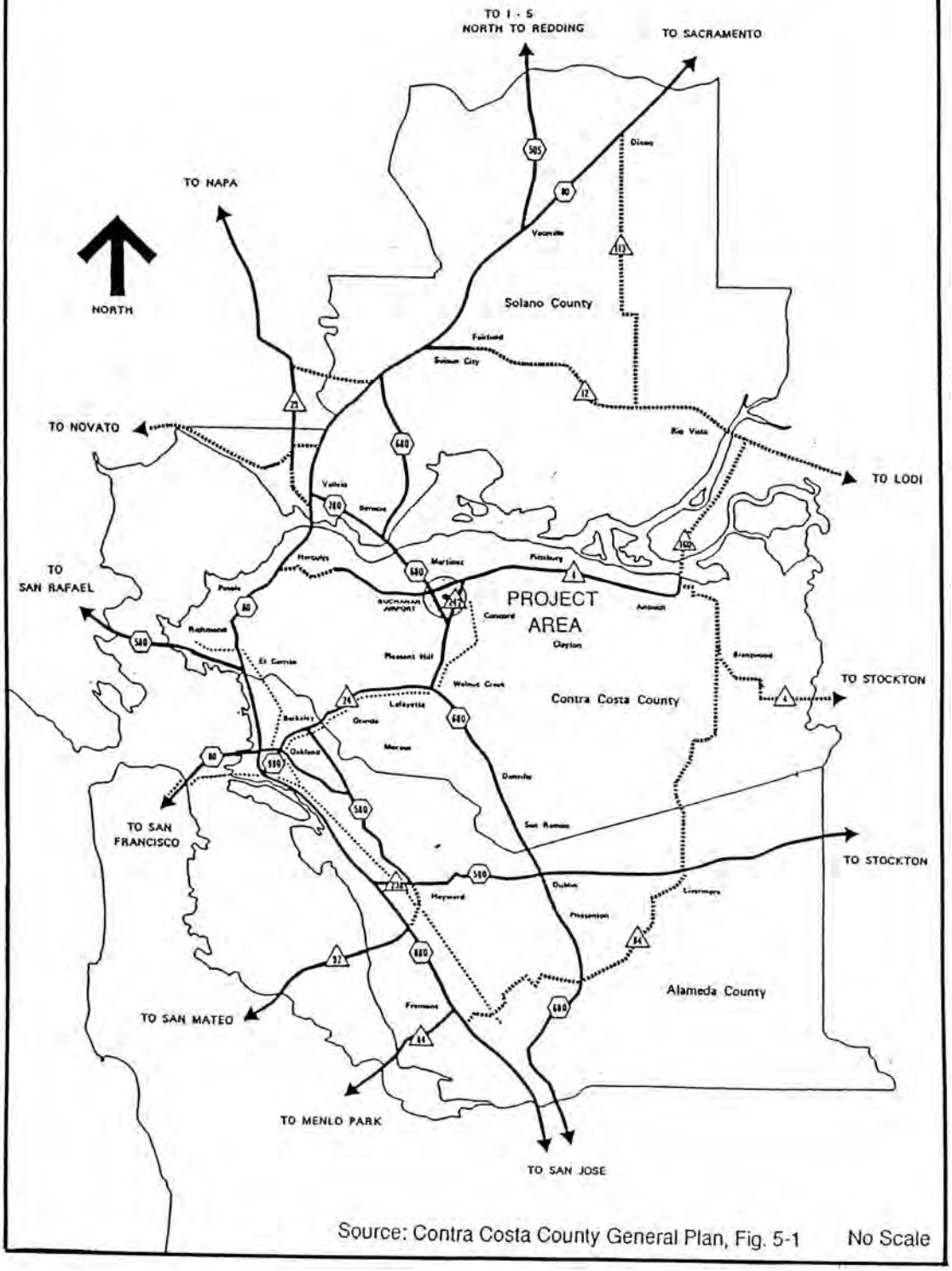
Map 1:

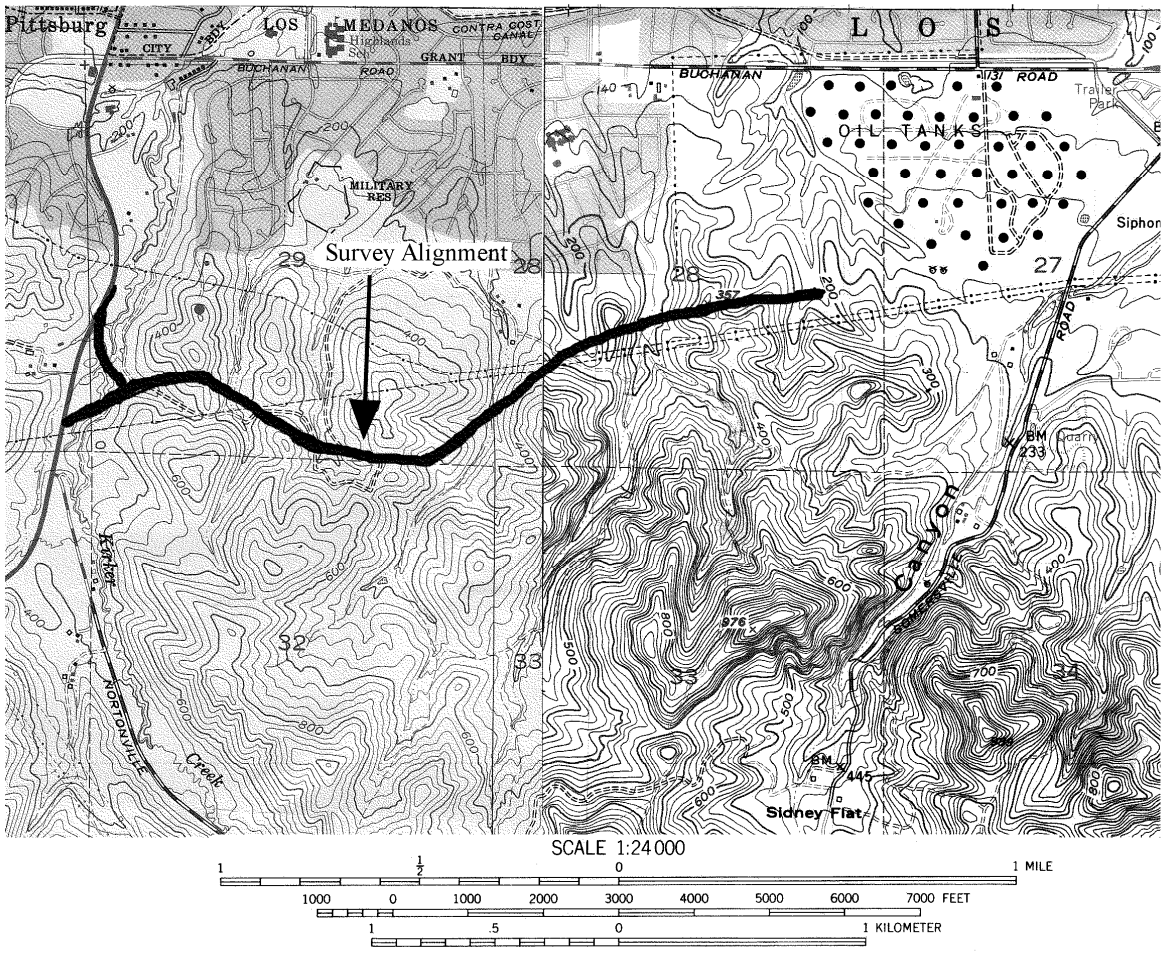
REGIONAL SETTING OF PROJECT IN SAN FRANCISCO BAY AREA

Buchanan Road Bypass

City of Pittsburg, California



Source: Contra Costa County General Plan, Fig. 5-1 No Scale



Map 2: Survey Alignment
(USGS 7.5' Clayton and Antioch South Quadrangles)

INTRODUCTION

Contra Costa County has proposed construction of a Buchanan Road Bypass south of the City of Pittsburg. Several alternative alignments have been proposed for which a cultural resources study has been requested. The California Environmental Quality Act (CEQA) requires that the effects of such projects on cultural resources be assessed. To meet these needs and at the request of RBF Consulting of Walnut Creek, California, Archaeological/Historical Consultants conducted a Phase 1 Archaeological Survey of the proposed alignments. This report details the results of the survey.

The Phase I field study took place on July 9-11, 2002.

Suzanne Baker (M.A., Antropology/Archaeology; Register of Professional Archaeologists certified; 30 years of archaeological experience in California) was the Principal Investigator and Field Director.

Michael Smith (25 years of archaeological field experience in California) and Daniel Shoup (M.A., 4 years of archaeological field experience in California) were the participating archaeological technicians.

RBF Consulting assumed responsibility for contacting the Native American community about this project.

1.0 PROJECT DESCRIPTION

The study area is located just south of the city of Pittsburg, primarily in unincorporated Contra Costa County, and partly in areas which are incorporated or proposed for annexation to the cities of Pittsburg and Antioch (Map 1). An approximately rectangular study area within Sections 27, 28, 29, 31, 32, 33, and 34 (T2N, R1E) on the Clayton and Antioch South 7.5' USGS topographic quadrangles was defined, although most of the study area and the alternative alignments lie within Sections 28 and 29. The Bypass will run in an approximately east-west direction from Somersville Road to Kirker Pass Road. At its eastern end, the Bypass is assumed to connect with and constitute a continuous roadway extending to Somersville Road, about a half-mile south of the latter's intersection with existing Buchanan Road. At its western end the Bypass would terminate at a T-intersection with Kirker Pass Road about three-quarters of a mile south of the present intersection of Buchanan Road and Railroad Avenue. Several alternative alignments have been proposed (Map 2).

2.0 PROJECT SETTING

The project area is located about three miles south of Suisun Bay and what were extensive adjoining tidelands. The study area is adjacent to these flatlands. The topography of the project area consists mainly of steep rolling hills with 30-50% slopes in some areas, particularly the western and southern portions. The slopes in the northern part of the project area are somewhat gentler with relatively flat terrain immediately adjacent to the northern project boundary. There is also flat terrain at the far eastern end adjacent to Somersville Road.

Flat areas along the north, east, and northeast portions of the project area are formed of Quaternary alluvium, resulting primarily from deposition by north-flowing drainages. The hills of the project are composed mainly of poorly consolidated sandstones and shales of both marine and non-marine origin. The Wolfskill Formation predominates, with narrow bands of Neroly, Cierbo, and Markley sandstones, as well as tuffs and shales of the Lawlor and Meganos Formations (Brabb *et al.* 1971).

The study area contains at least eight drainages, which flow from south to north. Two perennial streams form the west and east boundaries--Kirker Creek on the west and Markley Canyon Creek on the east. The rest are unnamed seasonal drainages. Kirker Creek had a small amount of water at the time of the July archaeological survey, while Markley Canyon Creek and other drainages were dry.

Vegetation in the project area consists almost entirely of grassland with here and there a few scattered oak trees or small oak groves, as well as sparse riparian vegetation within the drainages. The project area is and has been used almost entirely for cattle grazing throughout most of its history.

3.0 CULTURAL SETTING

3.1 Prehistoric and Ethnohistoric Background

Settlement in the San Francisco Bay area probably began over 10,000 years ago, and archaeological excavations at a number of sites in the region date between 5000 B.C. and 2000 B.C. Over the years much of the regional archaeological work has focused either on the San Francisco Bay shore to the west or to the northeast on the Sacramento Delta. There has been little, if any, formal archaeological work done near the study area. Several excavations in the interior of Contra Costa County, have, however, provided sufficient information to construct a general cultural sequence for the region (Fredrickson 1964; 1965; 1966; 1968; 1969; Mead and Moss 1967). Moratto (1984:262-262) summarizes this work, conducted principally at four sites--CCo-30 near Alamo, CCo-308 in Stone Valley, CCo-309 at Rossmoor, and CCo-311 near Alamo. The earliest component thus far identified is from CCo-308 with a carbon date of 2500+- 400B.C. Six other components have been identified, ending with a "Late Horizon, Phase 2" component carbon-dated at A.D. 1665+/-95 and undoubtedly identified with the Bay Miwok. It appears that a sedentary village life in the region began between 2500 B.C. and A.D. 1 and that an increasingly complex social organization gradually evolved, including an "evolution from an egalitarian society...to a system of social ranking based upon ascribed status" (Moratto 1984:264). At various times influences from both the Napa and the Delta-San Joaquin Valley regions arrived in the Contra Costa area, probably based both on diffusion and population movements (Fredrickson 1965:19; 1973:127; Bennyhoff 1994). Bennyhoff (1994) outlines a complicated picture of cultural expansion and replacement of populations over the millennia, culminating in the expansion of Bay Miwok populations into the west delta region around A.D. 900-1000 A.D.

The project area is in what was the ethnographic territory of the Chupcan, one of the groups that spoke the Bay Miwok language. Bay Miwok territory extended approximately from Walnut Creek eastward to the Sacramento-San Joaquin delta and from just south of Mount Diablo north to Suisun Bay (Bennyhoff 1977; Levy 1978). There is some uncertainty as to exact territorial boundaries, but it is believed that the Chupcan "can be assigned to the south shore of Suisun Bay between Port Chicago and the mouth of Marsh Creek" (Bennyhoff 1977:143). Bennyhoff (1977:143-144) says that the main village of the Chupcan was at Antioch, while Milliken states that the main village was on lower Pacheco Creek in present day Concord (Milliken 1995:241). It is likely that the Chupcan had more than one major village and that both of the above may have been important locations.

The Bay Miwok were successful intensive food collectors and hunters who utilized a wide range of resources in a very favorable environment. Plant foods in great variety were gathered on a seasonal basis, with acorns the most important vegetal staple, since they could be stored in large quantity. Large game like deer, elk and antelope were hunted. Game birds, waterfowl, and fish were other major food sources that thrived in the sloughs and marshes of the Suisun Bay and Delta area (Bennyhoff 1977:9-16). A summary of the ethnography of the Miwok may be found in Bennyhoff (1977) and Levy (1978).

The population of Bay Miwok speakers was probably never very numerous. Levy (1978:401) estimates no more than 1700 people for all Bay Miwok groups at the time of European contact, and the

total number of Chupcan will never be known. The Chupcan apparently resisted missionization for a time, because they were among only two East Bay groups that were still culturally intact by the end of 1805. By that time many Chupcan may also have "withdrawn to the north side of the Carquinez Strait" to the territory of the Suisun (Milliken 1995:191). The Chupcan were close allies of the Suisun who apparently protected "other groups who were reteating from the mission frontier, notably Saclans, Tatcans, and Chupcans" (Milliken 1991:308). It is likely, therefore, that Chupcan villages in or near the project area were abandoned at least by 1806. Spanish military action against the Suisun groups in 1810 resulted in movement of some Chupcan to the missions. The exact size of the original group is unknown, but 146 Chupcan were baptized at either Mission San Francisco or Mission San Jose between 1810 and 1811 (Milliken 1995:241). As a result of missionization, disease, and military action, the cultural integrity of these peoples was essentially destoyed by the mid-1800s. After secularization of the missions in the 1830s, some native people went to work on nearby ranchos, perhaps gravitating to home lands, but there is little information available about this period. Many of the Bay Area people who today identify themselves as of Miwok descent, including Coast and Bay Miwok, are united in a Federally recognized organization, the Federated Indians of Gratan Rancheria in Santa Rosa.

3.2. Historic Background

The historic period in Contra County begins with the 1772 expedition of Pedro Fages to the Mount Diablo area (Hoover *et al.* 1990:52). Fages' expedition, which tried to find an inland land route to Point Reyes, skirted the Carquinez Straits, eventually camping at a spot between present-day Pittsburg and Antioch. Here a decision was made to abandon the search. This "turn back" camping spot is commemorated in Buchanan Park north of the project area (Contra Costa County 1989:51).

The project area's location, in the hills lying just south of Pittsburg, has strongly influenced its history. During earliest historic times, the area was considered marginal at best and lay outside the boundaries of all the Mexican era (1820s-1840s) landgrants. The two closest grants were Los Medanos to the north and northeast and Monte del Diablo to the southwest (Beck and Haase 1974:30). Similarly during the Gold Rush and immediate post-Gold Rush years, it is likely that little activity took place there, although New York Landing (later Pittsburg) became an important transportation center. In 1859, coal, a key element in the industrialization of San Francisco, was found in quantity just two miles to the south of the project area. Several towns, including Nortonville, Somersville, and Stewartsville, rapidly sprang into existence as coal mining centers during the early 1860s, attracting miners from Welsh and English coal mining areas especially (Contra Costa County Development Association n.d:1-4; Hoover *et al.* 1990:62-63). Nortonville and Somersville both lie about two miles due south of the study area. Kirker Pass and Somersville Roads, which lie to the west and east of the project area respectively, seem to have had their origins in the 1860s as railroads that carried coal from Nortonville and Somersville to New York Landing, although these routes may have followed earlier trails and wagon roads (Contra Costa County 1871; Emanuels 1986:232-235; Hoover *et al.* 1990:63; U.S. Geological Survey 1898; 1916). Maps show that a portion of the rail route from Somersville once crossed the eastern edge of the project area in a south to north direction (Contra Costa County 1871; U.S. Geological Survey 1898; 1916). Mining fluctuated in activity, especially in the 1880s and 1890s, and by 1902 coal production had almost halted (Purcell 1940:368-369).

Mining created a demand for agricultural products, making it attractive for small farmers and ranchers to take up public land. By the 1860s individuals were claiming public lands for small ranches and farms. Typically, a quarter section of land (160 acres) was squatted on, claimed, and staked. Then, after the appropriate length of time and amount of improvements, the land was officially filed for patent under the Homestead Act or other land act. By 1871 two families are shown living in Section 27 west of Markley Canyon Creek in the very eastern part of the present project area and adjacent to the railroad line to Pittsburg--a Sawyer to the south and a Franklin in the center of the section (Contra Costa County 1871). The Franklin site is in or very near where structures are shown on the USGS Antioch South 1953,

revised 1980 map (see Map 2). No other family settlements are shown on the 1871 map within the study area.

By 1885 the south half of Section 29 was owned by David Griffith, the southwest quarter of Section 28 by an Edwards, and the southeast quarter of Section 28 and southwest quarter of Section 27 by Tormey. The northwest and northeast quarters of Section 32 were owned by a Lattimore and a Watson respectively, while the northwest and northeast quarters of Section 33 were owned by a McNemee and a Justice respectively (Kostura 2002; McMahan and Minto 1885).

In 1901 the Abrams family--two brothers, Warren and William Abrams, and their mother Margaret--inherited the Griffith acreage, which comprised most of the western half of the present study area. All three are listed on the 1910 and 1920 censuses. In 1910 Warren was 27 years old, William 24, and Margaret (or Margurete) was 48. The men were listed as farmers and had been born in Pennsylvania. Margaret, although born in Pennsylvania, had Welsh parents, indicating that they may have come from the Pennsylvania coal fields where many Welsh had continued their mining tradition (U.S. Census 1910; 1920). Over the years the Abrams family acquired more acreage until the ranch contained 800 acres. The Abrams operated the ranch until 1963, when Wayne Thomas, a cousin of the Abrams, acquired it (Kostura 2002).

By 1910 most of the eastern half of the study area was owned by Eugene Arata, a farmer, whose family consisted of his wife Nora and nine children (U.S. Census 1910). Eugene and Nora were born in Italy, but all of their children were born in California. It is of interest that in 1900 Eugene and his family (only four children at that time) were living in New York of the Pacific (Pittsburg) and that he was listed as a fisherman (U.S. Census 1900). Many Italians were originally attracted to the area to fish the San Joaquin and Sacramento rivers and by about 1910 over 1000 Italian fishermen were working in the rivers near Pittsburg (Emanuels 1986:226).

The Arata family continued to hold their ranch property, including parts of the study area, until the 1980s. The youngest son, Frank, listed on the May 1910 census as six months old, still owned the ranch in 1981 (Flynn 1981a:6). The Arata Ranch buildings are shown in the southeastern corner of the study area in the northwest quarter of the northwest quarter of Section 34 (Map 2). Currently the building complex is owned by the Antioch School District and consists of a residence, a large barn, and a number of other outbuildings. A portion of the old railroad grade from Somersville runs through the ranch complex. According Tracy Parent, a naturalist at Black Diamond Mines Regional Park, a small house, presently located on top of the railroad grade, was moved in the 1980s to the Arata Ranch complex. It came from a location within the study area about a half mile to the north in the southwest quarter of Section 27. This may have been the location of the first Arata family house and ranch buildings (Parent 2002).

An existing powerline that crosses the study area in a southwest to northeast direction was either being planned or in place by 1914, erected by Great Western Power Company (Weber 1914). In 1942, as part of the war effort, Camp Stoneman was built in Pittsburg just to the north of the western part of the study area (Emanuels 1986:230). Although this did not especially affect the project area, some gravel was quarried from the Abrams/Thomas Ranch during Camp Stoneman's construction (Thomas 2002). The camp was deactivated in 1954. Also by the early 1940s an oil storage area, with many oil tanks, was located immediately to the north of the eastern half of the study area (U.S. War Department 1942).

Topographic maps show few other substantive changes to the study area to the present day. The study area continues to be used mainly for cattle grazing, although at least the eastern third is scheduled for residential development in the near future.

4.0 ARCHIVAL RESEARCH

Historical research took place at the Earth Sciences and Bancroft Libraries of University of California, Berkeley, the Contra Costa County Recorders Office, and the Contra Costa County Historical Society.

An archival search was conducted at the Northwest Information Center, California Historical Resource System, at Sonoma State University. The search revealed that a number of archaeological surveys had previously taken place; one prehistoric site had been recorded; and an unrecorded historic site was listed as existing in the project area.

In the western half of the study area, an archaeological survey of a proposed pipeline route was conducted in 1986 (Peak & Associates, Inc. 1986). It ran east-west through the southern half of Section 29. No sites were found in the study area, but one prehistoric site was recorded approximately two thirds of a mile to the west.

In the eastern half of the study area, three previous studies had been completed. The earliest was in 1981, when approximately 279 acres were surveyed, including the southeast quarter of Section 28 and the portion of the southwest quarter of Section 27 west of Somersville Road (Flynn 1981a). During that survey, one archaeological site, CA-CCO-437, was found and recorded lying along the midline of Sections 27 and 28 (the northern border of the present study area). It consisted of a "surface scatter of grinding implements on the slopes above intermittent or ephermeral [sic] drainage swales on the north flank of the 200 foot contour, being the beginning of the Los Meganos ("sand hill") region" (Flynn and Rossman 1981). Five grinding implements were observed, including two pestles, two manos, and a hopper mortar, within an approximately 725m by 150m area. No midden soil, chipped stone tools or chipping detritus were seen. Flynn believed that these tools were lost or discarded by prehistoric food processors who used them in processing seeds harvested from grasslands or marshlands which originally existed nearby. Flynn notes also that the area could once have had vernal pools which may have "supported a wide variety of seasonally collectible plants and animal resources, including many of the grass seed plants, small mammals and birds which the natives depended upon as food staples" (Flynn 1981:3). The five artifacts observed were apparently collected during the survey (Flynn 1981:7).

In addition to this prehistoric site, Flynn (1981a:2; 1981b) reported, but did not record, an historic farm complex (C-252), which contained a "standing home, barns, and sheds associated with a cattle ranch." There was also a blacksmith stable (Flynn 1981a:3). The Flynn report notes that the owner of the property, Mr. Arata, was born in the farmhouse over 75 years before. Flynn (1981a:3) thought that the complex post-dated the 1890s, although few time-sensitive artifacts were observed. "A few bar-cut, square nails were found, but these seem to have been introduced into the area during the construction of the barn, no doubt with salvaged timbers. Very few time-sensitive artifacts such as pottery, glassward sherds, and the like were seen in the vicinity of the farm complex..." (Flynn 1981a:3). She therefore did not believe that the complex was historically significant. Flynn (1981a:2; 1981b) specifically noted that this complex was "located in the uppermost northeastern corner of the property, where the powerline corridor intersects Somersville Road." This location would have been at the approximate center of Section 27 and at the far northeast corner of the present study area.

Following this study, Holman (1983) conducted a reinspection of the areas of both the prehistoric site and historic farm complex. He essentially confirmed Flynn's previous findings that there was no evident midden deposit and he observed no other indicators of prehistoric cultural activity. He recommended that, prior to any earthmoving activities associated with construction, the area of site CA-CCO-437 should be disked and that archaeologists should collect any artifacts discovered (Holman 1983:2-3). Holman (1983:2) was also of the opinion that the historic farm complex was not historically significant.

Almost 20 years later Windmiller (1999) conducted test excavations within site CA-CCO-437 on the adjoining property north of the present study boundary. Twenty-one backhoe trenches were excavated along a 2500' length of the reported location of the site. No artifacts or other cultural deposits were found in the trenches or on the surface. Windmiller (2002) returned to the site in 2002 and reinspected the entire site area. Again, no prehistoric cultural materials were observed. He made no mention of an historic complex on the property (Windmiller 2002).

No sites currently on the National Register of Historic Places, the Californria Inventory of Historic Resources, list of California Historical Landmarks, or the Contra Costa County Historic Resources Inventory are within the project area.

Wayne Thomas, the owner of the western part of the study area, said that over the years an occasional Indian artifact, such as bowl mortars and grinding stones, had been found on the property, but these had long since been collected. He relayed no specific information about locations.

5.0 NATIVE AMERICAN CONSULTATION

Robert Ulibarri of RBF Consulting assumed responsibility for providing Native American liaison. He contacted Chuck Striplen of the Federated Indians of Graton Rancheria of Santa Rosa, the only Federally recognized tribe that includes Bay, Plains, and Coastal Miwok people in their membership. Mr. Striplen expressed no particular concerns about the project, but requested a copy of the Archaeological Survey Report when completed.

6.0 ARCHAEOLOGICAL RECONNAISSANCE

6.1 Methodology

A crew of three people, including the Principal Investigator, conducted the archaeological reconnaissance during the period July 7-July 9, 2002. The entire study area was not surveyed. Instead, RBF Consulting requested that only the alternative alignment corridors and likely adjoining areas be inspected (see Map 2). Using the 1:2000 topographic map which RBF Consulting supplied, archaeological surveyers walked in systematic transects, spaced approximately 20 to 40 meters apart, depending upon the steepness of the terrain. In potentially sensitive areas narrower transects were used. The survey width for each of the three alignments was approximately 160 meters. Large segments of each alignment crossed very steep slopes. Flat ridge tops and drainages adjacent to the alignments were also inspected because these areas were potentially more archaeologically sensitive than the slopes.

The ground was inspected for evidence of cultural modification, including midden soils, flaked and groundstone tools and detritus, and historic artifacts and features. In addition bedrock outcrops were examined for possible mortars and rock art.

Ground surface visibility was often poor since there was a short, but dense, dry grass cover in most locations. Grass was kicked aside at intervals and most open areas were inspected. There was little other vegetation except for a few scattered oaks. Within riparian areas observed species also included buckeye, willow, cattails, and fennel, as well as a date palm, observed in the Kirker Creek drainage, and a pepper tree in a seasonal drainage. Several very large eucalyptus trees were noted near the eastern edge of the study area just west of Markley Canyon Creek.

Sandstone outcrops--eroded and sculpted by the elements--occur in the western half of the project area. Their marine origin was evident by the clam shells eroding out of the formation. Soils ranged from

a dark grey or brown sandy silt, especially in the western part of the project area, to dark grey clayey silt in the eastern half.

6.2 Results of Reconnaissance

Prehistoric Sites. No new prehistoric sites were found during the survey. The recorded site location for CA-CCO-247 (P-220) was once again inspected. North of the fence at the north boundary of the study area, the site has been extensively disturbed by recent grading. South of the fence within the study area, several low hilltops had been graded flat near the site's recorded location, but probably not recently. Two waterworn cobbles, possibly used as hammerstones, were observed in the site area. One was located about eight meters south of the north boundary fence near its intersection with a north-south running fence. Both cobbles appeared battered on both ends and one also had edge battering. This latter cobble measured 13.5cm x 8.5cm x 5.5cm in size. The fact that the battering appeared patterned and unlike what would have resulted from contact with machines and since these were found within a reported site location, it is likely that the battering was culturally derived and that the stones were associated with prehistoric site activities. They were, however, marginal as artifacts. No other cultural materials and no midden soil were observed.

Historic Sites and Features

An historic ranch complex, two linear features (both segments of old roads), and a windmill were observed in or near the alignments. The ranch complex, part of the Abrams/Thomas Ranch, is located in the north-central part of the study area in the northwest quarter of the southwest quarter of Section 28. It consists of a 1920s era house and a number of corrals, outbuildings, and barns that pre-date the 1930s, as well as a 1950s era windmill. This complex and its National Register of Historic Places evaluation will be discussed in a separate Historic Architectural Survey Report.

A/HC-145, a segment of an old road, runs roughly north-south on the east side of an unnamed intermittent stream in the east half of the southwest quarter of Section 28. It was observed at a point where the southern alignment corridor crosses the drainage, where it was seen running north approximately 600 feet, terminating in a modern ranch road. It continued southward up the drainage, then could be seen from a distance, climbing southwest along hilly contours, probably continuing into Black Diamond Mines Regional Park. The road was not followed to the south as it continued well past the alignment corridor. The road exhibits engineering features, including well-developed road cuts. The observed segment is approximately 6' to 10' wide and does not appear to have been used or graded in the recent past. It is overgrown with grasses and, at a point near the 28/33 section line, where the alignment passes over the drainage, there is a large pepper tree growing in the road. Approximately 100 feet north of the pepper tree is a sandstone boulder on the west side of the drainage with grafitti carved in it. It reads "CARU.../STA..." The right side of the boulder may have exfoliated, removing the last letters of each word. The graffiti appears heavily patinated and could easily be over 50 years of age.

Historic topographic maps dating from 1898 through 1980 do not show this road until 1980 (U.S. Geological Survey 1953, revised 1980). This map was probably revised using aerial photographs which showed the road, but this does not necessarily mean that the road dates between 1953 and 1980. The road's physical appearance and the fact that a large tree is growing in it indicate that the road is more than 50 years old. Although the length of the road could not be ascertained during this survey, it may once have connected with a road or roads which led to the old mining towns of Nortonville or Somersville, located about two miles to the south. Supporting this is the fact that the USGS 7.5' Antioch South Quadrangle (1953, revised 1980) shows it connecting with what are currently foottrails leading to the old Nortonville Road in Black Diamond Mines Regional Park. Whether this was mainly a ranch road or a commonly used wagon or other vehicle route to Pittsburgh from Nortonville is unclear. The landowner, Wayne Thomas, declined to offer information on the road segments.

A/HC-146, a segment of another old road, runs north-south in the next unnamed intermittent drainage to the east of Linear Feature 1. The road segment runs on the east side of the drainage at the base of the hills and could be seen running northward for approximately 600 feet. It is unused and overgrown with grass and approximately the same width as Linear Feature 1. Another, currently used, graded dirt road runs on the west side of the drainage and is marked on the USGS topographic map (1953, revised 1980). South of a point where the southern alignment alternative crosses the drainage, both roads intersect with another graded dirt road running from the east. This graded road continues south up the drainage. According to the topographic map, a road climbs the slope southward, eventually intersecting with a road leading to Nortonville and to Somersville Road at Sydney Flat. It appears that the present graded dirt road, used as a ranch road today, may follow at least part of the route of the older road. The exact alignment of these roads was not determined during this survey, but a road cut can be seen contouring along the hills to the south and east of the drainage.

A dilapidated windmill (A/HC-147) is located near the north boundary of the project area in the northeast quarter of the southeast quarter of Section 28. The windmill is on metal struts and stands about 20' high. Two metal blades are broken. The windmill's tail retains the manufacturer's logo, "The Aermotor Co., Chicago." Adjacent to the windmill, an approximately 6' x 6' metal tank rests on horizontal 12" x 12" beams. The Aermotor Company, founded in 1883 by LaVerne Noyes, was manufacturing a metal windmill, used mainly for pumping water, by 1888. It had built a huge manufacturing plant in Chicago by 1904, and the company quickly became the "dominate supplier of windmills throughout the world" (Aermotor Company 2002). Although long since moved from its original Chicago location, the company is still in business today. One source estimates that the Aermotor Company built over 800,000 windmills (Andersen 2002). The Aermotor is probably one of the most common windmills found in the American West. The company's manufacturing operation moved to Oklahoma in 1964 (Aermotor Company 2002). It is clear that the windmill could have been built anytime between 1904 and 1964, when the company was still in the Chicago. Based on its condition, we can only guess that it was erected sometime in the 1950s. It is likely that it is close to 50 years of age or older. This may once have been a part of the Arata Ranch operation.

As discussed above, Flynn reported in 1981 that an historical farm complex (unrecorded site C-252) was still standing at the northeast corner of the property and the present study area. She stated explicitly that it was located "where the power line corridor intersects Somersville Road" (Flynn 1981b). This area and the area of a potential road alignment along the west bank of Markley Canyon Creek were inspected during the present survey. There are today no standing structures anywhere in the area and no evidence of structures where the power line intersects with Somersville Road. Slightly to the south, however, the USGS Antioch South topographic map (1953, revised 1980) shows a complex of three buildings and road running to the northeast corner of the property. These may have been the buildings to which Flynn was referring, but why they are described as being in the powerline corridor is unclear. In this general vicinity there is currently a corral, but no standing structures. The only evidence that there may once have been structures in this location are chunks of concrete, a very few pieces of wood and glass, a few metal items like several automotive parts, and plastic pipe, all scattered over a wide area. Aside from a small concrete rubble pile, no discrete trash dumps were noted. The materials observed exhibited little indication of substantial antiquity and some were modern. These materials were clearly not *in situ* and were so thoroughly dispersed and so limited in data categories that they were not recorded as an archaeological site. A number of chunks of concrete are found in a roughly linear configuration adjacent to the power line, and it is probable that some of this debris may be old foundations or pilings for the power line towers. Some torn up pieces of asphalt along the west bank of the creek were the only indication that a road had once existed here.

Flynn noted that the historic complex which she described was the location of the Arata Ranch house and buildings, owned at that time by Frank Arata who was born in the house approximately 75 years before 1981 (~1906). Historic maps show possible habitation in this location as early as 1871 (Contra Costa County 1871) and the presence of structures by 1916 (USGS 1916), so the buildings were

well over 50 years of age in 1981. No historic research or formal historic architectural evaluation of the farm complex was undertaken in either 1981 or 1983 (Flynn 1981a; Holman 1983), but both Flynn and Holman concluded that the complex had little historic importance.

As discussed above, this may have been the site of the original Arata ranch home prior to the family's moving to the present Arata Ranch complex about a half mile to the south. A house from the first location (in Section 27) was moved to the Arata Ranch in the mid-1980s and was placed on the old railroad grade.

Aside from a cattle corral, evidence of structures and features in in the southwest quarter of Section 27 have been thoroughly eradicated and it appears likely that most debris was hauled away. No evidence of significant trash dumps or privies were noted.

7.0 FINDINGS AND CONCLUSIONS

During this archaeological survey, three alternative alignments were inspected, as well as likely areas immediately adjacent to the alignments. One prehistoric site, one historic ranch complex, two historic road segments, and a windmill which may be over 50 years of age are within or near one or more of the project alignments.

The National Register of Historic Places and the California Register of Historical Resources have essentially the same criteria for the evaluation of the importance of an historic or prehistoric resource:

The Code of Federal Regulations, Title 36, Part 60, lists the criteria used to evaluate properties for the National Register. An eligible property must have integrity of location, design, setting, materials, workmanship, feeling, and association and meet at least one of the following four criteria:

Criterion A -- associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B -- associated with the lives of persons significant in our past; or

Criterion C -- embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D -- has yielded, or may be likely to yield, information important in prehistory or history.

CA-CCO-437

The location of prehistoric archaeological site, CA-CCO-437, recorded in 1981, lies along the northern border of the project area and within a project alignment. This site when originally recorded consisted of a scatter of five groundstone artifacts, which were collected in 1981. Two subsequent surface surveys in 1983 and 2002 failed to find any additional artifacts, and in 1999 backhoe testing in the portion of the site immediately to the north of the project boundary failed to reveal any evidence of a subsurface midden deposit or additional artifacts. During the present survey, two possible hammerstones--cobbles exhibiting end and edge battering--were found in the recorded location of the site. No other modified artifactual materials were observed. Prehistoric sites are normally evaluated under Criterion D, information important in prehistory. Although this site appears to be highly ephemeral with few cultural materials and few data categories (and consequently not eligible for the National Register), the area of the site recorded within the project study area has not been subjected to archaeological testing for presence or absence of cultural materials. No definitive conclusions with regard to its National Register eligibility can be made until such testing is undertaken.

Road Segments A/HC-145 and A/HC-146

Two linear features--both short segments of old roads--are crossed by the southernmost alignment. These road segments may be part of roads associated with transportation to and from the historic mining area to the south, especially the communities of Nortonville and Somersville, although no specific historic information related to these roads has thus far been found. Although both segments, especially A/HC-145, appear to have relatively good integrity, it is unlikely that on their own, either road segment would qualify for the National Register. If, however, more of these roads are eventually recorded and their integrity and historic associations determined, it is possible that they may be considered contributing elements of a larger historic feature.

A/HC-147, a Windmill

A windmill stands near the north boundary of the project area near the route of the north and central alignments. The windmill, built by the Aermotor Company of Chicago, could date at minimum to 1964, but is probably close to or older than 50 years. It is not presently functioning and has two broken blades, but appears to have relatively good integrity. This object can be evaluated under Criterion C. Although the windmill, used primarily for pumping water especially for stock watering, is a mechanism that has been important to ranching in the American West, this type of windmill is hardly unique. It was produced in very large numbers between 1904 and 1964 and examples of its type are probably fairly common in California and the American West. In and of itself this particular windmill lacks importance, and it is unlikely that it would be eligible for the National Register.

One historic ranch complex, the Abrams/Thomas Ranch buildings, is located within and adjacent to the northern alignment and very near the central alignment. This complex was evaluated in a separate Historic Architectural Survey Report and found eligible for the National Register of Historic Places.

Although USGS topographic maps and a 1981 archaeological report indicate that there were structures in the southwest quarter of Section 27, all buildings have been removed or destroyed. Aside from scattered concrete chunks and some relatively modern debris, no evidence of an historic site was found. At least some of the concrete may have been remnants of transmission line tower foundations.

8.0 RECOMMENDATIONS

Prehistoric site CA-CCO-437 is recorded along the northern boundary of the study area and within or very near one of the project alignments. Backhoe trenching in 1999 within the recorded site just north of the study area boundary located no subsurface midden or other artifactual deposits. Two possible cobble hammerstones were found on the surface in the project area during the current survey. Based on surface observation and 1999 backhoe trenching, it is very likely that there is no subsurface deposit within the recorded site boundaries in the study area. To determine with certainty, however, that no archaeological deposit exists in the site within the present study area, additional backhoe trenching should be undertaken. A definitive evaluation of the site cannot be undertaken without such testing.

Only short segments of two historic roads were recorded. Their exact length and configuration is unknown. If these road segments will be impacted by future construction, it is recommended that additional survey of the roads be undertaken to more thoroughly record their location, condition, and integrity. In addition, more detailed historic research should be conducted, particularly oral history interviews, to enable a more detailed evaluation of the historic importance of these roads.

Although the windmill may lack historic importance based on National Register or California Register criteria, such objects have some intrinsic historic interest. If impacts to this feature cannot be

avoided, it is recommended that it be offered to individuals or organizations that might have an interest in preserving it.

Although no historic archaeological site was recorded in the eastern part of the project area (southwest quarter of Section 27), where historic maps show that structures once existed, it is always possible that buried artifact deposits or features such as privies might exist. If unexpected subsurface trash dumps or other features are found during future construction, an archaeologist should be called to evaluate them.

If during the course of project construction, buried or subsurface archaeological deposits of either a prehistoric or historic nature are found anywhere within the study area, an archaeologist should be consulted.

Finally, if the final alignment chosen for the Buchanan Road Bypass differs significantly from those subjected to archaeological survey for this report, additional archaeological survey of the new alignment should be undertaken.

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Appendix 1:

Archaeological Site Records

State of California ♉ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-07-000220
HRI #
Trinomial Ca-CCo-748H
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

Page 1 **of** 4 ***Resource Name or #:** (Assigned by recorder) A/HC-147

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted** ***a. County:** Contra Costa

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Antioch South 7.5' **Date** 1953 (revised 1980) **T** 2N; **R** 1E; NE 1/4 **of** SE 1/4 **of Sec** 28 **B.M. MD**

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10, 4205080m N; 599880mE Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Approximately 1/2 mile south of Buchanan Road; ~3000' west of Somersville Road and approximately 300' north of the electricity transmission lines marked on USGS 7.5' topographic map; at the base of the hills in the mouth of a drainage emptying into flatlands.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A dilapidated windmill. The windmill is on metal struts and stands about 20' high. Two metal blades are broken. The windmill's tail retains the manufacturer's logo, "The Aermotor Co., Chicago." Adjacent to the windmill, an approximately 6' x 6' metal tank rests on horizontal 12" x 12" beams.

***P3b. Resource Attributes:** (List attributes and codes): HP11, AH10

***P4. Resources Present: X** Structure

P5a. Photograph or Drawing (see continuation sheet)

***P6. Date Constructed/Age and Source:** Historic; probably 1950s (see continuation sheet)

***P7. Owner and Address:** A. D. Seeno , 4021 Port Chicago Highway, P.O. Box 4113, Concord, CA 94524

***P8. Recorded by:** S. Baker, D. Shoup, M. Smith, Archaeological/ Historical Consultants, 609 Aileen St., Oakland, CA 94609

***P9. Date Recorded:** July 11, 2002

***P10. SurveyType:** Reconnaissance Survey

***P11. Report Citation**: Baker, Suzanne, 2002, Archaeological Survey of the Buchanan Road Bypass Project, Contra Costa County, California.

***Attachments:** ☐NONE ☐☒Location Map ☐☒Continuation Sheet ☐Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☐ Other (List):

P6. (Cont.)

The Aermotor Company, founded in 1883 by LaVerne Noyes, was manufacturing a metal windmill, used mainly for pumping water, by 1888. It had built a huge manufacturing plant in Chicago by 1904, and the company quickly became the "dominate supplier of windmills throughout the world" (Aermotor Company 2002). Although long since moved from its original Chicago location, the company is still in business today. One source estimates that the Aermotor Company built over 800,000 windmills (Andersen 2002). The Aermotor is probably one of the most common windmills found in the American West. The company's manufacturing operation moved to Oklahoma in 1964 (Aermotor Company 2002). It is clear that the windmill could have been built anytime between 1904 and 1964, when the company was still in the Chicago. Based on its condition, we can only guess that it was erected sometime in the 1950s. It is likely that it is close to 50 years of age or older. This may once have been a part of the Arata Ranch operation.

The windmill is not presently functioning and has two broken blades, but appears to have relatively good integrity. Although the windmill, used primarily for pumping water especially for stock watering, is a mechanism that has been important to ranching in the American West, this type of windmill is hardly unique. It was produced in very large numbers between 1904 and 1964 (800,000 are estimated) and examples of its type are probably fairly common in California and the American West. In and of itself this particular windmill lacks importance, and it is unlikely that it would be eligible for the National Register of Historic Places.

Windmill,
facing north

Windmill,
facing north

State of California ♿ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page 4 **of** 4`

***Resource Name or #** (Assigned by recorder) A/HC-147

***Map Name:** Antioch South 7.5′

***Scale:** 1:24,000

***Date of map:** 1953, photorevised 1980

State of California ♿ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-07-002564
HRI #
Trinomial CA-CCo-747H
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 6 ***Resource Name or #:** (Assigned by recorder) A/HC-145

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ☐ **Unrestricted** ***a. County:** Contra Costa **and**

***b. USGS 7.5' Quad** Antioch South 7.5' **Date** 1953(revised 1980) **T** 2N; **R** 1E; SE 1/4 **of** SW 1/4 **of Sec** 28 and NE 1/4 NW1/4 of Sec. 33; **B.M. MD**

c. Address _____ City _____ Zip _____

d. UTM Zone 10, observed north end: 4204640mN; 599140mE; observed south end 4204260mN; 599160mE

e. Other Locational Data: Approximately 1500m west of Somersville Road and approximately 600m south of electricity transmission lines marked on USGS 7.5' topographic map; in the third major drainage west of Somersville Road. ~340-380' elevation.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

A segment of an old dirt road that runs south toward the Nortonville-Somersville area. It is approximately 6-10 feet wide where observed on the east side of a seasonal; drainage. Approximately 600 linear feet of the road could be seen from the point where it was encountered. The road can be seen in the distance continuing on the slopes to the south. To the north it ends at a newer graded ranch road. A sandstone boulder with graffiti "CARU…STA…" was observed in the drainage immediately west of the road and about ~300' north of a large pepper tree that grows in the road.

***P3b. Resource Attributes:** HP33, HP37, AH7

***P4. Resources Present:** Site

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: July 11, 2002

***P6. Date Constructed/Age and Source:** Historic; age unknown, appears over 50 years. A large pepper tree grows in the road.

***P7. Owner and Address:**
William Wayne Thomas
4723 Suzanne Drive
Pittsburg, CA 94565

***P8. Recorded by:** S. Baker, D. Shoup, M. Smith, Archaeological/ Historical Consultants, 609 Aileen St., Oakland, CA 94609

***P9. Date Recorded:** July 11, 2002

***P10. SurveyType:** Reconnaissance Survey. The survey followed a proposed east-west road alignment that crossed the north-south running historic road segment. The old road was not, therefore, followed for much distance north or south of the alignment.

***P11. Report Citation**: Baker, Suzanne, 2002, Archaeological Survey of the Buchanan Road Bypass Project, Contra Costa County, California.

***Attachments:** ☒Location Map ☒Continuation Sheet ☒Linear Feature ☒ Sketch Map Other (List::

State of California ♦ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LINEAR FEATURE RECORD

Primary # P-07-002564
HRI #
Trinomial CA-CCo-747H

Page 2 **of** 6 **Resource Name or #:** (Assigned by recorder) A/HC-145

L1. Historic and/or Common Name: Thomas Ranch Road Segment #1

L2a. Portion Described: ☐ Entire Resource X Segment ☐ Point Observation **Designation**
Location of point or segment:

UTM Zone 10; observed north end: 4204640mN; 599140mE; observed south end 4204260mN; 599160mE
Other Locational Data: Approximately 4500' west of Somersville Road; north end is approximately 1200' south of electricity transmission lines marked on USGS 7.5' topographic map; in the third major drainage west of Somersville Road. ~320-340' elevation. Located on the Wayne Thomas Ranch.

L3. Description: A segment of an old road, ~6-10' wide. Approximately 600 linear feet of road were observed. Most of the segment runs along the east side of and slightly above a seasonal drainage. At its north end, it terminates at a newer, currently used, graded ranch road. To the south of the recorded segment, the old road could be observed in the distance continuing to the south along relatively steep slopes. The road exhibits such engineering features as well-developed slope cuts. The road is overgrown with grass and does not appear to have been used by vehicles for many years.

L4e. Sketch of Cross-Section (include scale) Facing:

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

a. **Top Width** ~6-10'
b. **Bottom Width**
c. **Height or Depth**
d. **Length of Segment** ~1200'

L5. Associated Resources: A sandstone boulder with graffiti is located very near the road on the west side of a seasonal stream bed. It reads "CARU…STA…" The graffiti is somewhat repatinated and does not appear to be recent.

L6. Setting: Just above the east side of a drainage and on slopes. The terrain is composed of rolling grassy hills.

L7. Integrity Considerations:

Recorded segment appears to be in relatively good condition and has not been used for many years. A large pepper tree grows in the road at one point.

L8a. Photograph, Map or Drawing

L8b. Description of Photo, Map, or Drawing (View, scale, etc.)

L9. Remarks: Road may continue to the Nortonville-Somersville vicinity to the south.

L10. Form Prepared by: S. Baker, Archaeological/Historical Consultants, 609 Aileen St., Oakland, CA 94609

L11. Date: July 7, 2002

Road segment, facing south/southwest.
Pepper tree in drainage in background.

Road cut on slope in mid-ground. Facing south/southeast.

Overview of rocks with graffiti. Facing north/northwest.

Detail of graffiti ("CARU…/STA…)

Page 6 of 6 intentionally removed because it contains confidential information.

State of California ♦ The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-07-002565
HRI #
Trinomial CA-CCo-748H
NRHP Status Code

Other Listings
Review Code Reviewer Date

Page 1 **of** 4 ***Resource Name or #:** (Assigned by recorder) A/HC-146

P1. Other Identifier: ***P2. Location:** ○ **Not for Publication** ○ **Unrestricted**

***a. County:** Contra Costa

and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Antioch South 7.5' **Date** 1953(revised 1980) **T** 2N; **R** 1E; SW 1/4 **of** SE 1/4 **of Sec** 28 **B.M.** MD

c. Address _____ City _____ Zip _____

d. UTM: (Give more than one for large and/or linear resources) Zone 10, observed north end: 4204740mN; 599460mE; observed south end 4204500mN; 599600mE

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate)

f. Approximately 1200m west of Somersville Road and approximately 600'-2400' south of electricity transmission lines marked on USGS 7.5' topographic map; runs at the base of the hills along the east side of the second major drainage west of Somersville Road.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This is a ~600' long segment of a north-south running old dirt road. It is approximately 6-10 feet wide where observed on the east side of a drainage and does not appear to have been recently used. A graded ranch road is located to the west of the same creek (marked on the USGS 7.5' topographic map). The south end of the recorded historic road segment intersects with another graded road running from the east, as does the north-south graded road. At this point the roads merge and a graded road continues southward up the drainage. In the distance, on slopes to the south, can be seen a road cut, but it is unknown whether this is a continuation of the graded road or the historic segment. To the north of the intersection, the road segment hugs the base of the hills to the north for a distance of about 600'.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

***P3b. Resource Attributes:** (List attributes and codes): HP33, HP37, AH7

***P4. Resources Present** Site X

P5b. Description of Photo: (view, date, accession #)

***P6. Date Constructed/Age and Source:** Historic; age unknown, appears over 50 years

***P7. Owner and Address:** A. D. Seeno , 4021 Port Chicago Highway, P.O. Box 4113, Concord, CA 94524

***P8. Recorded by:** S. Baker, D. Shoup, M. Smith, Archaeological/ Historical Consultants, 609 Aileen St., Oakland, CA 94609

***P9. Date Recorded:** July 11, 2002

***P10. SurveyType:** Reconnaissance Survey

***P11. Report Citation**: Baker, Suzanne, 2002, Archaeological Survey of the Buchanan Road Bypass Project, Contra Costa County, California, Report for RBF Consulting, Walnut Creek.

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

State of California ♦ The Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI #
LINEAR FEATURE RECORD
Trinomial

Page 2 **of** 4 **Resource Name or #:** (Assigned by recorder) A/HC-146

L1. Historic and/or Common Name:

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation**

Location of point or segment:) **T** 2N; **R** 1E; SW 1/4 **of** SE 1/4 **of Sec** 28 **B.M. MD**

Observed north end: 4204740mN; 599460mE; observed south end 4204500mN; 599600mE; approximately 1200m west of Somersville Road and approximately 600'-2400' south of electricity transmission lines marked on USGS 7.5' topographic map; runs at the base of the hills along the east side of the second major drainage west of Somersville Road.

L3. Description: (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.)

This is a ~600' long segment of a north-south running dirt road. It is approximately 6-10 feet wide where observed on the east side of a drainage and does not appear to have been recently used. A modern graded ranch road is located to the west of the same creek (marked on the USGS 7.5' topographic map). The south end of the recorded historic road segment intersects with another graded road running from the east, as does the north-south graded road. At this point the roads merge and a graded road continues southward up the drainage. In the distance, on slopes to the south, can be seen a road cut, but it is unknown whether this is a continuation of the graded road or the historic segment. It was not field inspected. To the north of the intersection, the old road segment hugs the base of the hills to the north for a distance of about 600'.

L4e. Sketch of Cross-Section (include scale) Facing:

L4. Dimensions: (In feet for historic features and meters for prehistoric features)

- **a. Top Width** 6-10'
- **b. Bottom Width**
- **c. Height or Depth**
- **d. Length of Segment:** ~600'

L5. Associated Resources:

L6. Setting: Segment is on the east side of a large drainage. Surrounding terrain consists of rolling, hilly grassland.

L7. Integrity Considerations: Segment does not appear to have been used for many years. Is grass covered.

L8a. Photograph, Map or Drawing:

L8b. Description of Photo, Map, or Drawing (View, scale, etc.)

L9. Remarks: Segment may have been part of a road system to the Somersville-Nortonville area, used by local ranchers.

L10. Form Prepared by: Suzanne Baker, Archaeological/Historical Consultants, 609 Aileen St., Oakland, CA 94609

L11. Date: July 11, 2002

Facing north; historic road segment in foreground at base of hills. Graded road in left background.

Facing south. Intersection of historic road and graded road in lower right foreground.
Road cut on upper left background may be historic road continuation.

APPENDIX 2:

HISTORIC RESOURCE EVALUATION REPORT OF THE ABRAMS RANCH

HISTORIC RESOURCE EVALUATION OF

THE ABRAMS RANCH,

PITTSBURG, CONTRA COSTA COUNTY, CALIFORNIA

by

William Kostura

Archaeological/Historical Consultants
609 Aileen St.
Oakland, CA 94609

Submitted to:

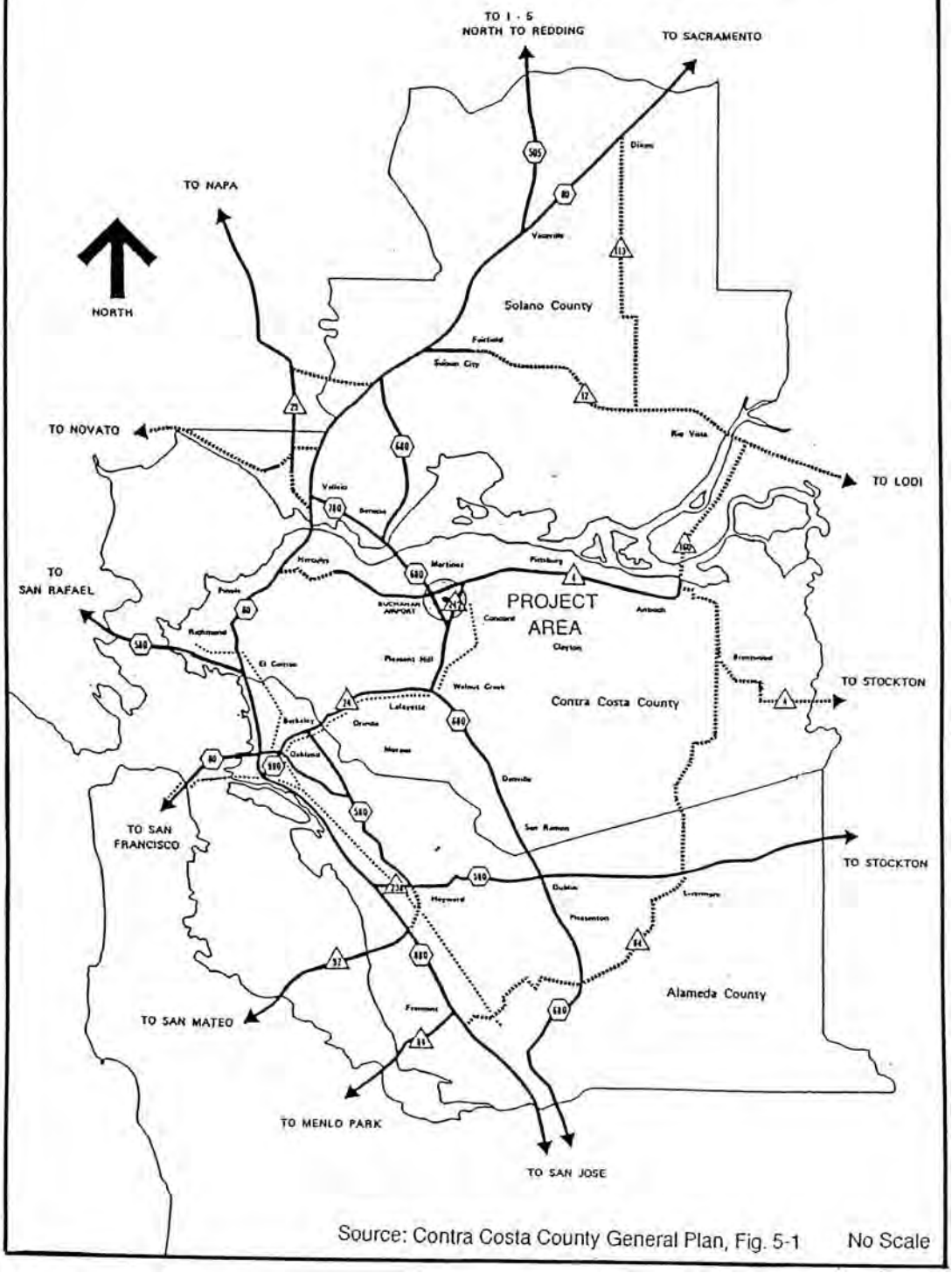
RBF Consulting
1981 N. Broadway
Walnut Creek, CA 94596

September 2002

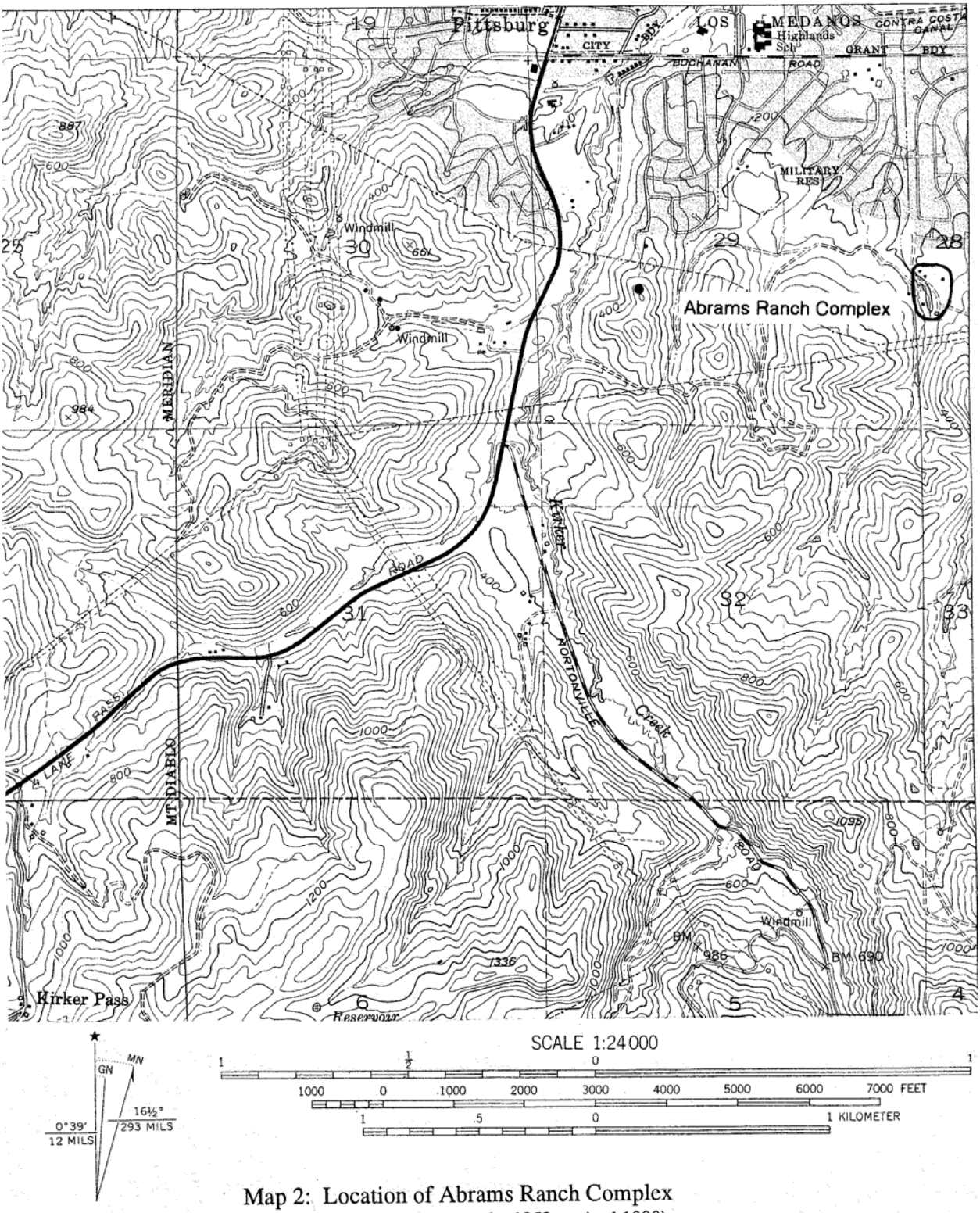
TABLE OF CONTENTS

Map 1:

REGIONAL SETTING OF PROJECT IN
SAN FRANCISCO BAY AREA
Buchanan Road Bypass
City of Pittsburg, California



Source: Contra Costa County General Plan, Fig. 5-1 No Scale



Map 2: Location of Abrams Ranch Complex
(USGS 7.5' Clayton Quadrangle, 1953, revised 1980)

SUMMARY OF FINDINGS

This report evaluates one property, the Abrams ranch buildings at 4723 Suzanne Road, Pittsburg, in Contra Costa County, California, for possible historic significance. This report finds that the property is eligible for the National Register of Historic Places.

FIELD AND RESEARCH METHODS

This property was researched and evaluated by William Kostura, an architectural historian with sixteen years of experience in the field. In early September 2002 Mr. Kostura went to the ranch to survey the property and to take photographs of the buildings. The present owner of the property, Mr. Wayne Thomas, was able to provide information regarding the uses of the various buildings, changes that have been made to them, and in some cases approximate dates of construction.

A substantial amount of information on the history of this property was readily available. At the beginning of his research Mr. Kostura interviewed Mr. Thomas, who is a first cousin of the Abrams brothers, the original developers of the ranch. More information on the Abrams family was available from Tracy Parent and Sabrina Dussau, of the Black Diamond East Bay Regional Park. This is because the Abrams family had lived in the Black Diamond coal mining area during the nineteenth century; and because an early Abrams residence was moved from Black Diamond to the ranch in 1902, and then back to Black Diamond eight decades later. The transcript of an interview with Dolores Thomas, also a cousin of the Abrams brothers, is at the Contra Costa County Historical Society in Martinez. Mr. Kostura conducted research on the historic Abrams Ranch at the Recorder's Office in Martinez, Official county maps of 1885, 1908, and 1938 shed additional light on the ownership of land during those years. Betty Maffei, of the Contra Costa County Historical Society, and a county history written in 1940, provided background information regarding ranching in Contra Costa County during the first half of the twentieth century.

HISTORICAL OVERVIEW

Cattle ranching was an important part of Contra Costa County's economy since before it was a county. Mexican land grants covered much of the land, and the early Mexican families, and their early successors, such as John Marsh (buyer of the Los Medanos rancho before the American takeover), ran cattle over the hills.

During the second half of the 19th century the economy of Contra Costa County diversified. The eastern part of the county, around Brentwood, Byron, Knightsen, Antioch, and the delta, became a major wheat growing area. Wheat farms occupied hundreds of acres, and Contra Costa County ports, such as Port Costa, became some of the most important shipping centers for wheat in the world. A number of mills for processing this wheat, such as the Starr Flouring Mills in Crockett (1885), were built. In the hills south of Pittsburg, coal deposits were discovered, and in the 1860s coal mining towns such as Nortonville, Stewartville, and

Somersville were developed. Collectively, these coal mines became known as the Black Diamond mines. Although the coal was not of a high grade, the closest mines that offered superior coal were in Oregon, and thus Black Diamond coal remained an important local industry well into the 20th century.

In 1902 petroleum refining became a very important part of Contra Costa County's economy. Oil wells of great capacity had been developed in Bakersfield, Los Angeles, and Coalinga, but getting that oil to markets was very difficult. As an alternative to loading the crude oil in barrels and hauling it over the coastal range by teams to southern California ports, the Standard Oil Company developed a 280 mile pipeline from Bakersfield to Richmond, in Contra Costa County. Twenty pumping stations were built along the route to force the crude oil through pipes to Standard Oil's new refinery in Richmond. Soon, Shell Oil Company and Associated Oil also built their own pipelines and Contra Costa County refineries. This industry remains important to this day.

In the 1910s the farming economy of eastern Contra Costa County was transformed with the advent of large-scale irrigation. The Balfour, Guthrie and Co. Insurance Company of San Francisco had been involved in east county agriculture since the 1880s. When the bulk of John Marsh's Los Medanos rancho, previously devoted mainly to wheat farming and cattle ranching, became available, Balfour, Guthrie and Company purchased it, subdivided the land into small farm lots, and built a vast irrigation system to bring water from the delta to these small, 20-acre farms. Soon afterward, wheat farmers in nearby Byron built their own irrigation system, and other irrigation companies also came into being. Irrigation allowed a much more intensive agriculture, one based on fruit orchards, nut orchards, and vegetables, to replace wheat and other grains that had been previously raised on the land. Produce farms, both large and small, thrived in eastern Contra Costa County until very recent times.

In the hills of western and central Contra Costa County, however, irrigation was not possible, and cattle ranching remained supreme. In her *History of Contra Costa County* (1940), Mae Fisher Purcell lists many places where cattle ranches were located during the years 1936-1940. These places included Tassajara Valley, Moraga Valley, Clayton, Pleasant Hills, Pinole Valley, Franklin Canyon, Rodeo, Blackhawk, Danville, Alamo, San Ramon, Green Valley, Diablo, Brentwood, Los Medanos, the Vasco area, and Jersey Island. Although the last four of these ranches were in the eastern part of the county, the great majority were in the hills to the west. The region's major slaughterhouse, that of the Contra Costa Meat Company, was located on Kirker Pass Road, south of Pittsburg.

No known survey has been made of surviving cattle ranches in Contra Costa County, and little information is available on the subject. Betty Maffei of the Contra Costa County Historical Society (Martinez) has some familiarity with what still survives. The Williamson ranch, in Antioch, has been preserved and is on the National Register. The Arata ranch near Antioch no longer operates as a ranch, but retains a ranch house, a barn, and other buildings. The Wood ranch, on Tassajara Road near Danville, still had many old buildings in 1988, some of which had been moved to the ranch in recent years. The Wiedemann ranch in San Ramon, still had old buildings in 1989, and by report still does. The Ginochio ranch, on Balfour Road near Antioch, is another ranch that may still have a collection of old buildings. The subject of this evaluation,

the Abrams ranch, now owned by Wayne Thomas, on Suzanne Road south of Pittsburg, retains a ranch house, two barns, a shop and vehicle shed, a scale house, and a butcher shed.

Over the past twenty years suburbanization and changing economies has eroded most of Contra Costa County's agricultural base. Both cattle ranches and produce farms are far fewer in number than they were in the first half of the twentieth century.

History of the Abrams Ranch

The Abrams ranch belonged to two brothers, Warren B. and William A. Abrams, who owned and operated it from 1901 into the early 1960s. The Abrams brothers inherited the first 480 acres in 1901 from a relative, David E. Griffith. Griffith had acquired his first 160 acres, the southwest quarter of section 29, in 1875 as a patent from the United States government. Some time during the next ten years he purchased the quarter section to the east (the southeast quarter of 29), and before 1894 he inherited his third section (the southwest quarter of 28) from a relative of his wife, named Edwards. Upon his death in 1900 these three quarter sections were inherited by his step-grandsons, Warren and William Abrams.

The Griffith, Edwards, Abrams, and Thomas families were members of an extended family with roots in Wales. Their history is closely intertwined with two areas in Contra Costa County, the area comprising this ranch and the Black Diamond coal mines a few miles to the south. The first family members emigrated from Wales to Pennsylvania in the 1850s. They next went to the Sierra foothills in California, and finally to the coal mines of central Contra Costa County, in the 1860s. It appears these family members worked variously as coal miners and as butchers; they also bought considerable amounts of property in the coal mining area (now known as Black Diamond East Bay Regional Park).

David Griffiths died in 1900, and his 480 acres of grazing land was inherited by his step-grandsons Warren and William Abrams, then ages 17 and 15, respectively. The following year John Abrams, father of Warren and William, left the family to go to the Yukon gold fields. William Abrams dismantled their house in Stewartsville, in the coal mining area, and moved it by wagon several miles to the northwest, to what had been the Griffith ranch. They moved with their mother to the ranch and began raising cattle and hay, a career they would follow for the rest of their lives.

According to Wayne Thomas, a cousin of the Abrams brothers and the current owner of the ranch, cattle raising was the main focus of the ranch. Raising hay nevertheless was practiced for many years. Before about 1920 the Abrams' hay was taken to Pittsburg, where it was transported to markets by rail. After 1920, their hay was marketed locally.

The brothers acquired two more quarter sections during their lifetimes. The northwest quarter of section 33 was acquired by their mother Margaret Abrams at an unknown time (after 1908) and was deeded to the brothers in 1913. The brothers obtained the northeast quarter of section 32 sometime between 1908 and 1938. By that year the brothers owned five contiguous quarter sections, or 800 acres. For Contra Costa County in the first half of the twentieth century,

this was a medium-sized cattle ranch. The Abrams family operated the ranch until 1963, when Wayne Thomas, a cousin, took over its ownership.

DESCRIPTION OF PROPERTY

The Abrams Ranch buildings are currently a part of the 1000 acre Wayne Thomas ranch, located south of the City of Pittsburg in Contra Costa County. The ranch buildings are located in the northwest quarter of the southwest quarter of Section 28 (T2N, R1E). Bordering on the ranch lands and about 300' north of the ranch buildings is a post-World War II residential subdivision that is part of the City of Pittsburg. A city street, Suzanne Road, winds through this subdivision in a generally southerly direction, and upon reaching the ranch property becomes an access road into the ranch. This access road into the ranch is paved with asphalt along its northern stretch, but to the south it is gravel. The old ranch house is the first building one encounters upon entering the ranch property. Somewhat to the south of this house is where the barns and other ranch buildings are located. A modern-era house (built 1980s) is located to the east of this group and is separate from them, being situated at a higher elevation.

The surrounding ranch lands consist of gently rolling hills such as are commonly found throughout western Contra Costa County. A natural gully or arroyo winds northward from these hills through the northern portion of the ranch, and alongside the ranch buildings. The hills are grassland, used for grazing, and the only landscaping is several pepper trees located around the buildings. Most of these are mature pepper trees planted by the Abrams brothers, but two of the trees are volunteers. A row of transmission towers stand on the hills south of the ranch buildings.

All but two of the Abrams Ranch buildings appear to be over fifty years old and are contributors to the historic property. These consist of a ranch house, two hay barns, a scale house, a shop and vehicle shed, a butcher shed, and a cabin. In addition to these there are a number of contributing structures, including a windmill, two water troughs, and a considerable amount of fencing and corrals. Non-contributing buildings include a house dating from the 1980s and a sheet-metal shed from the early 1960s.

The buildings are described individually below:

Craftsman style ranch house

Warren Abrams built this Craftsman-style house in 1921, when he was married. This rectangular one-story wood frame house faces north and measures thirty feet in width by forty-five feet in length. The house has a concrete foundation. The roof is front-gabled, is covered with wood shingles, overhangs the walls on all sides, has plain bargeboard with carved ends and exposed rafters, and is supported by knee braces in the gables. The cladding is v-groove siding. A profiled belt course runs around the house five and one-half feet off the ground. A projecting entrance porch on the north side stretches across 60% of the width of the house and has five wooden steps leading to a wood deck, a wooden railing with newel posts, and tapering columns supporting a gabled roof. The porch roof is treated similarly to the main roof of the house, with

knee braces and carved bargeboard ends. On the west side of the house is another projection (two feet by twelve feet) that also has a gabled roof with knee braces.

The north (front) façade has two pairs of double-hung windows with upper sash divided into multiple lights and plain board trim. Windows in the other facades are one-over-one double hung sash, variously singlet, paired, and tripartite. The front door is original, with eight small upper lights and a lower panel. The house has high integrity of elements, but is in fair-to-poor condition, due to a lack of recent maintenance.

The next building to the south is a one-story sheet metal storage building with a gabled roof. This dates from the early 1960s. Near this building is a driveway that goes east up a hill to a two-story, 1980s residence. Neither of these buildings is a contributor to the historic property. Immediately south of the sheet metal building are the following buildings, all contributors:

Shop and vehicle shed

This one story building measures about twenty feet by sixty feet, and is clad in vertical wood planks. At the north end is a vehicle shed with two open bays; this section has a shed roof covered with corrugated sheet metal. Behind this section is a shop and tool storage section with a gabled roof covered with corrugated sheet metal. This section has two rolling wood doors suspended from an iron rail, with original iron hardware. Except for the corrugated sheet metal roof, this building has high integrity.

Cabin

Just south of the shop and vehicle shed is a cabin that measures approximately twelve by eighteen feet. It has a new concrete foundation, a gabled roof with wood shingles, rustic siding, an original wooden door with four panels, and plain fascia board trim beneath the gable. The interior is finished with vertical wood boards. The siding has been removed from the north side of the house.

Butcher shed

Just west of the cabin is a one-story butcher shed that measures approximately nine feet by eighteen feet, has a steep gabled roof with wood shingles, and is clad in vertical plank siding. On the north and south sides the walls are open above the six-foot level. A wooden beam suspended from the ridgeline runs through the building, and a metal rail with many meat hooks is suspended from this rail. The floor is made of wood. The shed has high integrity of elements, but is in poor condition.

Hay barns

South and southwest of the cabin and butcher shed are two large barns situated some distance apart from each other. These barns are similar to each other in their use, materials, and design. Both have steeply gabled roofs, rest upon concrete foundations, and are clad in vertical board siding. Each is used as a hay barn, and has three main sections. The central section is a

hay storage area that is located directly beneath the ridgeline of the roof, runs the length of the barn, and is defined by wooden walls about four feet in height. Feeding troughs made of wood are located on either side of the hay storage area; these also run the length of each barn. The outer sections are open areas for cows to feed from.

Square posts support roof beams in each barn. In one barn (that further to the south), purlins rest upon the roof beams, and wood shingles are nailed to the purlins. In the other barn, a sheet metal roof has replaced the purlins and shingles. Attached to the more southerly of the barns is a shed-roofed passageway for cows. This passageway connects a corral on the north side of the barn to another corral on the south side.

Both barns are in very good condition. On the southern barn, the south façade is open, possibly due to the removal of siding. Aside from this, nearly all of the siding appears to be original on each barn. Integrity of these barns is generally very good.

Scale house

The southernmost building in this ranch complex is a scale house. This is a small (twelve feet by twenty-one feet) one story wooden structure that houses a scale for weighing cattle. This scale house has an opening on its east side to receive cattle from a runway, and is open on its north side to allow cattle to go into an adjacent corral. The building is otherwise clad in vertical plank siding. Square posts support a corrugated sheet metal roof. On the north side, wood siding fans out from the tops of the posts to lend visual support to the roof.

The scale is flat, measures about seven feet by fifteen feet, and is set into the ground. A scale box with weights is located to one side. This scale was manufactured by the Howe Scale Company of San Francisco. City directories show that Howe was in business in San Francisco at least during 1918-1929.

The scale is still functional, the building is in excellent condition, and aside from the sheet metal roof, integrity is very high.

Other structures

An extensive system of wooden corrals and fencing can be found to the north and south of the more southerly barn and connects that barn with the scale house. Although it is unknown to what degree the configuration of this system may have changed over the years, it appears that they date to the period of significance. Despite weathering, they are in very good condition.

Two concrete water troughs can be found on the ranch. Each is inscribed with the date of construction, and one is also inscribed with the names of the Abrams brothers. A trough dated 1927 is located between the cabin and the barns, and another trough, dated 1949, is located within a corral next to one of the barns.

A metal windmill can be found near the older of the two water troughs. This appears to date to the 1950s, definitely predates the 1960s, and is within the period of significance. It appears to be in good condition.

NATIONAL REGISTER OF HISTORIC PLACES SIGNIFICANCE EVALUATION

The National Register of Historic Places and the California Register of Historical Resources have essentially the same criteria for the evaluation of the importance of an historic or prehistoric resource:

The Code of Federal Regulations, Title 36, Part 60, lists the criteria used to evaluate properties for the National Register of Historic Places (NRHP). An eligible property must have integrity of location, design, setting, materials, workmanship, feeling, and association and meet at least one of the following four criteria:

Criterion A -- associated with events that have made a significant contribution to the broad patterns of our history; or

Criterion B -- associated with the lives of persons significant in our past; or

Criterion C -- embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

Criterion D -- has yielded, or may be likely to yield, information important in prehistory or history.

Any National Register of Historic Places significance evaluation involves a number of overlapping logical steps. First, the appropriate historic theme must be chosen and a determination made as to whether the cultural resource in question is a good representative of this theme. Second, a determination must be made regarding both the period of time when the resource may have been historically significant, as well as the level (local, state, or national) of significance. Third, the category of historic property (district, site, building, structure, or object) must be decided upon and its physical boundaries defined. Finally, the NRHP significance criteria must be applied to the resource and its level of integrity determined. Only when each of these steps has been followed can a proper determination be made as to whether the cultural resource in question is eligible for the NRHP.

Theme. Since cattle ranching was the central focus of the Abrams Ranch, the key historic theme for this property is agriculture, specifically ranching.

Level of Significance. Cattle ranching is clearly one of the most important aspects of the economic history of Contra Costa County. This is especially true for the central and western parts of the county that are situated on rolling hills. The level of significance is, therefore, local.

Period of Significance. Since the Abrams Ranch functioned as a cattle ranch, owned by the same people—Warren and William Abrams--from 1901 to 1963, and all of the historic

buildings date to the Abrams tenure, the period of significance is from 1901, when the Abrams brothers acquired the ranch, to 1963, when it passed out of Abrams family ownership.

Category of Historic Property and Boundaries. The category of property is "building," which includes all the pre-1950 buildings at this location. The boundaries of the eligible property include the area occupied by the craftsman style house, the shop and vehicle shed, the cabin, the butcher shed, the two barns, the scale house and scale, the wooden corrals and fencing, the water troughs, and the windmill. The 1960s sheet metal building and the 1980s stucco residence are non-contributing elements of the historic property.

National Register Criteria. The appropriate criteria of evaluation for this property are Criteria A and C. This property appears to qualify under Criterion A--associated with events that have made a broad contribution to the pattern of Contra Costa County history--in that it is an important representative of 20th Century ranching, which made a significant contribution to the development of Contra Costa County's local community and economy. It also appears to qualify for the NRHP under Criterion C, as a collection of buildings that illustrates the uses and function of an early-to-mid-20th century cattle ranch.

Integrity. The Abrams ranch complex has suffered the loss of one important building since 1963. The Stewartsville house that William Abrams dismantled and moved to the ranch in ca. 1902 was moved to Black Diamond East Bay Regional Park in 1980. Despite this loss, a ranch house still exists on the ranch property. This is the craftsman-style house that Warren Abrams built in 1921.

The 1921 ranch house, the two barns, the scale house, the shop and vehicle shed, and the butcher shed form a complete ensemble of ranching-related buildings. All of them are over fifty years old, and all appear to date to the 1930s or earlier. Three of these buildings – the shop and vehicle shed, the scale house, and one barn – have replacement sheet metal roofs. Otherwise, all of these buildings have high integrity. The corrals are of uncertain date, but from their materials and weathered surfaces appear to date to the period of significance. The two concrete water troughs also date to the period of significance. The windmill probably dates to the 1950s, but it was built during the Abrams brothers' ownership, and also falls within the period of significance.

Two buildings date from after 1963, when Wayne Thomas acquired the ranch. These are the sheet metal storage shed, which was framed by one of the Abrams brothers and was finished by Mr. Thomas; and the stucco-clad, two-story house, built in the 1980s.

While a number of other cattle ranches in the county also survive to the present, it is unlikely that very many of them have a finer collection of old ranch buildings, or better overall integrity, than does the Abrams ranch complex. Six of the seven aspects of integrity—location, design, materials, workmanship, feeling, and association—are fair to very good. The setting is only fair due to the encroachment of a housing subdivision just to the north of the ranch buildings.

In sum, it appears that the Abrams Ranch complex is eligible for the National Register of Historic Places because of its importance as a good example of early 20th century ranch buildings, illustrative of western Contra Costa County's ranching history.

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2002 (October 17) Deeds Vol. 251:319. Margaret J. Abrams to Warren and William Abrams. . On file, County Recorders Office, Martinez.

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Parent, Tracy (Black Diamond East Bay Regional Park)

2002 (August 7) Telephone interview by William Kostura

Purcell, Mae Fisher

1940 *History of Contra Costa County*. Berkeley, CA: Gillick Press,

Thomas, Dolores

1999 (September) Interview by Nilda Rego. On file, Contra Costa County Historical Society.

Thomas, Wayne

2002 (August 5) Interview by William Kostura.

Appendix:
Historic Resource Evaluation Form

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # _____
HRI # _____
Trinomial _____
NRHP Status Code 3S
Other Listings _____
Review Code _____ Reviewer _____ Date _____

Page 1 of 17 ***Resource Name or #:** (Assigned by recorder) Warren and William Abrams ranch

P1. Other Identifier: Wayne Thomas Ranch
P2. Location: ☐ **Not for Publication** ■ **Unrestricted** ***a: County** Contra Costa
and (P2c,P2e, and P2b or P2d. Attach Location Map as necessary.)
*b. **USGS 7.5' Quad** Antioch South, and Clayton **Date** 1973 **Township and Range**: see item "e," below
c. Address 4723 Suzanne Road City Pittsburg Zip 94565
d. UTM: (Give more than one for large and/or linear resources) Zone 10; 598600mE/4205000 mN
*e. Other Locational Data: Township and Range:
NW 1/4 of the SW 1/4 of Section 28; Mount Diablo Base Meridian
***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)
***P3b Resource Attributes:** (List attributes and codes) HP 33 – cattle ranch

The Wayne Thomas ranch currently consists of about 1000 acres of land. The portion of this ranch which belonged to the brothers Warren and William Abrams from 1901 into the early 1960s, and which form the historic ranch property that is being evaluated here, consists of 800 acres in five contiguous quarter-sections of land. Those quarter sections are as follows: the southwest quarter of section 28, the southeast quarter of section 29, the southwest quarter of section 29, the northeast quarter of section 32, and the northwest quarter of section 33, all in Township 2 North, Range 1 East. Nearly all of this land remains undeveloped and is used for grazing. A cluster of buildings, including two houses, two barns, and several other ranch buildings, can be found in the southwest quarter of section 28. The ranch is bordered on the immediate north by a post-World War II

(See Continuation Sheet, page 2.)

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

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)

P5b. Description of Photo: (View, date, accession #)
Photo 1. View looking south through the Abrams ranch. August 2002.
***P6. Date Constructed/Age and Source:** ■ Historic ☐ Prehistoric ☐ Both
1900s-1940s. Various sources.
***P7. Owner and Address:**
Wayne Thomas
4723 Suzanne Road
Pittsburg, CA 94565
***P8. Recorded by:** (Name, affiliation, and address)
William Kostura,
4247 Terrace Street
Oakland, CA 94611
***P9. Date Recorded:**
September 2002
***P10. Survey Type:** (Describe)
intensive

P11. Report Citation*: (Cite survey report and other sources, or enter "none".) William Kostura, "Historic Resource Evaluation of the Abrams Ranch, Pittsburg, Contra Costa County, California," September 2002.

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

P3a, Description (Continued from Primary Record):

residential subdivision that is part of the City of Pittsburg. A city street, Suzanne Road, winds through this subdivision in a generally southerly direction, and upon reaching the ranch property becomes an access road into the ranch. This access road into the ranch is paved with asphalt along its northern stretch, but to the south it is gravel. The houses and ranch buildings are located a short distance – less than a quarter mile – from the place where the subdivision ends and the ranch property begins. The old ranch house is the first building one encounters upon entering the ranch property. Somewhat to the south of this house is where the barns and other ranch buildings are located. A modern-era house (built 1980s) is located to the east of this group and is separate from them, being situated at a higher elevation.

The ranch consists of gently rolling hills such as is commonly found throughout western Contra Costa County. A natural gully or arroyo winds northward from these hills through the northern portion of this ranch, and alongside the ranch buildings. The hills are grassland, and the only landscaping is several pepper trees located around the buildings. Most of these are mature pepper trees planted by the Abrams brothers, but two of the trees are volunteers. A row of transmission towers stand on the hills south of the ranch buildings.

All but two of the buildings appear to be over fifty years old and are contributors to the historic property. These consist of a ranch house, two hay barns, a scale house, a shop and vehicle shed, a butcher shed, and a cabin. In addition to these there are a number of contributing structures, including a windmill, two water troughs, and a considerable amount of fencing and corrals. Non-contributing buildings include a house dating from the 1980s and a sheet-metal shed from the early 1960s.

The buildings are described individually below:

Craftsman style ranch house

This rectangular one-story wood frame house faces north and measures thirty feet in width by forty-five feet in length. The house has a concrete foundation. The roof is front-gabled, is covered with wood shingles, overhangs the walls on all sides, has plain bargeboard with carved ends and exposed rafters, and is supported by knee braces in the gables. The cladding is v-groove siding. A profiled belt course runs around the house five and one-half feet off the ground. A projecting entrance porch on the north side stretches across 60% of the width of the house and has five wooden steps leading to a wood deck, a wooden railing with newel posts, and tapering columns supporting a gabled roof. The porch roof is treated similarly to the main roof of the house, with knee braces and carved bargeboard ends. On the west side of the house is another projection (two feet by twelve feet) that also has a gabled roof with knee braces.

The north (front) façade has two pairs of double-hung windows with upper sash divided into multiple lights and plain board trim. Windows in the other facades are one-over-one double hung sash, variously singlet, paired, and tripartite. The front door is original, with eight small upper lights and a lower panel. The house has high integrity, and is in fair-to-poor condition.

(See Continuation Sheet, page 3.)

P3a, Description (Continued):

The next building to the south is a one-story sheet metal storage building with a gabled roof. This dates from the early 1960s. Near this building is a driveway that goes east up a hill to a two-story, 1980s residence. Neither of these buildings is a contributor to the historic property. Immediately south of the sheet metal building are the following buildings, all contributors:

Shop and vehicle shed

This one story building measures about twenty feet by sixty feet, and is clad in vertical wood planks. At the north end is a vehicle shed with two open bays; this section has a shed roof covered with corrugated sheet metal. Behind this section is a shop and tool storage section with a gabled roof covered with corrugated sheet metal. This section has two rolling wood doors suspended from an iron rail, with original iron hardware. Except for the corrugated sheet metal roof, this building has high integrity.

Cabin

Just south of the shop and vehicle shed is a cabin that measures approximately twelve by eighteen feet. It has a new concrete foundation, a gabled roof with wood shingles, rustic siding, an original wooden door with four panels, and plain fascia board trim beneath the gable. The interior is finished with vertical wood boards. The siding has been removed from the north side of the house.

Butcher shed

Just west of the cabin is a one-story butcher shed that measures approximately nine feet by eighteen feet, has a steep gabled roof with wood shingles, and is clad in vertical plank siding. On the north and south sides the walls are open above the six-foot level. A wooden beam suspended from the ridgeline runs through the building, and a metal rail with many meat hooks is suspended from this rail. The floor is made of wood. The shed has high integrity and is in poor condition.

Hay barns

South and southwest of the cabin and butcher shed are two large barns situated some distance apart from each other. These barns are similar to each other in their use, materials, and design. Both have steeply gabled roofs, rest upon concrete foundations, and are clad in vertical board siding. Each is used as a hay barn, and has three main sections. The central section is a hay storage area that is located directly beneath the ridgeline of the roof, runs the length of the barn, and is defined by wooden walls about four feet in height. Feeding troughs made of wood are located on either side of the hay storage area; these also run the length of each barn. The outer sections are open areas for cows to feed from.

Square posts support roof beams in each barn. In one barn (that further to the south), purlins rest upon the roof beams, and wood shingles are nailed to the purlins. In the other barn, a sheet metal roof has replaced the purlins and shingles.

(See Continuation Sheet, page 4.)

P3a, Description (Continued):

Attached to the more southerly of the barns is a shed-roofed passageway for cows. This passageway connects a corral on the north side of the barn to another corral on the south side.

Both barns are in very good condition. On the southern barn, the south façade is open, possibly due to the removal of siding. Aside from this, nearly all of the siding appears to be original on each barn. Integrity of these barns is generally very good.

Scale house

The southernmost building in this ranch complex is a scale house. This is a small (twelve feet by twenty-one feet) one story wooden structure that houses a scale for weighing cattle. This scale house has an opening on its east side to receive cattle from a runway, and is open on its north side to allow cattle to go into an adjacent corral. The building is otherwise clad in vertical plank siding. Square posts support a corrugated sheet metal roof. On the north side, wood siding fans out from the tops of the posts to lend visual support to the roof.

The scale is flat, measures about seven feet by fifteen feet, and is set into the ground. A scale box with weights is located to one side. This scale was manufactured by the Howe Scale Company of San Francisco. City directories show that Howe was in business in San Francisco at least during 1918-1929.

The scale is still functional, the building is in excellent condition, and aside from the sheet metal roof, integrity is very high.

Other structures

An extensive system of wooden corrals and fencing can be found to the north and south of the more southerly barn and connects that barn with the scale house. Although it is unknown to what degree the configuration of this system may have changed over the years, it appears that they date to the period of significance. Despite weathering, they are in very good condition.

Two concrete water troughs can be found on the ranch. Each is inscribed with the date of construction, and one is also inscribed with the names of the Abrams brothers. A trough dated 1927 is located between the cabin and the barns, and another trough, dated 1949, is located within a corral next to one of the barns.

A metal windmill can be found near the older of the two water troughs. This appears to date to the 1940s or 1950s, definitely predates the 1960s, and is within the period of significance. It appears to be in good condition.

B1. Historic Name: Warren and William Abrams ranch
B2. Common Name: Wayne Thomas ranch
B3. Original Use: cattle ranch B4. Present Use: cattle ranch
***B5. Architectural Style:** Craftsman (house)
***B6. Construction History:** (Construction date, alterations, and date of alterations)
The craftsman style house was built in 1921. The other wooden buildings were built at unknown times between 1901 and 1963. The sheet metal storage building was framed before 1963 and was sheathed shortly after that date. The two-story house was built in the 1980s.

***B7. Moved?** ■ **No** ☐ **Yes** ☐ **Unknown** **Date:** _____ **Original Location:** _____
***B8. Related Features:** Corrals, fencing, windmill, water troughs, scale for cattle, grazing land

B9a. Architect: unknown b. Builder: unknown

***B10. Significance: Theme** cattle ranching **Area** Contra Costa County
Period of Significance 1901-1963 **Property Type** ranch **Applicable Criteria** A, C
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This cattle ranch appears to be eligible for both the National Register of Historic Places and the California Register of Historic Resources as an excellent example of a cattle ranch from the first half of the twentieth century. The ranch belonged to two brothers, Warren B. and William A. Abrams, who owned and operated it from 1901 into the early 1960s. From the time the Abrams brothers acquired the ranch through at least World War II cattle ranching was one of the most important economies of western Contra Costa County, and the Abrams ranch was one of many in the region. At present, with the growth of cities and with changing economies, it is one of an increasingly small number.

Although now numbering about 1,000 acres, the ranch occupied from 480 to 800 acres during its period of significance (1901-1963). The Abrams brothers inherited the first 480 acres in 1901 from a relative, David E. Griffith. Griffith had acquired his first 160 acres, the southwest quarter of section

(See Continuation Sheet, page 6.)

B11. Additional Resource Attributes: (List attributes and codes) x

***B12. References:**

See Continuation Sheet, page 8.

B13. Remarks:

(Sketch map with north arrow required)

See Continuation Sheet, page 16.

***B14. Evaluator:** William Kostura
Date of Evaluation: September 2002

(This space reserved for official comments.)

B10. Significance (continued from Building, Structure and Object Record):

29, in 1875 as a patent from the United States government. Some time during the next ten years he purchased the quarter section to the east (the southeast quarter of 29), and before 1894 he inherited his third section (the southwest quarter of 28) from a relative of his wife, named Edwards. Upon his death in 1900 these three quarter sections were inherited by his step-grandsons, Warren and William Abrams.

The Griffith, Edwards, Abrams, and Thomas families were members of an extended family with roots in Wales. Their history is closely intertwined with two areas in Contra Costa County: the area comprising this ranch, and the Black Diamond coal mines a few miles to the south. The first family members emigrated from Wales to Pennsylvania in the 1850s. They next went to the Sierra foothills in California, and finally to the coal mines of central Contra Costa County, in the 1860s. It appears these family members worked variously as coal miners and as butchers; they also bought considerable amounts of property in the coal mining area (now known as Black Diamond East Bay Regional Park).

David Griffiths died in 1900, and his 480 acres of grazing land was inherited by his step-grandsons Warren and William Abrams, then ages 17 and 15, respectively. The following year John Abrams, father of Warren and William, left the family to go to the Yukon gold fields. William Abrams dismantled their house in Stewartsville, in the coal mining area, and moved it by wagon several miles to the northwest, to what had been the Griffith ranch. They moved with their mother to the ranch and began raising cattle and hay, a career they would follow for the rest of their lives.

According to Wayne Thomas, a cousin of the Abrams brothers and the current owner of the ranch, cattle raising was the main focus of the ranch. Raising hay nevertheless was practiced for many years. Before about 1920 the Abrams' hay was taken to Pittsburg, where it was transported to markets by rail. After 1920, their hay was marketed locally.

The brothers acquired two more quarter sections during their lifetimes. The northwest quarter of section 33 was acquired by their mother Margaret Abrams at an unknown time (after 1908) and was deeded to the brothers in 1913. The northeast quarter of section 32 was acquired by the brothers some time between 1908 and 1938. By that year the brothers owned five contiguous quarter sections, or 800 acres. For Contra Costa County in the first half of the twentieth century, this was a medium-sized cattle ranch.

In her *History of Contra Costa County* (1940), Mae Fisher Purcell lists many places where cattle ranches were located during the years 1936-1940. These places included Tassajara Valley, Moraga Valley, Clayton, Pleasant Hills, Pinole Valley, Franklin Canyon, Rodeo, Blackhawk, Danville, Alamo, San Ramon, Green Valley, Diablo, Brentwood, Los Medanos, the Vasco area, and Jersey Island. Many parts of Contra Costa County, then, had cattle ranches, but for the most part cattle ranches were found in the hills of the western and central county. Eastern Contra Costa County, by contrast, was devoted mainly to growing wheat and other grains before 1913 (when irrigation came in), and fruit and vegetables after that date. Other industries that were important in Contra Costa County were the shipping of wheat (before 1900), refining of oil (after 1902), and coal mining.

(See Continuation Sheet, page 7.)

B10. Significance (continued):

No known survey has been made of surviving cattle ranches in Contra Costa County, and little information is available on the subject. Betty Maffei of the Contra Costa County Historical Society (Martinez) has some familiarity with what still survives. The Williamson ranch, in Antioch, has been preserved and is on the National Register. The Arata ranch near Antioch no longer operates as a ranch, but apparently retains a ranch house, a barn, and other buildings. The Wood ranch, on Tassajara Road near Danville, still had many old buildings in 1988, some of which had been moved to the ranch in recent years. The Wiedemann ranch in San Ramon, still had old buildings in 1989, and by report still does. The Ginochio ranch, on Balfour Road near Antioch, is another ranch that may still have a collection of old buildings. At present it is unknown how these ranches compare with the Abrams ranch in age, size, number of ranch-related buildings, and integrity.

Integrity

The Abrams ranch has suffered the loss of one important building since 1963. The Stewartsville house that William Abrams dismantled and moved to the ranch in ca. 1902 was moved to Black Diamond East Bay Regional Park in 1980. Despite this loss, a ranch house still exists on the ranch property. This is the craftsman-style house that Warren Abrams built in 1921, when he was married.

The 1921 ranch house, the two barns, the scale house, the shop and vehicle shed, and the butcher shed form a complete ensemble of ranching-related buildings. All of them are over fifty years old, and all appear to date to the 1930s or earlier. Three of these buildings – the shop and vehicle shed, the scale house, and one barn – have replacement sheet metal roofs. Otherwise, all of these buildings have high integrity. The corrals are of uncertain date, but from their materials and weathered surfaces appear to date to the period of significance. The windmill is clearly a replacement structure, but it was built during the Abrams brothers' ownership, and also falls within the period of significance. The two concrete water troughs also date to the period of significance.

Two buildings date from after 1963, when Wayne Thomas acquired the ranch. These are the sheet metal storage shed, which was framed by one of the Abrams brothers and was finished by Mr. Thomas; and the stucco-clad, two story house, built in the 1980s. The most visually intrusive element on the ranch is the row of transmission towers on the hills south of the ranch buildings.

In sum, the ranch has good-to-high integrity of location, design, materials, workmanship, feeling and association. The seventh area of integrity, setting, has been compromised by the residential subdivision immediately north of the ranch, and by the transmission towers on the ranch. The setting of the ranch is at least fair, however.

Evaluation

Cattle ranching is clearly one of the most important aspects of the economic history of Contra Costa County. This is especially true for the central and western parts of the county that are situated on rolling

(See Continuation Sheet, page 8.)

B10. Significance (continued):

hills. While a number of other cattle ranches in the county also survive to the present, it is very unlikely that many of them have a finer collection of old ranch buildings, or better overall integrity, than does the Abrams ranch. The Abrams ranch has functioned as a cattle ranch under one family from 1901 to the present, and was owned by the same people, Warren and William Abrams, from 1901 to 1963. This property therefore appears to qualify for the National Register under criterion A, for its ability to represent this very important aspect of the county's history, and under criterion C, as a collection of buildings that illustrate the uses and function of an early-to-mid-20th century cattle ranch. For the same reasons it is also eligible for the California Register under criteria 1 and 3. The period of significance is from 1901, when the Abrams brothers acquired the ranch, to 1963, when it passed out of their ownership. The boundaries of the eligible property are the five quarter-sections (800 acres) that were owned by the Abrams brothers, namely, the southwest quarter of section 28, the southeast and southwest quarters of section 29, the northeast quarter of section 32, and the northwest quarter of section 33, all in T2NR1E. The acreage that was added to the ranch after 1963 is outside the boundaries of the eligible property. The craftsman style house, the shop and vehicle shed, the cabin, the butcher shed, the two barns, the scale house and scale, the wooden corrals and fencing, the windmill, the water troughs, and the grazing land are contributing elements of the historic property. The 1960s sheet metal building, the 1980s stucco residence, and the transmission towers are non-contributing elements of the historic property.

B12. References:

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220 Deeds 6. In the matter of the estate of Reese G. Thomas, deceased.
134 Deeds 562. Warren to William Abrams. December 16, 2002.
319 Deeds 251. Margaret J. Abrams to Warren and William Abrams. October 17, 2002.
16 Marriage Certificates 145. Warren B. Abrams and Margaret McMullen. April 19, 1921.
2 Patents 244. United States of America to David E. Griffith. February 10, 1875.

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Thomas, Wayne. Interview by William Kostura, August 5, 2002.

United States Census, Contra Costa County. 1910 and 1920.

Photos 2 and 3. Views looking south (top photo) and north (bottom photo) of the 1921 house built for Warren Abrams. August 2002.

Photos 4 and 5. The shop and vehicle shed. The top photo is a view looking south, showing the vehicle shed at the north end of the building. The bottom photo is a view looking north, showing the shop portion of the building. August 2002.

At left: Photo 6.
Butcher shop.
August 2002.

Below: Photo 7.
Cabin. August 2002.

Photos 8 and 9. Two views of the more northerly of the two barns. This is the barn that has the replacement sheet metal roof. August 2002.

Photos 10 and 11. Two views of the more southerly of the two barns. This is the barn with a wood shingled roof. Note corrals and fencing. August 2002.

Above: Photo 12. View looking south of the scale house. August 2002.

At left: Photo 13. Windmill. August 2002.

Top: Photo 14. Sheet metal building, begun by one of the Abrams brothers and completed by Wayne Thomas. August 2002.

Bottom: Photo 15. 1980s residence. August 2002.

Appendix D.2

California Register of Historical Resources and National Register of Historic Places Evaluation of CA-CCO-819 (P-07-03086)

CONFIDENTIAL

CALIFORNIA REGISTER OF HISTORICAL RESOURCES AND NATIONAL REGISTER OF HISTORIC PLACES EVALUATION OF CA-CCO-819 (P-07-03086), JAMES DONLON EXTENSION PROJECT, CONTRA COSTA COUNTY, CALIFORNIA

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MANAGEMENT SUMMARY

The City of Pittsburg proposes to extend James Donlon Boulevard westward to Kirker Pass Road through a portion of unincorporated Contra Costa County. The proposed James Donlon Extension Project (Project) is a roadway extension designed to link cities in eastern Contra Costa County (Antioch, Brentwood, and Pittsburg) with cities in central Contra Costa County (Concord and Walnut Creek) and help alleviate traffic congestion.

This project has been in the planning stage for over ten years, and was originally known as the Buchanan Road Bypass. Earlier archaeological investigations (Baker 2002, 2007) were conducted under the California Environmental Quality Act (CEQA). Due to potential federal funding for the Project, archaeological investigations also need to address historic preservation requirements of Section 106 of the National Historic Preservation Act and its implementing regulations found at CFR 800.5.

Archaeological site CA-CCO-819 (P-07-03086) lies within the Area of Potential Effects for the Project. CA-CCO-819 is a sparse prehistoric lithic scatter, first identified in 2012 by Archaeological/Historical Consultants (A/HC) during archaeological inventory survey for the Project (Baker 2012b). Construction activities associated with this Project have the potential to impact archaeological data potentials associated with the resource. As currently proposed, roadway construction would cover CA-CCO-819 with fill material.

Archaeological/Historical Consultants contracted with Pacific Legacy, Inc. to conduct an Extended Phase I Survey at CA-CCO-819. The purpose of this investigation was to confirm the presence or absence of cultural materials and conduct limited subsurface investigations in order to define the nature and extent of the archaeological deposit. Pacific Legacy excavated 12 shovel probes and three backhoe trenches within the site boundaries. A total of 1.55 m^3 of soil was manually excavated resulting in the identification of a sparse, shallow lithic scatter with few tools. Cultural materials were found at a maximum depth of 60 cmbs with the majority found between 0 and 40 cmbs. A total of 21 artifacts consisting of two edge modified flakes, one core and 19 pieces of debitage were recovered from the shovel probes. Three backhoe trenches were excavated to investigate the site's geomorphology and investigate the presence of buried archaeological component. The geoarchaeological analysis revealed that the site is in the upper portion of a single stratigraphic layer (A, B, and C horizons) and there is no buried archaeological deposit.

During the course of investigations, Pacific Legacy and A/HC determined that the data collected was sufficient to evaluate whether the site is eligible for listing on the National Register of Historic Places and the California Register of Historical Resources. The investigations provided little information with which to address substantive research questions posed in Section 2.3. It is our opinion that CA-CCO-819 is not eligible for listing in the California Register of Historical Resources under Criteria 1 through 4 or the National Register

of Historic Places under Criteria A through D.

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1.0 INTRODUCTION

The City of Pittsburg (City) proposes to extend James Donlon Boulevard westward to Kirker Pass Road through a portion of unincorporated Contra Costa County. The proposed James Donlon Extension Project (Project) is a roadway extension designed to link cities in eastern Contra Costa County (Antioch, Brentwood, and Pittsburg) with cities in central Contra Costa County (Concord and Walnut Creek) and help alleviate traffic congestion. As currently configured, the extension would vary between two and four lanes and require a large amount of cut and fill for the roadway prism. The Project alignment falls within Sections 28 and 29 (T2N, R1E) on the Clayton and Antioch South 7.5' USGS topographic quadrangles (see Figure 1).

This Project has been in the planning stage for over ten years, and was originally known as the Buchanan Road Bypass. Earlier archaeological investigations (Baker 2002, 2007) were conducted under the California Environmental Quality Act (CEQA). Due to potential federal funding for the Project, archaeological investigations also need to address historic preservation requirements of Section 106 of the National Historic Preservation Act and its implementing regulations found at CFR 800.5.

Prior to selection of the present road extension alignment, three alternative road alignments were considered. In order to assess the effects of the potential project on cultural resources Archaeological/Historical Consultants (A/HC) conducted a cultural resources inventory survey and evaluation for the three alternative alignments in 2002 (Baker 2002; Kostura 2002b). In 2007, A/HC conducted a supplemental field survey of areas of the chosen alignment that had not been previously inspected (Baker 2007). In 2012, changes to the preferred alignment necessitated additional study of uninspected areas (Baker 2012b).

CA-CCO-819 was discovered as a result of the 2012 survey (see Figure 2) (Baker 2012b). Baker (2012a) described prehistoric site CA-CCO-819 as a light surface scatter of flaked stone. Baker noted four pieces of "probable" debitage and one utilized basal flake. Most cultural materials were found in rodent burrow dirt piles suggesting a subsurface deposit. Cattle aggregate on the flat and discernible surface disturbance by cattle resulted in a small swale or wallow. Potential adverse effects to the site include ground disturbances from site preparation and the placement of fill on the bench encompassing CA-CCO-819. As currently designed, Project construction would result in the placement of a substantial amount of fill material on top of CA-CCO-819.

The original scope of work for this Project was primarily to determine the presence or absence of cultural materials within the Area of Potential Effects (APE). This was to be accomplished by hand excavating Shovel Probes (SP) in and around the observed site boundaries. In addition, mechanical trenching to explore the potential for buried deposits was also recommended.

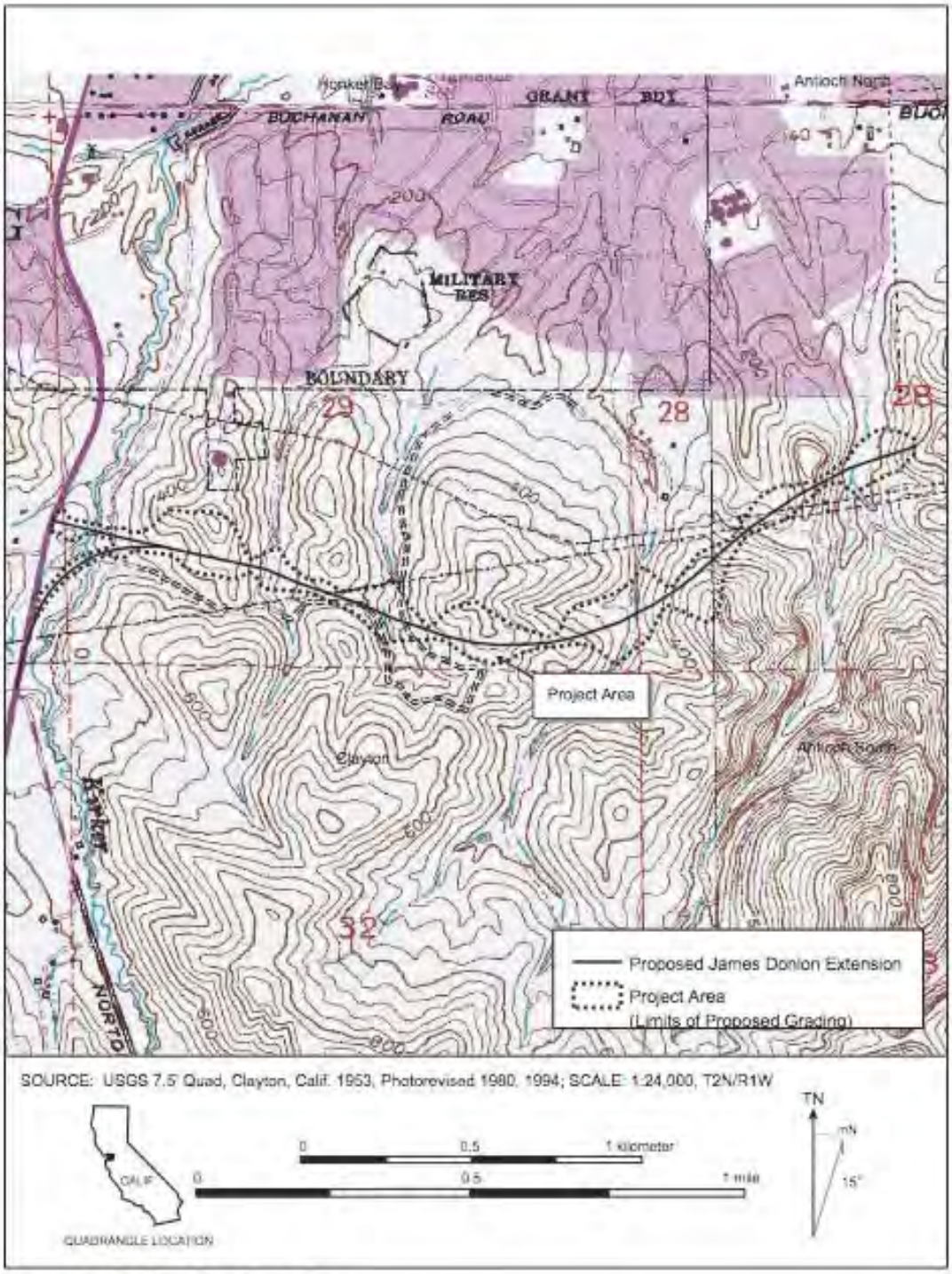

Figure 1. Project Location Map.

CRHR and NRHP Evaluation of CA-CCO-819
James Donlon Extension Project
November 2012

Page 8 intentionally removed because it contains confidential information.

Subsequently, Pacific Legacy and A/HC determined enough information was gathered from the Extended Phase I excavation to assesses the eligibility of site CA-CCO-819 for listing on the NRHP and the CRHR. Due to the small quantity and minimal diversity of archaeological materials recovered at CA-CCO-819, Pacific Legacy recommends that the site is not eligible for listing on the NRHP/CRHR under any criteria.

1.1 PROJECT DESCRIPTION

The following Project description was taken from the 2012 archaeological survey report (Baker 2012b).

The City proposes the construction of a 1.71 mile extension of James Donlon Boulevard from the western edge of the Sky Ranch II Subdivision (Sky Ranch II) to Kirker Pass Road. The proposed project would provide a limited access arterial roadway to serve regional circulation needs and relieve existing traffic congestion on Buchanan Road, which currently receives a high volume of east-west commute traffic between the City of Antioch and the City of Concord. The extension of James Donlon Boulevard would provide an alternative access route that would link the eastern portion of Contra Costa County (e.g., the cities of Brentwood, Antioch and Pittsburg) to the central portion of Contra Costa County (e.g. the cities of Concord and Walnut Creek). In addition to the extension of James Donlon Boulevard, the City proposes to upgrade Kirker Pass Road from Nortonville Road to the City limit line (approximately 0.63 mile) from a four-lane rural road to a four-lane urban road. A northbound to eastbound free right-turn from Kirker Pass Road to the extension of James Donlon Boulevard is also proposed.

The Project site is currently located within unincorporated Contra Costa County. To facilitate construction of the roadway extension, the City proposes to annex two privately owned properties through which the roadway would cross totaling approximately 475 acres. A General Plan Amendment and Prezoning to designate the properties Open Space are also proposed. In addition, the City proposes to annex the Kirker Pass Road right-of-way from Nortonville Road to the City limit line and, thus, that portion of Kirker Pass Road would become a City-maintained right-of-way.

As noted above, the extension of James Donlon Boulevard is proposed from the western edge of the Sky Ranch II Subdivision to Kirker Pass Road. The environmental impacts associated with the construction of the road extension through Sky Ranch II were analyzed in the Sky Ranch II Subdivision Environmental Impact Report (EIR).

The proposed Project was previously referred to as the Buchanan Road Bypass in various planning documents, including the City's General Plan 2004 (General Plan) and the East Contra Costa Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP), as well as in previous cultural resources documents (Baker 2002; Kostura 2002). The James Donlon Boulevard Extension is the same project and has undergone a name change along with other

alignment modifications. Additionally, in 1993, a Program EIR was prepared for the proposed Buchanan Road Bypass. By nature, a Program EIR generally analyzes broad environmental effects of a program with the acknowledgement that site-specific environmental review may be required for particular aspects of the program (State *CEQA Guidelines*, Section 15168). The 1993 Program EIR had not yet defined the proposed Project in specific detail or in engineering design terms; therefore, it is only relevant in the sense that it provides baseline information on the general environmental impacts regarding construction and operational conditions in the area defined by the preliminary route configuration. The preliminary route configuration (i.e., roadway alignment and Kirker Pass Road intersection configuration) which was defined in the 1993 Program EIR and which was used for the 2002 cultural resources survey were significantly different from the Project described in 2007 (see Baker 2002; 2007) and in the present report.

The proposed extension of James Donlon Boulevard would be constructed from the western edge of the Sky Ranch II Subdivision to Kirker Pass Road. From Sky Ranch II, the proposed roadway would merge from a four-lane road to a two-lane road and would meet City and California Department of Transportation (Caltrans) standards and regulations for highway design for vehicles traveling up to 55 miles per hour (mph).

The intersection configuration at Kirker Pass Road would generally maintain the existing alignment of Kirker Pass Road and create a four-way signalized intersection with proposed Montreux Drive as the eastbound approach, proposed James Donlon Boulevard as the westbound approach, and Kirker Pass Road as the northbound/southbound approaches.

The four-lane portion of the James Donlon Boulevard at the Kirker Pass Road intersection would be designed to urban road standards with medians, curbs, gutters, sidewalks and streetlights. The two-lane portion of James Donlon Boulevard would be designed to rural road standards. Kirker Pass Road from Nortonville Road to the City limits would be upgraded from rural road standards to urban road standards. Finally, the profile of Kirker Pass Road would be raised to provide acceptable grades at the intersection with James Donlon Boulevard.

The proposed project would include approximately nine culverts and/or bridges, as necessary, to cross existing streams within the Project Area, including Kirker Creek. Culverts would be sized to facilitate 100-year storm events. Additional culverts of various sizes would also be provided to accommodate wildlife movement and cattle ranch operations across James Donlon Boulevard. The proposed culverts and bridges would require construction within the drainage features. Project grading would require a substantial amount of cut and fill due to the steep terrain within the Project Area. Grading activities may require the export of native soils and the import of engineered fill material. Approximately 2,878,000 cubic yards of grading would be required for the roadway. Additionally, landslides have been identified within the Project Area and would require remediation prior to the start of construction activities. Where landslide deposits are found to underlie fill, these areas would be over-excavated and replaced as engineered fill. In addition, the Project would utilize a buttressing technique to support slopes

at a 2:1 gradient. This technique would minimize the grading required in several cut slopes within the Project Area.

There are several large PG&E electrical transmission lines that traverse the Project Area. It would be necessary to relocate or raise two transmission towers in order to implement the proposed Project. Electricity would be provided by extending PG&E service to the proposed roadway. In addition, Kinder Morgan has a ten-inch, high–pressure, natural gas pipeline within the Project Area that may be lowered in certain locations.

1.2 REGULATORY SETTING

The Project falls within the regulatory framework of the California Environmental Quality Act (CEQA). With the addition of potential federal funding, the proposed Project would constitute a federal undertaking requiring compliance with Section 106 of the National Historic Preservation Act. As such this report meets the requirements of Section 106 of the National Historic Preservation Act (NHPA) for evaluation of cultural resources within the Project APE. The purpose of this study is to provide information and analysis to determine whether the proposed construction activities will have the potential to cause adverse effects/significant impacts to properties eligible for or listed in the NRHP or the CRHR.

Section 106 of NHPA of 1966 (16 USC 470f, as amended) requires federal agencies to consider the effects of their actions including the approval, funding or permitting, of an activity on properties that are listed or eligible for inclusion in the NRHP. Historical sites, objects, districts, structures, and cultural landscapes that are eligible for listing in the NRHP are known as "historic properties." Section 106 also requires the federal agency to afford the Advisory Council on Historic Preservation an opportunity to comment on the agency's efforts to consider historic properties. The implementing regulations for Section 106, found at 36 CFR 800, describe a process of inventory, evaluation, and consultation that satisfies the federal agency's requirements. For federally permitted or funded projects, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP.

NRHP criteria for eligibility are defined as follows:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling and association, and that:
>
> a) are associated with events that have made a contribution to the broad pattern of our history;
> b) are associated with the lives of people significant in our past;
> c) embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a

significant and distinguishable entity whose components may lack individual distinction; or,

d) have yielded, or are likely to yield, information important in prehistory or history (36 CFR Part 60.4).

The California Environmental Quality Act (CEQA) defines a significant historical resource as "a resource listed or eligible for listing on the California Register of Historical Resources" (Public Resources Code Section 5024.1). For a historical resource to be eligible for listing in the CRHR, it must be significant at the local, state, or national level under one or more of the following four criteria:

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

Historical resources automatically listed in the CRHR include those historical properties listed in, or formally determined eligible for, the NRHP.

In addition to meeting one or more of the criteria set forth for listing in the NRHP or CRHR, a cultural resource must retain the quality of *integrity* in order to qualify for the NRHP or CRHR. The concept of integrity is usually interpreted to mean "intactness" of physical characteristics, but in terms of the NRHP and CRHR, integrity is a measure of the degree to which a property retains or is able to convey the essential characteristics defined under one of the four eligibility criteria. These characteristics may be expressed through integrity of location, design, setting, materials, workmanship, feeling, and association of a property (National Park Service 1995).

1.3 AREA OF POTENTIAL EFFECTS

The APE for archaeology is the area of direct impact. As shown on Map 3 (Appendix A), all three proposed alternatives have similar alignments at their western and eastern ends, with variations in the central part of the alignment. Maps 2 and 4 (Appendix A shows the preferred alignment (C-2), including areas of cut and fill (areas of cut and fill at the west and east ends are shown within the dotted blue line). The APE includes the preferred road alignment, as well as the adjacent cut and fill areas, which are up to approximately 500' in width (see Map 4, Appendix A). Archaeological site CA-CCO-819 is located within the Project APE. The APE is approximately 570 ft. wide at the site location and the site boundary is located 130 ft. from the northern edge of the APE.

1.4 PROJECT PERSONNEL

The following Pacific Legacy personnel contributed to this report:

- John Holson, M.A., Project Manager and Principle Investigator, over 30 years experience in California archaeology;
- Hannah Ballard, M.A., Supervisor, over 15 years experience in California archaeology;
- Katherine Chao, B.A., field technician, five years in California archaeology;
- Graham Dalldorf, M.A., Geomorphologist, over 15 years in California archaeology;
- Rose Guthrie, B.A., field technician;
- Dan Trout, B.A., field technician, over ten years in California archaeology; and
- Lucian N. Schrader III, B.A., field technician and lithic analyst, nine years in California archaeology.

The following A/HC personnel contributed to this report:

- Suzanne Baker, (M.A., Anthropology/Archaeology; M.Sc. Rock Art Studies; Register of Professional Archaeologists certified; 37 years of archaeological experience in California).

Native American monitors representing the Ohlone/Bay Miwok were present during all excavation activities. Katherine Erolinda Perez was present on October 15 and 16, 2012. Engle Merga was present on October 15-17, 2012.

1.5 CA-CCO-819 (P-07-03086) SITE DESCRIPTION

CA-CCO-819 (P-07-03086) is a prehistoric site consisting of a sparse lithic scatter. The site was first recorded by Suzanne Baker in 2012 (Baker 2012a) (see Appendix B). CA-CCO-819 is situated on a small bench at the foot of a large hill south of the City overlooking the confluence of an intermittent stream and a seasonal drainage. It has one hundred percent exposure, and a gentle slope to the north. Soils on the bench and within site boundaries are dark brown silty clay. Sandstone bedrock is visible on adjacent hills and within the drainages. Onsite vegetation consists of sparse seasonal grasses. Very little vegetation was present on the bench due to cattle trampling. The site has been heavily disturbed by cattle as it is a location where livestock congregates. It is also possible colluvial deposition from the hill to the southwest has partially covered cultural materials onsite.

As originally recorded, the site measures roughly 30 m north-south by 20 m east-west and encompasses the northern portion of the bench. Baker (2012a) noted the following cultural constituents on the surface: one basalt utilized flake and four pieces of debitage. Debitage material consisted of basalt, a type of cryptocrystalline quartz (chert or quartzite), and an unidentified material that may be indurated sandstone. The utilized flake showed unifacial flake removals to the dorsal face of the ventral margin that may be trample damage. Baker observed most of the artifacts near ground squirrel holes, suggesting the possibility of a buried

deposit. The site datum is an upright metal pole sunk in concrete located near the approximate center of the site.

2.0 BACKGROUND

The section presents a brief overview of the study area's environmental, ethnographic, historical, and archaeological background and prehistoric research themes.

2.1 ENVIRONMENTAL SETTING

This region of California, known as the Delta of the Sacramento-San Joaquin Rivers is an area of reclaimed marshlands where agriculture, animal husbandry and commercial recreational development are the key economic factors. Prior to the reclamation of the marshlands, which began in the 1850s, the Delta was a vast area of freshwater and brackish marshlands with scattered islands. Habitats and ecological zones have changed through time in the Delta and these changes have affected human occupation of the area.

Environmental setting includes a brief overview of the nature of the physiography, geology and soils, climate and hydrology, and vegetation and fauna.

2.1.1 PHYSIOGRAPHY, GEOLOGY, AND SOILS

The Project is located about three miles south of Suisun Bay and the once extensive adjoining tidelands. The Project is in the uplands, adjacent to the flatlands to the south. The topography of the Project Area consists mainly of steep rolling hills with 30-50° slopes in some areas.

The hills in the Project area are composed largely of poorly consolidated sandstones and shales of both marine and non-marine origin. The Wolfskill Formation predominates, with narrow bands of Neroly, Cierbo, and Markley sandstones, as well as tuffs and shales of the Lawlor and Meganos Formations (Brabb et al. 1971).

CA-CCO-819 is situated on a small (~50 x 50 m) bench at the base of a hillslope immediately west of an incised, unnamed drainage in the northern foothills of the Diablo Range. The bench occupies a footslope position at the base of a northeast-facing hillslope. The bench has a gentle slope of less than 5% to the northeast, and has a convex shape both parallel and perpendicular to the horizontal contour. The hillslope rises approximately 50 m above the bench to a crest, has an average slope of approximately 40%, and is characterized by a convex shape both parallel and perpendicular to the horizontal contour. This steep slope and shape has likely contributed to the deposition of hillslope colluvium and alluvium at CA-CCO-819 through erosional processes such as mass wasting and surface runoff.

Soils at CA-CCO-819 are mapped as Altamont-Fontana Complex, 30-50 percent slopes (USDA-NRCS 2012). Although the scale of soil mapping (1:24000) is likely too small to adequately characterize the soil at CA-CCO-819, the mapped soil units are nonetheless informative regarding soil properties in the immediate vicinity. The Altamont soil is a vertisol with an A/Bss1/Bss2/Bssk/Cr profile, while the Fontana soil is a mollisol with an A1/A2/Ck/C

profile. Both soils are formed in residuum and found in hillslope settings.

2.1.2 CLIMATE AND HYDROLOGY

The Project is located in a Mediterranean climate characterized by hot, dry summers and cold, wet winters. The proposed road extension will pass along slopes and across or adjacent to at least six drainages, which flow mainly south to north. Kirker Creek at the western end of the roadway extension is the only perennial stream, the others are unnamed intermittent or seasonal drainages.

A small spring is located directly east of CA-CCO-819, adjacent to the small intermittent creek that flows to the north. This spring is at the intersection with another small seasonal drainage that flows downhill from the east along the northern edge of the bench on which the site is located.

2.1.3 VEGETATION AND FAUNA

Vegetation in the Project Area consists almost entirely of a mixed habitat of riparian and oak savannah vegetation that bordered the flat marshlands of the Delta. Willows, cottonwoods, sycamores, ash, buckeye, alder and oak were the predominant plant species found along the marshland borders (Bennyhoff 1977).

The grasslands and oaks savannahs of the area supported vast populations of upland game birds including: quail, mourning doves, flickers, woodpeckers, roadrunners, and songbirds. The marten, the grey fox and weasel were also present. Tule elk derived their name from early explorers who hunted the elk that hid and sheltered in the vast tule marshes adjacent to the grasslands and oak savannahs where they grazed (McCullough 1971). Deer, rabbit, raccoon, black bear, grizzly bear and coyote also inhabited the area.

The Project Area has been used almost entirely for cattle grazing for the last 150 years. This trampling and grazing has eliminated most native grasses, which were overrun by introduced species.

2.2 CULTURAL SETTING

The cultural setting includes brief overview of the prehistory of the region derived largely from previous archaeological research as well as ethnographic and historical background for the general area.

2.2.1 PREHISTORIC BACKGROUND

Much of the early regional archaeological work has focused on either the San Francisco Bay shore to the west or to the region to the northeast on the Sacramento Delta (Baker 2012b). Several site excavations in the interior of Contra Costa County in the mid 1960s provided sufficient information to develop a general cultural sequence for the area (Fredrickson 1964;

1965; 1966; 1968; 1969; 1973; 1974; Moss and Mead 1967). Moratto (1984:262-262) summarized this work, conducted principally at four sites, CA-CCO-30 near Alamo, CA-CCO -308 in Stone Valley, CA-CCO -309 at Rossmoor, and CA-CCO -311 near Alamo. The earliest component, identified at CA-CCO -308 had a carbon date of 2500+- 400B.C. Six other components were identified, ending with a "Late Horizon, Phase 2" component carbon-dated at A.D. 1665+/-95 and undoubtedly identified with the Bay Miwok. Closer to the Project Area, excavations in Lafayette recovered burials and other artifacts dating between ~A.D. 1650 and A.D. 1725. At that time the native people used a wide range of resources characteristic of interior drainages and exhibited what has been called a foothill hunting adaptation with a "deer economy". A wide diversity of faunal species and acorns and many chaparral plants important to subsistence were found in the archaeological record (Baker 1994:16-17).

In the past 30 years, under the impetus of development and local, state, and national cultural resource requirements, many other archaeological excavations in the area have refined and elaborated early theories and discovered more new data about the formation of the region's prehistoric cultural patterns (Baker 2012b). These cultural patterns are complicated and diverse even within small geographical areas.

The following chronological periods are taken from Meyer and Rosenthal (1997) who adapted them from Fredrickson's (1974) terminology.

Paleo-Indian (Greater than 10,000 years BP)
The Paleo-Indian period is poorly understood; only one known site has been identified (Meighan and Haynes, 1968). The scarcity of Paleo-Indian period sites is likely due to geological processes burying the sites. Isolated artifacts dating to this time period have been discovered throughout California and consist of large fluted Clovis projectile points, crescent shaped bifaces, and large shouldered projectile points. Fredrickson (1992) hypothesized that the period was characterized by lacustrine sites with a probable emphasis on hunting. Trade and exchange probably occurred on an individual basis. The primary social unit was likely the extended family. Resources were likely acquired through mobility rather than trade.

Lower Archaic (10,000-6,000 years BP)
Very few sites dating to the Lower Archaic (Early Holocene) have been discovered (again, likely due to geological processes). Available information indicates that, at this time, there were sparse populations of mobile foragers or hunters and gatherers who populated the East Bay. Fredrickson (1992) stated that the family unit continued to be the main primary social unit. During this period, the ancient lakes, which had been the subsistence base during the Paleo-Indian period, began to dry up as a result of climate change. An increased emphasis on plant foods can be inferred by the abundant appearance of milling slabs and handstone/manos (Fredrickson 1973). Lower Archaic projectile points are typified by concave-base and stemless projectile points and small numbers of wide-stemmed points.

Middle Archaic (6,000-2,500 years BP)
This Middle Archaic (Early Period) is much more widely known than the previous two time periods (Milliken et al. 2007). The mortar and pestle appeared during this pattern. During this time there was increased population, sedentism and regional symbolic integration represented by the occurrence of shell beads and rise of mortar and pestle technology (Milliken et al. 2007:114-115). Large leaf shaped dart points, shouldered projectile points, and bipoints are characteristic of the Middle Archaic. Deer ulna bone awls and flakers are also common. During this period, there was an industry of obsidian biface trade from obsidian sources to neighboring areas across the state. The Berkeley Pattern represented the expansion of Miwokian speakers into the North Bay at approximately 500 BC (Bennyhoff 1968).

It has been postulated that about 1900 B.C. a population of marsh and bayshore adapted people, probably ancestral Costanoan-speakers, settled along the East Bay margin, perhaps moving from eastern Contra Costa County (Moratto 1984:277). While it seems clear that there was population movement into and out of the Bay Area, issues of direction and identity of populations are not yet fully understood (Milliken et al. 2007:112-113).

Upper Archaic (2,500-1,500 years BP)
The expansion of settlements coupled with population growth continued. Fredrickson (1974:48) suggested that the Upper Archaic (Middle Period) "seems to have been marked by ever increasing socio-political complexity, a growth of status distinctions based on wealth, the emergence of group-oriented religious activities, and greater complexity of the exchange systems." Large leaf shaped projectile points and shouldered projectile points continue to be the dominant flaked stone tool forms. Deer ulna bone awls, mortars, and pestles also continued to be plentiful. There was also an increase in *Olivella* beads, abalone ornaments, incised bone, and coiled basketry. The large obsidian biface manufacturing industry collapsed throughout California around 1,800 years ago.

Lower Emergent (1,500-900 years BP)
During the Lower Emergent, Prehistoric cultures throughout California "reached levels of sociocultural complexity usually considered correlates of agricultural societies" (Fredrickson 1973:38). The emergence of the bow and arrow technology around 1,500 years ago meant a shift away from larger dart points to smaller arrowheads. Early arrowheads called Stockton Serrated points had numerous square barbs running up each margin. Territorial boundaries became well established. Regularized exchange networks flourished.

A new archaeological pattern, the Augustine, developed about A.D. 300-500 in the bay region, as the bow and arrow and new bead types were introduced and the population grew (Milliken et al. 2007:116-117). The pattern that existed at the time of Spanish contact in the late 18th century included:

> …large populations; a greater number of settlements and more evidence of status differentiation among them; a greater emphasis on gathering vegetal foods, especially

acorns; more intensive trade and highly developed exchange system; the spread of secret societies and cults together with their associated architectural features and ceremonial traits; and, in late prehistory, the appearance of clamshell disk beads as a currency for exchange (Moratto 1984:282).

Upper Emergent (900-200 years BP)

The Stockton Serrated points were replaced around 900 years ago by small, triangular, corner-notched projectile points. Well shaped mortars and pestles were increasingly prevalent. This period witnessed the continued growth and elaboration of the exchange system as well as the development of some degree of specialization.

In the inland areas of Contra Costa County it appears that sedentary village life may have begun between 2500 B.C. and A.D. 1 and that an increasingly complex social organization gradually evolved, including an "evolution from an egalitarian society...to a system of social ranking based upon ascribed status" (Moratto 1984:264). At various times influences from both the Napa and the Delta-San Joaquin Valley regions arrived in the Contra Costa area, probably based both on diffusion and population movements (Fredrickson 1965:19; Bennyhoff 1994).

2.2.2 ETHNOGRAPHIC BACKGROUND

The Project Area was probably in the ethnographic territory of the Chupcan Bay Miwok group, which spoke a language classified within the Eastern Division of the Miwok language family (Bennyhoff 1977:164; Milliken 1991:253). Bay Miwok territory generally extended from Suisun Bay to just south of Mount Diablo and eastward to the Sacramento-San Joaquin Delta. There is some uncertainty as to exact territorial boundaries, but it is believed that the Chupcan "can be assigned to the south shore of Suisun Bay between Port Chicago and the mouth of Marsh Creek" (Bennyhoff 1977:143). Bennyhoff (1977:143-144) says that the main village of the Chupcan was at Antioch, while Milliken states that the main village was on lower Pacheco Creek in present day Concord (Milliken 1995:241). It is likely that the Chupcan had more than one major village and that both of the above may have been important locations.

Bennyhoff (1977), Levy (1978), and Milliken (1991, 1995) provide some details about Miwok life, social customs, and material culture, although references to particular groups are scanty. The Bay Miwok were successful intensive food collectors and hunters who used a wide range of resources in a very favorable environment. Those populations living adjacent to the great bays of the region relied heavily on shellfish and aquatic animals for food. In the interior, plant foods in plentiful variety were gathered on a seasonal basis with acorns the most important vegetal staple, since they could be stored in great quantity. Large game like deer, elk and antelope were hunted. Game birds, waterfowl, and fish were other major food sources that thrived in the sloughs and marshes of the Suisun Bay and Delta area (Bennyhoff 1977:9-16). A summary of the ethnography of the Miwok may be found in Bennyhoff (1977) and Levy (1978).

2.2.3 HISTORICAL BACKGROUND

Previous studies by Baker (2002, 2007, 2012b) and Kostura (2002b) include extensive archival research relating to the Project. The following historical background is taken from this work; Baker (2002, 2007, 2012b) and Kostura (2002b) provide more detail on the history of the Project Area.

The first documented contact with Europeans in the area occurred in 1772 when the Fages-Crespi expedition passed near the present day location of Walnut Creek (Cook 1957). The population of the Bay Miwok at the time of contact was not very numerous, likely numbering fewer than 2,000 individuals (Levy 1978). Although a few Chupcan Bay Miwok were baptized at Mission Dolores in 1779 and 1795 and several in 1804, the Chupcan resisted the missionization process, and they were only one of two East Bay groups that were still culturally intact by the end of 1805 (Milliken 1995:191). Such resistance resulted in a Spanish military expedition against the main Chupcan village in September of 1804. Because of such pressures most Chupcan fled across the Suisun Bay and harbored with the Suisun Patwin people (Milliken *et al.* 2009:111-112). The Chupcan were close allies of the Suisun who apparently protected "other groups who were retreating from the mission frontier, notably Saclans, Tatcans, and Chupcans" (Milliken 1991:308). It is likely, therefore, that Chupcan villages in or near the project area were abandoned at least by 1806. After a major Spanish military attack on Suisun villages in 1810, 146 Chupcan came for baptism at either Mission San Francisco or Mission San Jose between 1810 and 1811 (Milliken 1995:241; Milliken *et al.* 2009:111-112).

As a result of disease, military action, and missionization, the cultural integrity of the native peoples in the area were essentially destroyed by the mid 1800s (Baker 2012b). After the secularization of the missions in the 1830s, some native peoples went to work on nearby ranchos. Ranchers reported in the early twentieth century that some native peoples were still living on local ranches in the 1850s, some collecting acorns (Loud 1913). The cultural affiliation of these individuals is unknown.

The location of the Project Area, in the hills just south of the City, has strongly influenced its history (Baker 2012b). During the Mexican era, the area was considered marginal and lay outside the boundaries of the two closest land grants. These were Los Medanos to the north and northeast and Monte del Diablo to the southwest (Beck and Haase 1974).

During the Gold Rush, the area continued to be ignored. New York Landing (now Pittsburg) became an important transportation hub, but there was still little activity in the hills to the south. However, in 1859 coal was discovered two miles south of the Project Area. Several small towns including Nortonville, Somersville, and Stewartsville developed as coal mining centers in the 1860s, attracting miners from the Welsh and English coal mining industry (Contra Costa County Development Association n.d.). Kirker Pass and Somersville Roads, lying to the west and east of the Project Area respectively, appear to have origins in the 1860s as railroads that carried coal (Emanuels 1986). Mining activity fluctuated in intensity over the next few decades, and had almost halted by 1902 (Purcell 1940).

Mining created a demand for agricultural products, making it attractive for small farmers and ranchers to take up public land (Baker 2012b). By the 1860s, individuals were claiming public lands, typically squatting on a quarter section (160 acres), claiming it, and then staking it. After the appropriate length of time and a set amount of improvements had been constructed, the

land was officially filed for patent under the Homestead Act or other land act.

By 1885, the south half of Section 29 was owned by David Griffith and the southwest quarter of Section 28 by an Edwards (McMahan and Minto 1885). In 1901 the Abrams family, comprised of two brothers (Warren and William) and their mother (Margaret), inherited the Griffith acreage that comprises most of the present study area (Kostura 2002b). The men were listed as farmers and all three were born in Pennsylvania. The mother, Margaret, had Welsh parents, which may indicate they came from the Pennsylvania coalfields where the Welsh had continued their mining traditions (U.S. Census Bureau 1910). Over the following decades the family acquired more and more land until the ranch totaled 800 acres. The Abrams operated the ranch until 1963 when it was acquired by Wayne Thomas, a cousin of the Abrams (Kostura 2002b). Mr. Thomas is now deceased but his descendants continue to operate the ranch.

2.3 PREHISTORIC ARCHAEOLOGICAL RESEARCH THEMES

The discovery of undisturbed subsurface archaeological materials may contribute information important in developing the emerging regional picture of lifeways and change over time. Six general themes and the types of data necessary to address these themes are discussed below:

2.3.1 CULTURAL CHRONOLOGY

Chronology is generally a fundamental topic in archaeology. Chronological information provides baseline data on which research for many other archaeological questions is dependent. Development of individual site chronology is also important for filling in regional information gaps and for comparison with other regional sites. Data sets for chronology in the region include but are not limited to:

- Obsidian, useful for hydration studies for relative dating;
- Organic materials, such as carbon, bone, or shell, to conduct radiocarbon dating;
- Shell beads for stylistic analysis used in relative dating (shell bead sequences are well known for the region);
- Projectile points, since relative dates for many point types are known for the region;
- Other typologically distinctive artifacts for which some chronological associations have been established.

2.3.2 SETTLEMENT, SUBSISTENCE, SEASONALITY, AND ENVIRONMENT

Archaeological evidence can help establish the types of subsistence practices used by past populations, the times of year the site may have been utilized, and whether there have been environmental changes since the site was used. Data sets for addressing such research issues include:

- Groundstone artifacts which can indicate seed or acorn processing;
- Fishing implements, such as bone fishhooks or net weights;
- Projectile points and other lithic artifacts that may indicate hunting and butchering;

- Faunal and floral materials to indicate the types of animals hunted and vegetal products utilized, environmental procurement zones, and seasonality;
- The presence of features, such as house pits or hearths.

2.3.3 EXCHANGE RELATIONSHIPS

The degree of participation by prehistoric populations in exchange networks can indicate the complexity of organizational structure, subsistence strategies and relationships with neighboring people. Some questions include the sources of trade items, what the sources indicate about trade patterns, and whether the type, intensity, and source of exchange items changed over time. Clearly many perishable trade items do not survive in an archaeological context; however, useful data sets include:

- X-Ray fluorescence of obsidian and basalt items to determine sources;
- Shell analysis to determine location of origin;
- Ethnobotanical analysis of carbonized seeds to determine if such materials may have derived from outside of the local area.

2.3.4 LITHIC PRODUCTION

Analysis of tool production can provide insight into site activities, site categorization, and trade. Did tool manufacture change over time? Were local versus imported materials favored? What production methods were used? Data sets include:

- Formed tools and debitage for identification of production methods, reuse and repair, and heat treatment, and for sourcing and analysis of importance of distance to source.

2.3.5 SOCIOLOGY AND IDEOLOGY

Do artifacts indicate wealth, social differentiation, or ritual practice? Data sets could include:

- Artifacts, such as "charmstones", beads and pendants.
- Human burials and their burial associations.

2.3.6 DEMOGRAPHICS, AND CULTURAL AFFILIATION

Does the site contain evidence of affiliation with archaeologically known populations? Is there evidence of intensity of occupation, age differentiation, or disease within the site? Data sets may include:

- Formed artifact types, such as projectile points and steatite bowls;
- Human burials.

It should be noted here that the presence of prehistoric human burials would almost surely create a presumption of eligibility for the NRHP because of the multifaceted nature of the information they contain and because of their importance to contemporary Native American populations. The degree of analysis of human burials is dependent on permission from Most Likely Descendants designated by the Native American Heritage Commission.

Many other categories and questions can be posed depending on the quantity and quality of archaeological data recovered. Historic finds can generally also be evaluated based on many of the themes discussed above with obvious differences in artifact data sets and with the addition of the use of historic archival research.

3.0 NATIVE AMERICAN CONSULTATION

Native American consultation was conducted by RBF and A/HC in 2002 and in 2012 as part of the completion of cultural resources survey of the APE. Robert Ulibarris of RBF Consulting initiated consultation in 2002 (Baker 2002). He contacted Chuck Striplen of the Federated Indians of Graton Rancheria of Santa Rosa, the only federally recognized tribe that includes people of Miwok descent in their membership. Mr. Striplen expressed no particular concerns about the Project, but requested a copy of the survey report when completed (Baker 2002).

As ten years had passed since the initial consultation, a new consultation process was initiated by A/HC on February 10, 2012. A/HC contacted the Native American Heritage Commission (NAHC) to solicit information and concerns about Native American cultural resources and heritage values (Baker 2012b). The NAHC had no information on Native American cultural resources in the immediate Project Area, and recommended contacting the three Native American consultants on its Contra Costa County list. These individuals were Katherine Erolinda Perez, Andrew Galvan, and Ramona Garibay.

Katherine Erolinda Perez represents Bay Miwok, Ohlone/Costanoan, and Northern Valley Yokut concerns. Andrew Galvan represents Bay Miwok, Ohlone/Costanoan, Plains Miwok, and Patwin concerns. Ramona Garibay is the representative of the Trina Marine Ruano Family and represents Bay Miwok, Ohlone/Costanoan, Plains Miwok, and Patwin concerns.

Letters were initially sent to these three individuals on February 10, 2012 (Baker 2012b). No replies were received, prompting a follow-up inquiry on March 12, 2012. One reply from Andrew Galvan was received by e-mail on March 13 stating he had no specific information about the Project Area. On August 15, 2012, Katherine Perez sent a letter to Superior Court of California, Contra Costa County, requesting that a qualified archaeological firm test the site with a Native American Monitor present.

4.0 ARCHAEOLOGICAL METHODS

4.1 EXCAVATION METHODS

Pacific Legacy conducted Extended Phase I survey on October 15-17, 2012. This investigation included the manual excavation of 12 shovel probes and mechanical excavation of three trenches.

The purpose of the Extended Phase I investigations was to determine presence or absence of subsurface cultural material and to characterize the nature and extent of the cultural deposit. Though testing was not originally intended to evaluate the site's eligibility for the NRHP/CRHR, the results of the excavation provided sufficient data to evaluate the site.

Prior to excavation, Project personnel systematically surveyed the surface of the site and flagged surface artifacts with pieces of wooden grade lath. At the request of the landowner, Project personnel did not use pin flags on site because of the potential to injure cows. The surface artifacts were located with a Trimble handheld GPS unit with submeter accuracy.

Testing consisted of the excavation of twelve Shovel Probes (SPs). Shovel Probes are small excavation units measuring 50 cm by 50 cm. These are excavated in 20 cm levels from the ground surface. The SPs were laid out in a rough grid system spaced at approximately ten-meter intervals. The excavation units were placed to test in and around areas of higher surface artifact concentration, as well as in different parts of the landform on which the site is located. A roughly northeast-southwest main axis was laid out in line with the longest portion of the bench within the recorded site boundary. Two lines were laid out approximately perpendicular to the main axis in areas where the SP had higher numbers of cultural materials and to test different portions of the site. All SPs were located with the handheld GPS.

Shovel Probes were excavated manually, using shovels, picks and breaker bars. Below 20 cm soils were very compact and hard, requiring a breaker bar or pick to loosen the sediments. Excavated soil was screened through ¼" metal wire screen mesh. All cultural materials were removed from these screens or from the units *in situ*.

Three backhoe trenches, measuring 1 m wide by approximately 5.5 m long by 1.5 m deep, were excavated to investigate the site's geomorphology and identify any buried site components. These trenches provided detailed soil profile, an opportunity to identify any former land surfaces that might have buried archaeological sites and an understanding of the site formation processes. The trenches were placed in locations thought to have the greatest potential for buried cultural deposits based on the landform and the results of SP excavation and surface artifacts.

An operator from Pacific Coast General Engineering excavated the backhoe trenches on October 17, 2012. The trenches were excavated using a three foot wide bucket with a plate welded over

the teeth. Soil was slowly and evenly removed in 10-20 cm levels from the length of the trenches in order to identify any buried features or living surfaces. Soil was piled on either side of the trench and was checked for cultural materials by the archaeological and Native American monitors.

Cultural materials were collected and bagged by level. All recovered artifacts were analyzed and described in the field. At the request of the landowner, artifacts were not removed from the site but were reburied at the end of the excavation. The recovered artifacts were placed in the bottom of Trench 3 (T-3) prior to backfilling. Thus, no additional special analyses, such as obsidian hydration or x-ray fluorescence were completed.

4.2 ARTIFACT ANALYSIS METHODS

Lucian Schrader completed the infield artifact analysis. Cultural materials recovered consisted of debitage, one core, two edge-modified flakes, and fire affected rock. The infield analysis consisted of identifying the flaked stone materials, measuring flakes, and tallying flake types on a Flaked Stone Deposit Record. All tools were described and measured.

Debitage includes all flaking debris resulting from the manufacture, use, and repair of stone tools (Andrefsky 2005; Cotterell and Kamminga 1987; Crabtree 1971; Dibble 1985; Odell 2003, Patterson 1983; Sullivan and Rozen 1985). Debitage analysis is undertaken in order to better understand what tools were made on the site, then carried away.

Debitage was sorted by material and size category (1 in., 0.5 in., and 0.25 in.). Flake size is useful in differentiating techniques and methods for lithic production (Patterson 1983). Flake size can also give insight into raw material procurement strategies and use lives (Eerkens et al. 2007). Platform analysis of debitage can provide informative insight into prehistoric methods of lithic production (Andrefsky 2005; Dibble 1985).

Twelve flake types were discerned for this analysis. They consist of:

- primary cortical flakes (PDC) are any with more than 70% dorsal cortex;
- secondary cortical flakes (SDC) are any piece of debitage with less than 70% cortex on its dorsal surface or platform;
- simple interior percussion flakes (SIP) are straight in cross section with one dorsal arris;
- complex interior percussion flakes (CIP) are straight in cross section with more than one dorsal arris;
- early biface thinning flakes (EBT) are curved in cross section with one to two dorsal arris. These can have a distinctive lip at the proximal margin of the flake where it was detached from a biface using soft hammer percussion techniques;
- late biface thinning flakes (LBT) are curved in cross section with more than two dorsal arris. These can have a distinctive lip at the proximal margin of the flake where it was detached from a biface using soft hammer percussion techniques;

- early stage pressure flakes (FPE) are small flakes with greater length than width, without a linear dorsal arris and a well defined focal platform;
- late stage pressure flakes (FPL) are small flakes with greater length than width and one linear dorsal arris;
- notching flakes are small pressure (FNG) flakes with round or amorphous outlines and simple dorsal surfaces that often resemble the shape of a clam shell;
- flake fragments (FRA) are non-diagnostic fragments of flakes;
- shatter (SHT) is small, clunky, blocky, pieces of debitage; and,
- bipolar (BIP) are flakes that are the result of bipolar reduction. They often show distinct patterns related to simultaneous impact forces on opposing ends.

Edge modified flakes are pieces of debitage that have been modified (flaked) along their margins (Andrefsky 2005; Whittaker 1994). Utilized flakes are pieces of debitage that have been modified through use. Analysis of these artifacts focuses on describing the shape and type of edge modification along flake margins—proximal margin, lateral margins and distal margin—and included description of the margin face, margin shape, and margin modification.

The margin modification is based on intentional flaking and inadvertent use wear where micro flakes are unintentionally removed through use. Light use wear describes an edge of less than 45 degrees with a regular pattern of micro flakes removed. Moderate use wear describes an edge between 45 degrees and 60 degrees with a regular pattern of micro flakes removed. Heavy use wear describes an edge over 60 degrees with a regular pattern of extensive micro flakes removed. "Steep" is defined as intentional edge modification that leaves an edge angle of over 45 degrees. "Alternating" denotes changing faces along the same margin.

Cores are considered to be any mass of stone shaped by the removal of three or more flakes, these flakes serving as blanks for tools (Andrefsky 2005; Odell 2003; Whittaker 1994). Masses of stone showing one or two flake removals are considered to be assayed cobbles.

5.0 CA-CCO-819 EXCAVATION RESULTS

5.1 EXCAVATION RESULTS

Extended Phase I testing at CA-CCO-819 took place on October 15-17, 2012. Pacific Legacy staff excavated 12 0.5 x 0.5 m SPs and three 1.0 x 5 m backhoe trenches (see Figure 3). A total of 1.55 m^3 of sediments was manually excavated and examined. Two edge-modified flakes, 13 pieces of debitage, and less than 10 small fragments of FCR were recovered from the excavation units. Cultural materials were recovered from six of the twelve SPs (SP-2, 3, 5, 7, 10, and 11). No cultural materials were observed in the backhoe trenches. Additionally, six surface artifacts (one core and five pieces of debitage) were identified and recorded. The results of the shovel probe excavation are summarized in Table 1.

5.1.1 SHOVEL PROBE RESULTS

Shovel Probe 1
Shovel Probe 1 was located near the center of the site, and was excavated to 50 cm below surface (cmbs). The soil was uniform throughout and consisted of a very compact, very dark grayish brown silty loam with less than 5% gravels. No cultural materials were recovered.

Shovel Probe 2
Shovel Probe 2 was located approximately 10 meters to the northeast of Shovel Probe 1 and was excavated to 57 cmbs. The soil consisted of two layers. The top 5 cmbs was loose, dark grayish brown silty loam. Below that was a very compact, very dark grayish brown silty loam with less than 5% gravels.

Two pieces of debitage were recovered from 0-20 cmbs. One was a ¼" red chert simple interior percussion flake. The other was a ¼" flake fragment of possible petrified wood or cryptocrystalline silicate.

Shovel Probe 3
Shovel Probe 3 was located approximately 10 meters northeast of SP-2 near the northeastern corner of the site and was excavated to 60 cmbs. The soil consisted of two layers. From the surface to 5 cmbs there was a loose, dark grayish brown silty loam. Below that was a very compact, very dark grayish brown silty loam with less than 5% gravels.

Two artifacts were recovered from SP-3: an edge-modified flake (0-20 cmbs) and one piece of debitage (20-40 cmbs). The edge-modified flake was manufactured from a complex interior percussion flake of petrified wood and measured 2.2 cm long by 3.1 cm wide by 0.8 cm thick. There were irregular unifacial flake removals on the dorsal face of the distal margin and possible use wear along one lateral margin. The flake was a ¼" cryptocrystalline silicate flake fragment.

Table 1. Shovel Probe Summary

Shovel Probe #	UTM Coordinates	Depth (cmbs)*	m^3	Soil	Cultural Constituents
1	598432mE 4204704mN	0-50	0.13	0-50 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	None
2	598437mE 4204713mN	0-57	0.14	0-5 cmbs is a loose dark grayish brown silty loam. 5-57 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	One petrified wood flake (0-20 cmbs), one chert flake (0-20 cmbs)
3	598434mE 4204719mN	0-60	0.15	0-5 cmbs is a loose dark grayish brown silty loam. 5-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	One petrified wood edge-modified flake (0-40 cmbs), one chert flake (20-40 cmbs)
4	598434mE 4204719mN	0-40	0.1	0-40 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	None
5	598426mE 4204725mN	0-60	0.15	0-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels	Three petrified wood flakes (n=2, 0-20 cmbs; n=1, 20-40 cmbs)
6	598417mE 4204718mN	0-30	0.08	0-30 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels	None
7	598434mE 4204695mN	0-60	0.15	0-4 cmbs is a loose dark grayish brown silty loam. 4-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	One chert flake (0-20 cmbs), two petrified wood flakes (20-40 cmbs), one obsidian flake (40-60 cmbs)
8	598423mE 4204693mN	0-40	0.1	0-4 cmbs is a loose dark grayish brown silty loam. 4-40 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	None
9	598423mE 4204710mN	0-40	0.1	0-40 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	None
10	598441mE 4204689mN	0-60	0.15	0-3 cmbs is a loose dark grayish brown silty loam. 3-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	Obsidian edge-modified flake (20-40 cmbs), one chert flake (0-20 cmbs), one petrified wood flake (0-20 cmbs)
11	598430mE 4204687mN	0-60	0.15	0-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	One igneous flake (20-40 cmbs), less than 10 small fragments of FCR (0-40 cmbs)
12	598412mE 4204711mN	0-60	0.15	0-5 cmbs is a loose dark grayish brown silty loam. 5-60 cmbs is a very compact, very dark grayish brown silty loam with less than 5% gravels.	None
Total			1.55		Two edge-modified flakes, 13 debitage, FCR

*centimeters below surface

Page 31 intentionally removed because it contains confidential information.

Shovel Probe 4

Shovel Probe 4 was located approximately 10 meters northwest of SP-2 and was excavated to 40 cmbs. The soil was uniform throughout and consisted of a very compact, very dark grayish brown silty loam with less than 5% gravels. No cultural materials were recovered.

Shovel Probe 5
Shovel Probe 5 was located approximately 20 meters northeast of SP-2 near the site northern boundary. This unit was excavated to 60 cmbs. The soil was uniform throughout and consisted of a very compact, very dark grayish brown silty loam with less than 5% gravels.

Three pieces of debitage were recovered, two from 0-20 cmbs and one from 20-40 cmbs. All three were tan to brown cryptocrystalline silicate or petrified wood. One flake from 0-20 cmbs was a ¼" primary decortication flake, while the other was a ¼" early biface thinning flake. The flake from 20-40 cmbs was a ½" simple interior percussion flake fragment.

Shovel Probe 6
Shovel Probe 6 was located approximately 20 meters northwest of Shovel Probe 1 and was excavated to 30 cmbs. The soil was uniform throughout and consisted of a very compact, very dark grayish brown silty loam with less than 5% gravels. No cultural materials were recovered.

Shovel Probe 7
Shovel Probe 7 was located approximately 10 meters south/southeast of SP-1 and was excavated to 60 cmbs. The upper 4 cm consisted of loose, dark grayish brown silty loam. Below that was a very compact, very dark grayish brown silty loam with less than 5% gravels.

Four pieces of debitage were recovered from this unit. One chert flake was recovered from 0-20 cmbs, two cryptocrystalline silicate/petrified wood flakes from 20-40 cmbs, and one obsidian flake from 40-60 cmbs. The chert flake was a dark gray, ½" simple interior percussion fragment. Both of the cryptocrystalline silicate/petrified wood flakes (one was tan and one white) were ¼" flake fragments. The obsidian flake was a ½" early biface thinning flake. This highly patinated flake was visually sourced as Napa Glass Mountain obsidian.

Shovel Probe 8
Shovel Probe 8 was located approximately 15 meters southwest of SP-1 near the southern portion of the site. It was excavated to maximum depth of 40 cmbs. The soil in this SP consisted of two layers. From the surface to 4 cmbs there was a loose, dark grayish brown silty loam. Below that was a very compact, very dark grayish brown silty loam with less than 5% gravels. No cultural materials were recovered.

Shovel Probe 9
Shovel Probe 9 was locate approximately 10 meters northwest of SP-1 and was excavated to 40 cmbs. The soil was uniform throughout and consisted of a very compact, very dark grayish

brown silty loam with less than 5% gravels. No cultural materials were recovered.

Shovel Probe 10
Shovel Probe 10 was located approximately 20 meters southeast of SP-1 near the southeastern corner of the site and was excavated to 60 cmbs. The top 0-3 cmbs was a loose, dark grayish brown silty loam. Underlying this layer was a very compact, very dark grayish brown silty loam with less than 5% gravels.

Three artifacts were recovered from this unit consisting of: two pieces of debitage (0-20 cmbs) and one edge-modified flake (20-40 cmbs). The flakes included a ¼" light green chert flake fragment lacking a platform and a ¼" cryptocrystalline silicate/petrified wood simple interior percussion flake. The edge-modified flake was highly patinated and visually sourced as Napa Glass Mountain obsidian. It measured 1.3 cm long by 2.0 cm wide by 0.5 cm thick. There was unifacial flake removal and use wear along the dorsal face of the distal margin.

Shovel Probe 11
Shovel Probe 11 was located approximately 10 meters southwest of SP-7 and was excavated to 60 cmbs. The soil was uniform throughout and consisted of a very compact, very dark grayish brown silty loam with less than 5% gravels.

One igneous primary flake (>2") was recovered from the 20-40 cmbs level of the excavation unit. At 0-20 there was a large (>1") cortical (crenulated cortex) piece of tan chert shatter from a rounded cobble. This shatter may be cultural; however it lacks visible flake scars. Less than 10 small pieces of fire cracked rock were observed between 20 and 60 cmbs. These FCR fragments varied in size from 2-5 cm diameter.

Shovel Probe 12
Shovel Probe 12 was located approximately 10 meters west of SP- 9 and was excavated to 60 cmbs. The soil consisted of two layers. From the surface to 5 cmbs there was a loose, dark grayish brown silty loam. Below that was a very compact, very dark grayish brown silty loam with less than 5% gravels.

5.1.2 TRENCH RESULTS

Trench 1
Trench 1 (T-1) was located at the southwestern corner of the site near the base of the slope. The trench was oriented 161°/341°and measured 5.9 m long by 1 m wide and 1.5 meters deep. The southern end of the trench was sloped up to the surface for entrance and egress. No cultural materials were observed during the excavation. Table 2 provides a summary of the soil descriptions observed in T-1 and Figure 4 depicts the soil profile (see Section 5.2).

Trench 2
Trench 2 (T-2) was located near the northern edge of the site, paralleling a seasonal drainage to the north. Trench 2 measured 6.9 meters long along a bearing of 61°/241°. It measured approximately 1 meter wide and 1.5 meters deep. The western end of the trench was sloped up

to the surface for entrance and egress. No cultural materials were observed during the excavation. Table 3 provides a summary of the soil descriptions observed in T-2 (see Section 5.2).

Trench 3

Trench 3 (T-3) was located near the eastern edge of the site and paralleling the bench edge. T-3 measured 5.9 meters long along a bearing of 168°/348° and was approximately 1 meter wide and 1.5 meters deep. The northern end of the trench was sloped up to the surface for entrance and egress. No cultural materials were observed during the excavation. Table 4 provides a summary of the soil descriptions observed in T-3 and Figure 4 depicts the soil profile (see Section 5.2).

5.1.3 SURFACE SURVEY RESULTS

Intensive surface survey identified six flaked stone artifacts within the site boundaries. These consisted of one core and five flakes. These artifacts were distributed along the eastern site edge. In addition to the artifacts there was non-cultural petrified wood on the surface. Much of this was angular and resembled shatter but appears to be the result of cattle trampling.

The igneous core was located south of SP-10 (at 598441mE/4204717mN). It measured 6.2 cm long by 7.9 cm wide by 5.8 cm thick. It was manufactured from a rounded igneous cobble. There were three unidirectional flake removals along one face and no visible platform preparation. This modification may, however, have been the result of trampling damage.

Five pieces of debitage were also discovered on the surface of the site, consisting of two chert, two igneous, and one cryptocrystalline silicate flake. One chert flake was a ¼" fragment lacking a platform. The other chert flake was a ½" simple interior percussion flake. One of the igneous flakes was a ½" fragment lacking a platform. The other was a ½" complex interior percussion flake. The cryptocrystalline silicate flake was a ½" secondary flake with less than 50% cortex.

5.2 SOILS AND STRATIGRAPHY

The shovel probe and trench excavations revealed that the soils across the site were largely uniform, with some variability at the toe of the slope and the edge of the bench. Trench profiles indicate that the soils at the site consist of a single stratum made up of A, B, and C horizons on top of sandstone bedrock. Backhoe trenching and geomorphological analysis of CA-CCO-819 revealed similar soil characteristics to the mapped soil units described in Section 2.1.1. Tables 2, 3, 4 provide detailed soils descriptions of the trenches. Shovel probe excavation revealed that the upper 5 cm is very loose and contains abundant organic matter from decomposing cow manure. The looseness of the soil is the result of extensive cattle trampling. Krotovena were also encountered around 20 cmbs in many of the shovel probes. Figure 4 illustrates representative soil profiles for T-1 and T-2. Given the uniformity of the soils across the site, these profiles are representative of the overall site.

Table 2. Trench 1 West Wall Profile (Described 1.5-2.5 m from NW Corner)

Depth (cmbs)	Stratum	Horizon	Description
0-24	I	A	10YR 4/2 (dry) dark grayish brown silty loam; strong, medium to coarse, granular structure; hard; <5% small to large, subrounded to rounded dispersed gravels; clear and smooth boundary; common fine roots; common fine tubular pores; common worm casts; few rodent holes.
24-58	I	ABt	10YR 3/1 (dry) very dark gray silty clay loam; moderate, medium to coarse, granular parting to subangular blocky structure; very hard; <5% small, subrounded to rounded dispersed gravels; common, faint clay films on ped faces and in pores; clear and wavy boundary; very few fine tubular pores.
58-86	I	Btk	10YR 3/2 (moist) very dark grayish brown sandy clay loam; strong, medium to coarse, angular blocky structure; <5% small, subrounded to rounded dispersed gravels; very firm; many, distinct clay films on ped faces and in pores; clear and smooth lower boundary; few fine accumulations of soft calcium carbonate on ped faces and in pores.
86-150	I	Ck	10YR 5/3 to 5/4 (moist) brown to yellowish brown sandy loam; massive structure; friable; lower boundary not excavated; few fine soft masses of calcium carbonate.

Table 3. Trench 2 South Wall Profile (Described 1.5-2.5 m from SE Corner)

Depth (cmbs)	Stratum	Horizon	Description
0-21	I	A	10YR 4/2 (dry) dark grayish brown silt loam; moderate, medium to coarse, granular structure; <5% small to large, subangular to subrounded gravels; hard; clear and smooth boundary; common rodent holes and bioturbation; common fine roots; common fine tubular pores; common worm casts.
21-53	I	ABw	10YR 3/2 (dry) very dark grayish brown silty clay loam; moderate, medium to coarse, granular parting to subangular blocky structure; <5% small, subangular to subrounded gravels; hard; very few, faint clay films on ped faces; clear and smooth boundary; few fine roots; common fine tubular pores.
53-84	I	Bt	10YR 3/1 (moist) very dark gray silty clay loam; moderate, medium to coarse, angular blocky structure; <5% small, subangular to subrounded gravels; firm; common, distinct clay films on ped faces and in pores; clear and smooth lower boundary; few fine tubular pores.
84-150	I	BCtk	10YR 4/3-4/4 (moist) brown to dark yellowish brown sandy loam; moderate, weak, coarse, angular blocky structure; <10% small to medium, subrounded to rounded gravels; friable to firm; few to common, distinct clay films on ped faces, in pores, and coating/bridging grains; lower boundary not excavated; upper portion of horizon has common, 10 to 30 cm diameter pockets of bioturbated A horizon material; few fine tubular pores; few fine $CaCO_3$ coats along pores and as stringers.

Table 4. Trench 3 East wall profile (described 1.5-2.5 m from SE corner)

Depth (cmbs)	Stratum	Horizon	Description
0-21	I	A	10YR 4/2 (dry) dark grayish brown silt loam; moderate, medium to coarse, granular structure; <5% small to large, subangular to subrounded gravels; hard; clear and smooth boundary; common rodent holes and bioturbation; common fine roots; common fine tubular pores; common worm casts.
21-53	I	ABw	10YR 3/2 (dry) very dark grayish brown silty clay loam; moderate, medium to coarse, granular parting to subangular blocky structure; <5% small, subangular to subrounded gravels; hard; very few, faint clay films on ped faces; clear and smooth boundary; few fine roots; common fine tubular pores.
53-84	I	Bt	10YR 3/1 (moist) very dark gray silty clay loam; moderate, medium to coarse, angular blocky structure; <5% small, subangular to subrounded gravels; firm; common, distinct clay films on ped faces and in pores; clear and smooth lower boundary; few fine tubular pores.
84-150	I	BCtk	10YR 4/3-4/4 (moist) brown to dark yellowish brown sandy loam; moderate, weak, coarse, angular blocky structure; <10% small to medium, subrounded to rounded gravels friable to firm; few to common, distinct clay films on ped faces, in pores, and coating/bridging grains; lower boundary not excavated; upper portion of horizon has common, 10 to 30 cm diameter pockets of bioturbated A horizon material; few fine tubular pores; few fine $CaCo_3$ coats along pores and as stringers.

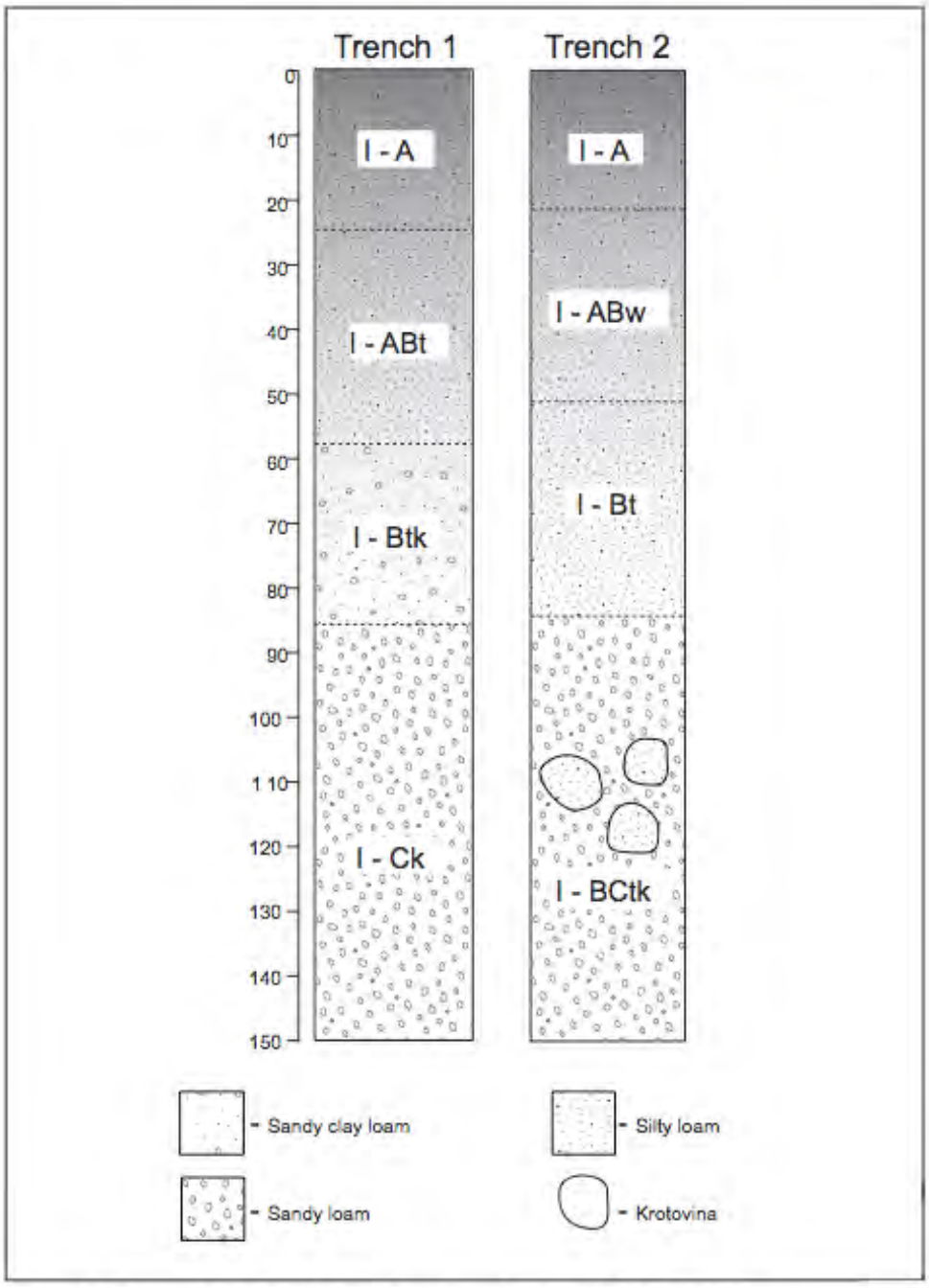

Figure 4. Representative Soil Profiles from Trenches 1 and 2, CA-CCO-819

CRHR and NRHP Evaluation of CA-CCO-819
James Donlon Extension Project
November 2012

5.3 SUMMARY

A total of 21 artifacts were recovered during Extended Phase 1 investigations. Fifteen of these artifacts came from excavation units (totaling 1.55m^3 of soil), while the remainder were surface finds. The six surface artifacts consisted of one core and five pieces of debitage found along the eastern edge of the site. Cultural materials were recovered from six of the twelve SPs (SP-2, 3, 5, 7, 10, 11). These artifacts consisted of two edge-modified flakes, one core, and 18 pieces of debitage. The two edge modified flakes, found in SP-3 (0-20cmbs) and SP-10 (20-40 cmbs), were the only flake tools recovered from the excavations. All but one of the artifacts was found between 0-40 cmbs (see Table 5), indicating that the site is a shallow deposit. For the subsurface component, artifact density is 10 per m^3 and was primarily debitage. No cultural materials were observed in the backhoe trenches. The backhoe trenching and geoarchaeological analysis did not identify a buried archaeological component.

Table 5. Cultural Materials by Depth

Depth (cmbs)	Core	Debitage	Edge-Modified Flake	Total
Surface	1	5	0	6
0-20	0	7	1 (SP-3)	8
20-40	0	5	1 (SP-10)	6
40-60	0	1	0	1
Total	1	18	2	21

Material types present at the site include chert, cryptocrystalline silicate, cryptocrystalline silicate/petrified wood, igneous, obsidian, and petrified wood. The cryptocrystalline silicate/petrified wood was the most common material on site, comprising one-third of all artifacts. Chert was the next most common material type (n=5). The rest of the materials were represented by one or two pieces. The core was an igneous material, while one edge-modified flake was obsidian and the other was petrified wood. Table 6 summarizes the material types and artifact types recovered from the site.

Table 6. Material Types by Artifact Type

Material	Core	Debitage	Edge-Modified Flake	Total
Chert	0	5	0	5
Cryptocrystalline Silicate	0	2	0	2
Cryptocrystalline Silicate/Petrified Wood	0	7	0	7
Igneous	1	1	0	2
Obsidian	0	1	1	2
Petrified Wood	0	0	1	1

This sparse shallow deposit indicates a very ephemeral use of the site. The tool assemblage

lacked diversity or temporally diagnostic tools and indicated that a narrow range of activities took place at the site. The edge-modified flakes represent expedient tools used for general cutting and scraping tasks. The edge modification on the core may be the result of trample damage.

The debitage is mostly early stage reduction of locally available material, primarily petrified wood. The petrified wood is naturally occurring[1] throughout the area and is of varying texture and quality. Expedient, informal, opportunistic utilization of this resource likely occurred. Very few flakes indicative of late stage reduction or tool rejuvenation were present at the site. The assemblage suggests that limited processing of animals or plants may have occurred onsite. The presence of two Napa obsidian flakes is indicative of trade and exchange activities.

In sum, the excavations demonstrated that CA-CCO-819 is a shallow cultural deposit lacking diversity and temporally diagnostic artifacts. The deposit is sparsely distributed on the northeastern portion of the bench and is largely limited to the upper 40 cm of the soils. The backhoe trenching showed that there is no buried deposit at this site. The cattle and rodent bioturbation was present at least to 20 cmbs indicating that the shallow deposit is also highly disturbed to 20 cmbs. The cultural materials recovered indicate that a narrow range of activities were performed at this ephemeral site.

[1] The landowner indicated that petrified wood as well as small nodules of chert, chalcedony, and other stone have been found on their property; in particular on a ridge one hill over to the west (Thomas, personal communication:2012)

6.0 CALIFORNIA REGISTER OF HISTORICAL RESOURCES AND NATIONAL REGISTER OF HISTORIC PLACES EVALUATION AND MANAGEMENT RECOMMENDATIONS

6.1 CALIFORNIA REGISTER OF HISTORICAL RESOURCES AND NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

As described in Section 1.2, CA-CCO-819 must meet at least one of the four criteria for listing on the CRHR (Criteria 1 through 4) or one of the four NRHP criteria (Criteria A through D) to be eligible for listing on either register (National Park Service 1995). Furthermore, the resource must retain sufficient integrity to convey their significance.

CA-CCO-819 is within the Project APE for disturbances associated with construction of James Donlon Extension. Pedestrian survey of CA-CCO-819 initially recorded five lithic artifacts on the site surface (Baker 2012), and subsequent excavation of 12 0.5 x 0.5 m SPs and three backhoe trenches resulted in the recovery of eighteen pieces of debitage, one core, and two edge-modified flakes. However, five pieces of debitage and the core were collected from the surface during the excavation. A total of 1.55 m^3 of sediments were examined. For the subsurface component, artifact density is 10 per m^3 primarily debitage. Two obsidian flakes were recovered which were visually sourced as being from the Napa Glass Mountain obsidian flow. Restrictions on removing artifacts and analysis precluded dating of the artifacts utilizing the obsidian hydration method.

Based on these results, CA-CCO-819 does not appear to be associated with events that have made a significant contribution to the broad patterns of local or regional history or to the cultural heritage of California or the United States and, therefore, does not appear to be eligible for listing to the NRHP under Criterion A, or for inclusion on the CRHR under Criterion 1.

Historical background research, archaeological excavations and Native American consultation failed to identify any links between the CA-CCO-819 and individuals important to local, regional, or national history and, therefore, the site does not appear to be eligible for inclusion on or listing to the NRHP or CRHR under Criterion B or 2 respectively.

Historical background research, previous site surface inspections, and excavation conducted for CA-CCO-819 did not result in the identification of any unusual or unique characteristics that would make the site distinctive of a certain type, period, region, or method of construction, nor representative of the work of a master, or possesses high artistic values. CA-CCO-819 is recommended not eligible for the NRHP under Criterion C, or CRHR under Criterion 3.

The eligibility of CA-CCO-819 under Criterion D relies on its ability to address significant archaeological research themes. CA-CCO-819 is a shallow, broadly dispersed light lithic scatter. The assemblage contained two obsidian flakes, which were visually sourced as Napa Glass

Mountain. The site assemblage lacks materials, such as faunal remains, groundstone, typologically diagnostic artifacts (projectile points, shell beads), abundant debitage and flaked stone tools, that are required to address significant archaeological research themes such as Cultural Chronology; Exchange Relationships; Lithic Production; Settlement, Subsistence, Seasonality, and Environment; Sociology and Ideology; Demographics, and Cultural Affiliation (see Section 2.3). Though obsidian can provide relative dates for site occupation, it was present in small numbers and does not appear to be available in amounts that would provide a statistically valid sample. The small amount of debitage and core provide limited data about lithic production at the site. In this case, the site consists of a sparse surface lithic scatter, which does not contain sufficient information to contribute to significant questions about prehistory and cannot be considered eligible under NRHP Criterion D, or CRHR Criterion 4. The site, moreover, does not appear to have substantial subsurface deposits of archaeological materials. While perhaps contributing to a regional database regarding site settlement, the resource does not, by itself, contain information that can address questions relevant to the field of prehistoric archaeology.

The concept of integrity is often interpreted to mean "intactness" of physical characteristics. In terms of NRHP eligibility, integrity is a measure of the degree to which a property retains the essential characteristics defined under one of the four eligibility criteria at 36 CFR 60.4. Thus, the aspect of integrity sufficient to convey a property's cultural values will depend on the specific criterion or criteria for which it is significant. Measures of integrity for prehistoric archaeological sites include artifact preservation and retention of stratigraphic relationships.

CA-CCO-819 is comprised solely of lithic artifacts with good preservation. If other types of artifacts were present in the past they have not been preserved. The absence of organic artifacts such as faunal and floral remains may indicate poor artifact preservation; however it is more likely that these materials were never present at the site.

Cultural materials observed at CA-CCO-819 are located in an undifferentiated A Horizon that is approximately 60 cm deep. There is evidence that the site has suffered impacts in at least the upper 20 cm of the deposit. There was abundant evidence that the cattle use the bench on which the site is located as a wallow and a place to congregate. The presence of now defunct cattle-related apparatus (site datum), within the site boundary, indicates that this area has been used by cattle for decades, perhaps dating as far back as 1901 when the Abrams family first began ranching here. Consequently, cattle trampling impacts to the upper portion of the site appear to be significant. Other site impacts include bioturbation, rodent burrowing, erosion, and off road vehicle use. The excavation revealed that, at a minimum, the upper 20 cm of the site, which comprise a significant portion of the cultural deposit, have been seriously impacted by cattle trampling and bioturbation. Consequently, this resource appears to have poor stratigraphic integrity.

6.2 MANAGEMENT RECOMMENDATIONS

There is always a potential to encounter previously undetected subsurface archaeological deposits during project construction; however, given that the site will be buried underneath fill and minimal sub-surface disturbance is planned, it is our opinion there is no need for an archaeological monitor to be present during construction.

Construction and supervisory staff must complete the Worker Environmental Awareness training before working on the construction project. Such training includes alerting workers to the protection of cultural resources and the possibility for the discovery of unanticipated cultural resources, including buried archaeological and paleontological remains. There should be a reporting system in place in the event such remains are found during construction.

If human remains are encountered during construction or any other phase of development, work in the area of the discovery must be halted, the Contra Costa County Coroner notified, and the provisions of Public Resources Code 5097.98-99, Health and Safety Code 7050.05 carried out.

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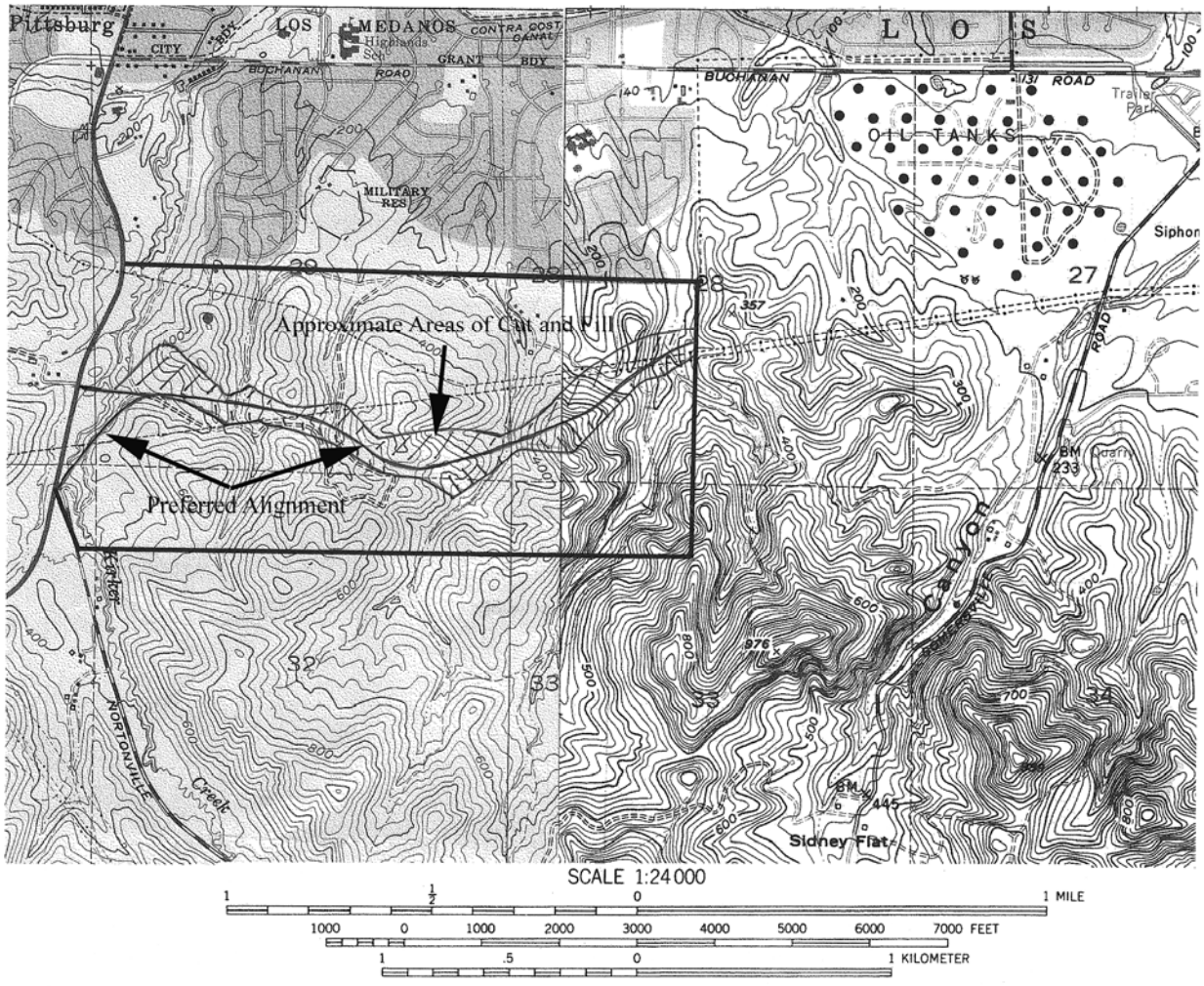
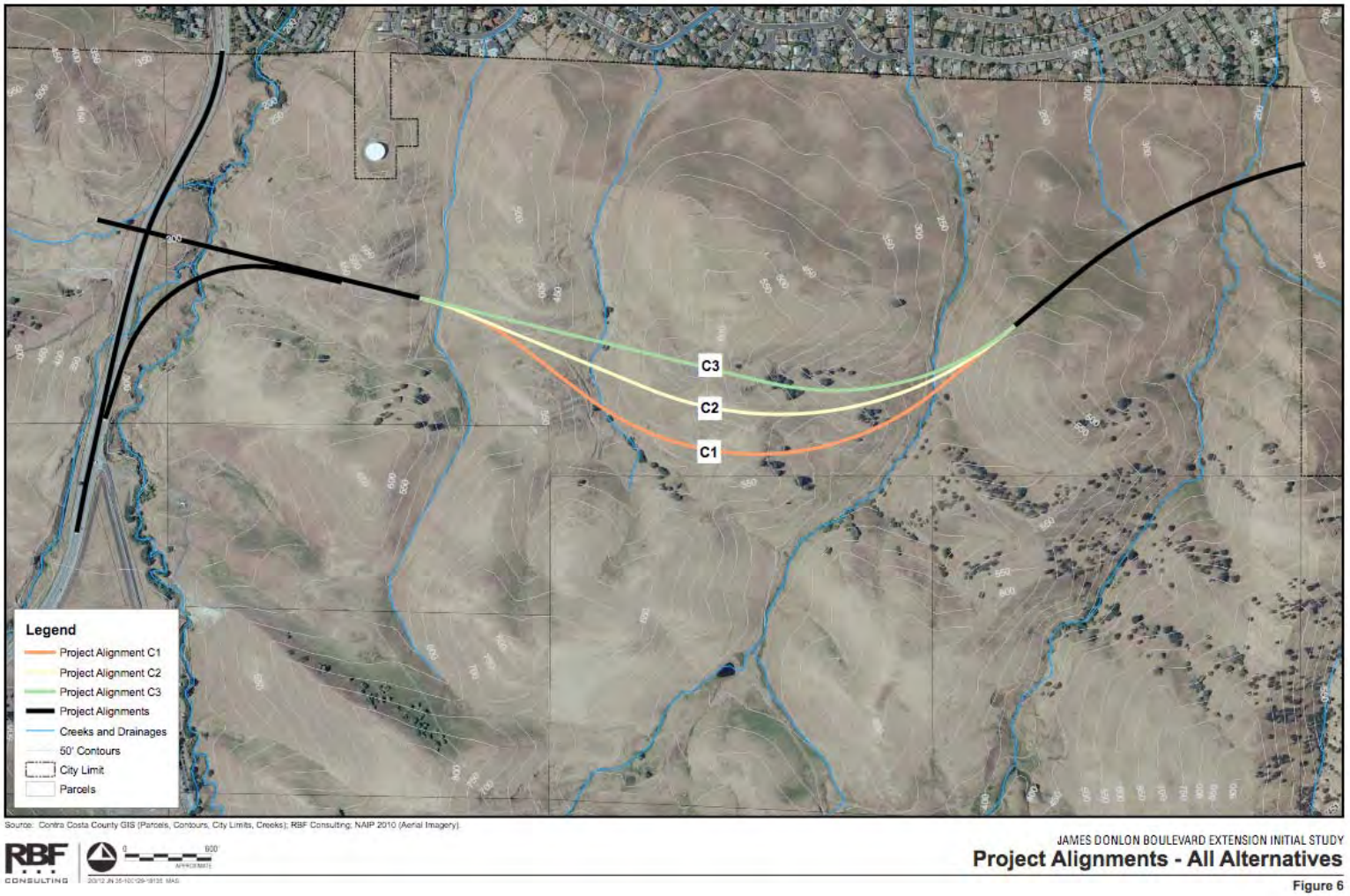
APPENDIX A: PROJECT APE AND CONSTRUCTION MAPS: MAPS 2-4 FROM BAKER (2012b)

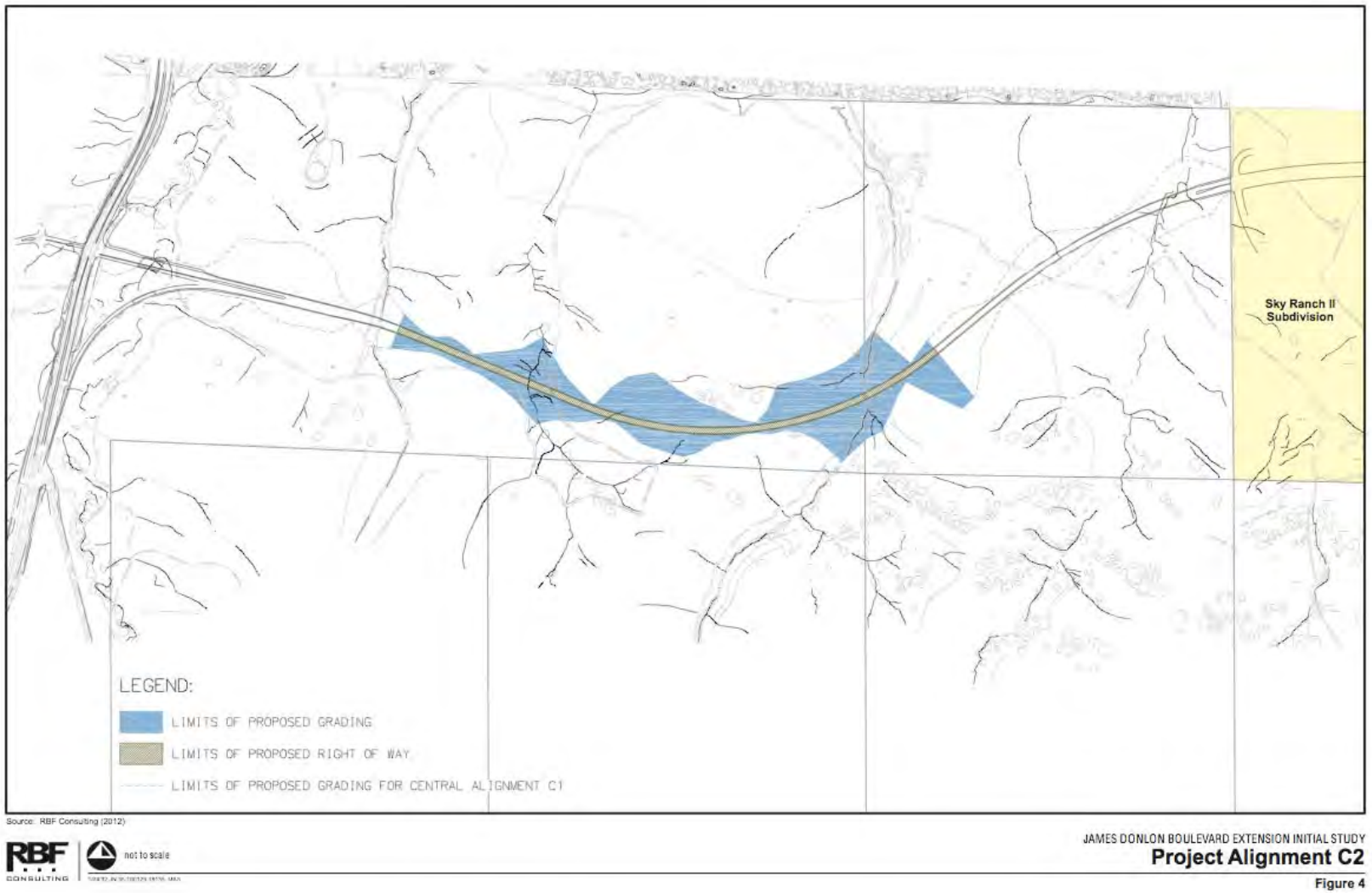


Map 2:

Location of Project Study Area with
Preferred Alignment and Area of Cut and Fill
(USGS 7.4' Clayton Quadrangle 1980, 1994 revised)



Map 3: Proposed Project Alternatives



Map 4: APE for Archaeology: Preferred Alignment and Areas of Cut and Fill

APPENDIX B: CA-CCO-819 (P-07-03086) SITE RECORD

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary# P-07-003086
HRI#
Trinomial CA-CCO-819
NRHP Status Code 6Z

Other Listings
Review Code Reviewer Date

 ***Resource Name or #:** (Assigned by recorder) A/HC-164

P1. Other Identifier: ***P2. Location:** ☐ **Not for Publication** x **Unrestricted**

***a. County:** Contra Costa

***b. USGS 7.5' Quad:** Clayton **Date:** 1953, photorevised 1980, 1994 **T** 2N; **R** 1E; **M.D.** **B.M.** MD

c. Address: _4723 Suzanne Drive___City: Pittsburg Zip: 94565

d. UTM: (Give more than one for large and/or linear resources) Zone 10; 0598540 mE/ 4204500 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate): From Kirker Pass Road/Railroad Avenue in Pittsburg, CA, turn east onto Buchanan Road. Go 0.9 miles to Suzanne Drive. Turn south onto Suzanne Drive and go approximately 0.5mi to a gate at the south end of the subdivision. Continue south, entering the Thomas Ranch, to the end of the paved Suzanne Drive Road to the Thomas Ranch buildings. From the southernmost barn of the ranch complex, cross an intermittent stream and continue south (190º) ~350m (about 0.3 mi) on a dirt ranch road that runs south on the west side of the intermittent stream to a small flat west of the road and stream. There is a small, west to east flowing intermittent drainage just to the north of the flat. The flake scatter was found on this flat.

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): A lithic scatter. Site materials observed consisted of one utilized basalt flake showing unifacial utilization and four pieces of probable debitage or chipping waste. These included one basalt flake, two small flakes of some type of cryptocrystalline quartz (chert or quartzite), and one flake of unidentified cream-colored material, possibly an indurated sandstone. Although site indicators were sparse, these flakes were observed in loose silty dirt around ground squirrel burrows, indicating that there may be a buried archaeological component here. There is a large hill directly behind this area and colluvial activity has probably deposited a lot of dirt on this small flat. The flat is situated at the confluence of an intermittent stream and two seasonal drainages, one on either side of the stream. At least seasonal freshwater would have been available at this location.

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

See Continuation Sheet

***P3b. Resource Attributes:** (List attributes and codes) AP2 Lithic Scatter

***P4.Resources Present:** Site

P5b.Description of Photo: (view, date, accession #) (See Continuation Sheet)

***P6. Date Constructed/Age and Source:** Prehistoric

***P7. Owner and Address**: Thomas Family, 4723 Suzanne Drive, Pittsburg, CA 94565

***P8. Recorded by:** (Name, affiliation, and address)
Suzanne Baker
Archaeological/Historical Consultants
609 Aileen St.
Oakland, CA 94609

*P9. Date Recorded: March 05, 2012

*P10. Survey Type: **(Describe)** On-foot archaeological reconnaissance.

*P11. Report Citation: Baker, Suzanne, 2012, Cultural Resources Survey of the James Donlon Boulevard Extension Project, Contra Costa County, California: Addendum 1. Report for RBF Consulting, Walnut Creek, CA.

***Attachments:** X Location Map X Continuation Sheets

State of California — The Resources Agency Primary # P-07-003086
DEPARTMENT OF PARKS AND RECREATION Trinomial CA-CCO-819

ARCHAEOLOGICAL SITE RECORD

 ***Resource Name or #** (Assigned by Recorder) A/HC-164

***A1. Dimensions:** **a. Length** 30m (N-S) × **b. Width** 20m (E-W)
Method of Measurement: X Paced ☐ Taped ☐ Visual estimate ☐ Other:
Method of Determination (Check any that apply.): X Artifacts ☐ Other (Explain: Based on limits of observed lithic scatter).
Reliability of Determination: Low Explain: Although site indicator were sparse,these flakes were observed in loose dirt around ground squirrel burrows, indicating that there may be a buried archaeological component here. There is a large hill directly behind this area and colluvial activity has probably deposited a lot of dirt on this small flat.
. **Limitations** (Check any that apply): Site limits incompletely defined. No excavation has yet been conducted.

A2. Depth: Unknown

***A3. Human Remains:** Unknown (Explain): None observed on surface and no excavations conducted.

***A4. Features**: (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map.)

***A5. Cultural Constituents:** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with features.):
Site materials observed consisted of one utilized basalt flake showing unifacial utilization and four pieces of probable debitage or chipping waste. These included one basalt flake, two small flakes of some type of cryptocrystalline quartz (chert or chalcedony), and one flake of unidentified cream-colored material, possibly an indurated sandstone.

***A6. Were Specimens Collected?** No

***A7. Site Condition:** Good, but cattle grazing.

***A8. Nearest Water:** (Type, distance, and direction.) Intermittent stream 5-10m east of flat where site materials are located. A seasonal drainage immediately north of flat.

***A9. Elevation:** ~300'

A10. Environmental Setting: (Describe culturally relevant variables such as vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc.) The site is on an undeveloped cattle ranch in an area of steeply rolling hills. The site is located on a small flat in a relatively steep canyon of an intermittent stream. It is just west of the stream. Steep slopes rise above and just to the west of the site. The site is covered with seasonal grasses, but at the time of the survey, grasses were low and cattle had been grazing on the site. The underlying geology is sandstone. Soils are clay silt. Solar exposure is primarily from the south.

A11. Historical Information: This prehistoric site is situated on the historic Warren and William Abrams ranch, established in 1901 and now owned by the Thomas family, descendants of the Abrams. The ranch has been evaluated as possibly eligible for the National Register of Historic Places as an excellent example of a cattle ranch from the first half of the 20th century (Kostura 2002)

***A12. Age:** Prehistoric, chronology not yet determine.

A13. Interpretations: (Discuss data potential, function[s], ethnic affiliation, and other interpretations)

A14. Remarks:

A15. References: (Documents, informants, maps, and other references): Baker, Suzanne (Archaeological/Historical Consultants), 2012, Cultural Resources Survey of the James Donlon Boulevard Extension Project, Contra Costa County, California: Addendum 1. Report for RBF Consulting, Walnut Creek, CA. Kostura, William (Archaeological/Historical Consultants), 2002, Historic Resource Evaluation of the Abrams Ranch, Pittsburg, Contra Costa County, California. For RBF Consulting, Walnut Creek, CA.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record.): See Continuation Sheets
Original Media/Negatives Kept at: Archaeological/historicl Consultants, 609 Aileen St., Oakland, CA 94609

***A17. Form Prepared by:** Suzanne Baker **Date:** March 23, 2012 **Affiliation and Address:** Archaeological/Historical Consultants, 609 Aileen St., Oakland, CA 94609

Unifacially utilized basalt flake at A/HC-164

Unifacially utilized basalt flake at A/HC-164

Location of A/HC-164, facing north (Thomas/Abrams Ranch building complex in background).

Location of A/HC-164, facing south

Page 5 of 6 intentionally removed because it contains confidential information.

Page 6 of 6 intentionally removed because it contains confidential information.

Appendix D.3

Draft Archaeological Discovery Plan

DRAFT

ARCHAEOLOGICAL DISCOVERY PLAN

JAMES DONLON EXTENSION PROJECT

CITY OF PITTSBURG,

CONTRA COSTA COUNTY, CALIFORNIA

by

Suzanne Baker, M.A., M.SC. (RPA), Archaeologist

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500 Ygnacio Valley Road – Suite 300
Walnut Creek, CA 94596

December 2012

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INTRODUCTION

The following document describes how the City of Pittsburg plans to comply with 36 Code of Federal Regulations (CFR) 800 13(a)(2), a process for treating archaeological discoveries, during the James Donlon Extension Project.

The City of Pittsburg (City) proposes the construction of a roadway extension from James Donlon Boulevard westward to Kirker Pass Road in an area of unincorporated Contra Costa County. Planning for this new roadway commenced as early as 2002. The project was then called the Buchanan Road Bypass Project. Since the California Environmental Quality Act (CEQA) requires that the effects of such projects on cultural resources be considered, in 2002 RBF Consulting of Walnut Creek, California requested that Archaeological/Historical Consultants (AH/C) of Oakland, California, conduct a cultural resources study of three alternative alignments. This was completed in July 2002 and the results were reported in an Archaeological Survey Report and an Historic Resources Evaluation Report (Baker 2002; Kostura 2002). In 2007, a preferred road alignment was chosen, and RBF Consulting asked AH/C to conduct another field study to ensure that all of the preferred alignment had been inspected during the initial survey. The results of that study were documented in another cultural resources survey report (Baker 2007). By 2012, a new preferred alignment had been chosen that incorporated much of the previously studied alignment(s), but which also varied in certain locations. To make certain that the new preferred alignment was entirely subjected to archaeological survey, the Project Area was revisited in in the spring of 2012. During the 2012 archaeological survey, one prehistoric site (P-07-003086, CA-CCo-819), a small lithic scatter was found within the proposed alignment for the Project (Baker 2012). Because Federal funding is now potentially available, the 2012 Archaeological Survey Report that resulted was prepared to document the new alignment, summarize and update previous work, and to ensure that reporting requirements of Section 106 of the National Historic Preservation Act are met. Because of the presence of an archaeological site, an Extended Phase I Archaeological Survey was then undertaken and the results documented (Schrader et al. 2012).

If Federal money will be involved in this project, it is assumed that the California Department of Transportation (Caltrans), acting as the lead agency under the delegated authority of the Federal Highway Administration (FHWA), will provide project oversight with administration by the Caltrans District 04 Office of Local Assistance. Consequently, the studies conducted for this project are consistent with Caltrans responsibilities under the January 2004 *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA) for Compliance with Section 106 of the National Historic Preservation Act (NEPA).*

Because of the presence of prehistoric sites within and very near the Project Area, it must be assumed that there is some archaeological sensitivity for the entire Project. A Discovery Plan

to guide treatment of unknown cultural resources, should they be found during construction, is therefore warranted.

This Discovery Plan outlines the procedures to be followed if archaeological properties are discovered during construction excavation and includes the criteria for NRHP eligibility evaluation and methods for data recovery, if needed. The City of Pittsburg will assume that the property is potentially eligible for the purposes of compliance with Section 106 (36 CFR 800.13 [a][2], assuming the resources meet eligibility criteria in the research design based on consultation with the State of California Department of Transportation (Caltrans) archaeology staff. If data recovery were determined appropriate, such work would be done as quickly as possible so that construction is not unnecessarily delayed.

PROJECT DESCRIPTION

The City of Pittsburg (City) proposes the construction of a 1.71-mile extension of James Donlon Boulevard from the western edge of the Sky Ranch II Subdivision (Sky Ranch II) to Kirker Pass Road. The proposed Project would provide a limited access arterial roadway to serve regional circulation needs and relieve existing traffic congestion on Buchanan Road, which currently receives a high volume of east-west commute traffic between the City of Antioch and the City of Concord. The extension of James Donlon Boulevard would provide an alternative access route that would link the eastern portion of Contra Costa County (e.g., the cities of Brentwood, Antioch and Pittsburg) to the central portion of Contra Costa County (e.g. the cities of Concord and Walnut Creek). In addition to the extension of James Donlon Boulevard, the City proposes to upgrade Kirker Pass Road from Nortonville Road to the City limit line (approximately 0.63 mile) from a four-lane rural road to a four-lane urban road. A northbound to eastbound free right-turn from Kirker Pass Road to the extension of James Donlon Boulevard is also proposed.

The Project site is currently located within unincorporated Contra Costa County. To facilitate construction of the roadway extension, the City proposes to annex two privately-owned properties through which the roadway would cross totaling approximately 475 acres. A General Plan Amendment and Prezoning to designate the properties Open Space are also proposed. In addition, the City proposes to annex the Kirker Pass Road right-of-way from Nortonville Road to the City limit line and, thus, that portion of Kirker Pass Road would become a City-maintained right-of-way.

ARCHAEOLOGICAL SENSITIVITY

In 2012, a record search at the Northwest Information Center, Sonoma State University, indicated that two historic sites are recorded within or very near the project alignment. The Warren and William Abrams Ranch complex (P-07-002566), located in the northwest quarter of the southwest quarter of Section 28, was recorded and evaluated for the National Register and California Register (Kostura 2002a; 2002b; see Appendix 2). The complex was constructed after 1901 and before 1950 and some of the buildings are still used by the current

landowners, the Thomas family. The historic building complex was judged to be eligible for the National Register and California Register (Kostura 2002:7). The preferred James Donlon Boulevard road alignment passes approximately 350 to 450 meters east and south of the ranch complex.

One historic site—P-07-002564 (CA-CCO-747H)—an approximately 600 linear foot (182m) long segment of an old road—was recorded during the 2002 survey for this Project in the southeast part of Section 28, running north-south on the east side of and slightly above a drainage. It is approximately 6 to 10 feet wide. An apparent continuation of the road could be seen to the south, but recording the road beyond the Project Area was outside of the scope of the cultural resources survey. The road is believed to be more than 50 years old (Baker 2002:7). As far as is known, this linear feature does not extend into the Preferred Alignment.

One prehistoric site—CA-CCO-437/H (P-07-000220)—has been recorded within one-quarter mile of the Area of Potential Effect (APE) for archaeology. This site, located at the midline between Sections 27 and 28, was first recorded in 1981 (Flynn 1981; Flynn and Rossman 1981). Artifacts described at that time consisted solely of five grinding implements, including two pestles, two manos, and a hopper mortar, within an approximately 725m by 150m area. No midden soil, chipped stone tools, or chipping detritus were seen. The artifacts were apparently collected during that survey (Flynn and Rossman 1981; Flynn 1981). Re-inspections in 1983 and 2002 and test excavations in 1999 found no additional cultural materials (Flynn 1981; Flynn and Rossman 1981; Windmiller 1999; 2002). Another inspection in 2002 found two possible hammerstones—cobbles exhibiting end and edge battering—but these were marginal as artifacts. No other cultural materials and no midden soil were observed (Baker 2002). Since 2002, a subdivision and road have been constructed in the area of the recorded site location of CA-CCO-437/H. This site is outside of the present Project Area; the eastern terminus of the segment of the James Donlon Boulevard Extension alignment considered in this report is west of the recorded site location.

As discussed above, prehistoric site CA-CCO-819 (P-07-003086), a sparse surface lithic scatter was found in 2012 within the proposed alignment for the James Donlon Extension Project. It consisted of a probable utilized basalt flake and four other pieces of lithic debitage (Baker 2012). Because of the sparse nature the surface finds, it was recommended that an Extended Phase 1 Archaeological Survey be conducted to determine whether a subsurface deposit existed and, if so, its depth and extent; the type of data categories that it contained; and whether it had information potential sufficient to qualify it for the National Register of Historic Places and the California Register of Historic Resources. This work was undertaken in October 2012. Test excavations determined that shallow subsurface prehistoric archaeological materials were present in the site. The sparse nature of the artifacts and limited number of data categories indicated, however, that the site has little further information potential and is, therefore, not eligible for either the National Register of the California register (Schrader et al. 2012).

Wayne Thomas (2002), the former owner of the study area, said that over the years an occasional Indian artifact, such as bowl mortars and grinding stones, had been found on the

property, but these had long since been collected. He relayed no specific information about locations.

The James Donlon Project Preferred Alignment runs through a relatively rugged and hilly topography, but the presence of a number of seasonal drainages nearby and the known location of a prehistoric site within the project, as well as one within a half mile, indicate at least a moderate archaeological sensitivity. The potential for finding unknown historic sites is lower, given what we know about the loci of historic activity near the Project Area.

CULTURAL BACKGROUND

Context

To put the James Donlon Project in its prehistoric and historic contexts, please refer to the Baker (2002) ASR and the Kostura (2002) HRER for local and regional prehistory and history.

Expected Property Types

Previous archaeological surveys have found primarily prehistoric lithic materials in and near the Project Area. Site CA-CCo-819 (P-07-003086) is known to contain debitage, cores, and utilized flakes of basalt, chert, obsidian, and other materials (Baker 2012; Schrader et al. 2012). Nearby site CA-CCo-437/H (P-07-000220) contained grinding implements, including pestles, manos, a hopper mortar, and possible hammerstones (Flynn and Rossman 1981; Flynn 1981; Baker 2002).

Prehistoric property types that could be expected in the Project, therefore, might include lithic scatters, including artifacts and debitage, and grinding stones, but without other cultural components. Other potential properties are middens—deposits of culturally derived materials indicating human settlement. Middens often contain such features as human burials, hearths, housepits, and concentrations of fire-cracked rock, as well as shell, bone, and lithic artifacts, ground stone artifacts, flaked stone debitage, fire-cracked rock, charcoal, and other organic detritus, such as ash, seeds, shell, and non-artifactual faunal material. Isolated human burials and other isolated features and artifacts also might be expected.

Potential historic properties might include trash dumps dating at least to the early 20th century. Structural features do not seem likely within the Project Area.

ARCHAEOLOGICAL RESEARCH THEMES AND DATA REQUIREMENTS FOR EVALUATION OF ARCHAEOLOGICAL PROPERTIES

The criteria for evaluation of properties for nomination to the National Register of Historic Places (NRHP) are outlined in Part 60.4 of Chapter 1 of Title 36 of the Code of Federal Regulations:

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

a) are associated with events that have made a significant contribution to the broad patterns of our history; or
b) are associated with the lives of persons significant in our past; or
c) embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
d) have yielded, or may be likely to yield information important in prehistory or history (36CFR 60.4).

The California Environmental Quality Act (CEQA) defines a significant historical resource as "a resource listed or eligible for listing on the California Register of Historical Resources" (Public Resources Code Section 5024.1). For a historical resource to be eligible for listing in the CRHR, it must be significant at the local, state, or national level under one or more of the following four criteria:

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

Historical resources automatically listed in the CRHR include those historical properties listed in, or formally determined eligible for, the NRHP.

For archaeological properties, information potential (Criterion d and Criterion 4 above)—is most appropriate. The degree of information potential residing in an archaeological property depends on the quality of its integrity and on the types of research data sets residing in the site. The importance of these data sets, however, depends on locally relevant research issues that can be addressed by any new archaeological find within the .

The discovery of undisturbed subsurface archaeological materials may contribute information important in developing the emerging regional picture of lifeways and change over time. A number of general themes can be posed and the types of data necessary to address these themes can be discussed (with an emphasis on prehistory):

1) Cultural Chronology. Chronology is generally a fundamental topic in archaeology. Chronological information provides baseline data on which research for many other

archaeological questions is dependent. Development of individual site chronology is also important for filling in regional information gaps and for comparison with other regional sites. Data sets for chronology in the region include but are not limited to:

- Obsidian, useful for hydration studies for relative dating;
- Organic materials, such as carbon, bone, or shell, to conduct radiocarbon dating;
- Shell beads for stylistic analysis used in relative dating (shell bead sequences are well known for the region);
- Projectile points, since relative dates for many point types are known for the region;
- Other typologically distinctive artifacts for which some chronological associations have been established.

2) Settlement, Subsistence, Seasonality, and Environment. Archaeological evidence can help establish the types of subsistence practices used by past populations, the times of year the site may have been utilized, and whether there have been environmental changes since the site was used. Data sets for addressing such research issues include:

- Groundstone artifacts which can indicate seed or acorn processing;
- Fishing implements, such as bone fishhooks or net weights;
- Projectile points and other lithic artifacts that may indicate hunting and butchering;
- Faunal and floral materials to indicate the types of animals hunted and vegetal products utilized, environmental procurement zones, and seasonality;
- The presence of features, such as house pits or hearths.

3) Exchange Relationships. The degree of participation by prehistoric populations in exchange networks can indicate the complexity of organizational structure, subsistence strategies and relationships with neighboring people. Some questions include the sources of trade items, what the sources indicate about trade patterns, and whether the type, intensity, and source of exchange items changed over time. Clearly many perishable trade items do not survive in an archaeological context; however, useful data sets include:

- X-Ray fluorescence of obsidian and basalt items to determine sources;
- Shell analysis to determine location of origin;
- Ethnobotanical analysis of carbonized seeds to determine if such materials may have derived from outside of the local area.

4) Lithic Production. Analysis of tool production can provide insight into site activities, site categorization, and trade. Did tool manufacture change over time? Were local versus imported materials favored? What production methods were used? Data sets include:

- Formed tools and debitage for identification of production methods, reuse and repair, and heat treatment, and for sourcing and analysis of importance of distance to source.

5) Sociology and Ideology. Do artifacts indicate wealth, social differentiation, or ritual practice? Data sets could include:

- Artifacts, such as “charmstones”, beads and pendants.
- Human burials and their burial associations.

4) Demographics, and Cultural Affiliation. Does the site contain evidence of affiliation with archaeologically known populations? Is there evidence of intensity of occupation, age differentiation, or disease within the site? Data sets may include:

- Formed artifact types, such as projectile points and steatite bowls;
- Human burials.

It should be noted here that the presence of prehistoric human burials would almost surely create a presumption of eligibility for the National Register of Historic Places because of the multifaceted nature of the information they contain and because of their importance to contemporary Native American populations. The degree of analysis of human burials is dependent on permission from Most Likely Descendants designated by the Native American Heritage Commission.

Many other categories and questions can be posed depending on the quantity and quality of archaeological data recovered. Historic finds can generally also be evaluated based on many of the themes discussed above with obvious differences in artifact data sets and with the addition of the use of historic archival research.

METHODOLOGY

Excavation Methodology

Evaluation of an archaeological discovery may take the form of limited hand excavation in order to demonstrate that the endangered resource is eligible for inclusion on the National Register of Historic Places and/or the California Register of Historic Resources. Depending on the nature of the find, units of 0.5 x 0.5cm, 0.5m x 1m, 1m x 1m, and/or 1m x 2m in size would be hand excavated. The areal extent and depth of the cultural materials would determine the number of units, but it is anticipated that no more than one to two cubic meters of excavation would be required to determine the data categories contained within the excavated soils. A site datum will be established to provide horizontal control. Backhoe testing to determine areal boundaries and whether deeply buried deposits exist might be required.

Excavation of units will be in arbitrary 10cm levels, unless natural stratigraphy is recognized. All soil would be excavated through screen mesh. One-quarter inch mesh may be utilized, with samples of soil screened through one-eighth inch mesh in order to determine whether smaller items, such as beads, seeds, and faunal material like fish bone, exist in the matrix. Materials from each level will be bagged and labeled by provenience.

After hand excavation, laboratory cleaning and cataloguing of the artifactual materials will be conducted. Analysis will include counting, weighing, and description of materials. Those

selected for further analysis, such as obsidian, radiocarbon, and faunal and floral samples, will be sent to the appropriate laboratories. The types of data sets found and their ability to address some of the research questions posed, as well as the degree of integrity of the deposit, will determine the site's information potential and its eligibility for the NRHP.

Generally, the level of effort will be determined by the size and complexity of the deposit and will be limited by the degree of projected impacts to a site from the James Donlon Project. It can be said that fieldwork methods must be flexible enough to reflect the existing on-the-ground conditions of the project. The research methodology would be modified as needed.

Curation

Unless retained by the landowner, artifacts and samples would become the property of the City of Pittsburg,. Materials will be bagged, labeled, and curated in archive-quality boxes, accompanied by documentation. Upon completion of the final report, the collection and documentation will be transferred to an appropriate curation facility for permanent curation. The facility will meet the standards for Curation of Federally Owned and Administered Archaeological Collections (36 CFR 79).

DATA RECOVERY REPORT

After evaluation of the archaeological discovery, a technical report meeting Caltrans standards will be issued and submitted to the City of Pittsburg. It will include the scope of work, description of location and setting, a summary of previous research, research goals, methodology, description of findings, evaluation of finding in relationship to research goals and problems, conclusions, references, and necessary appendices.

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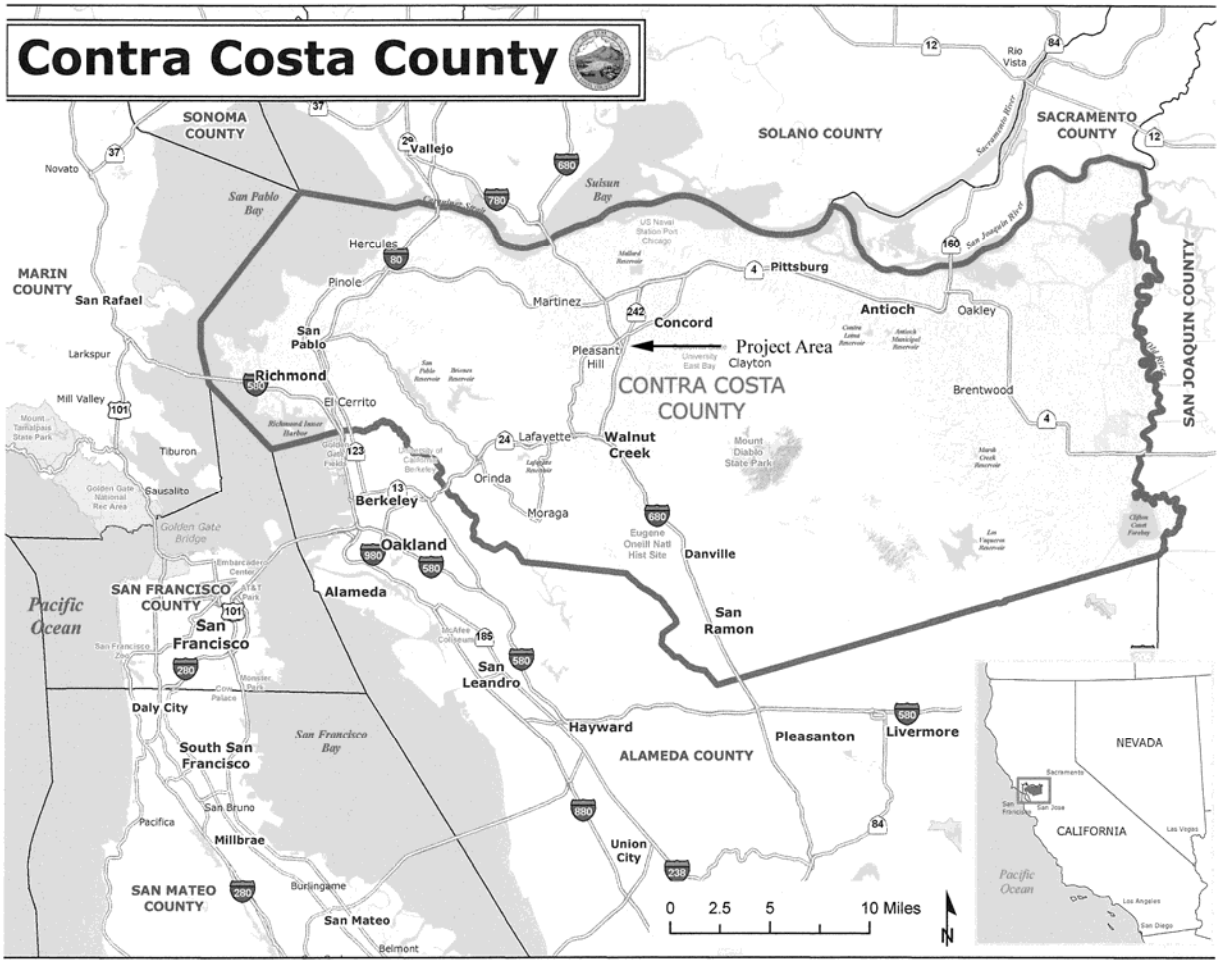
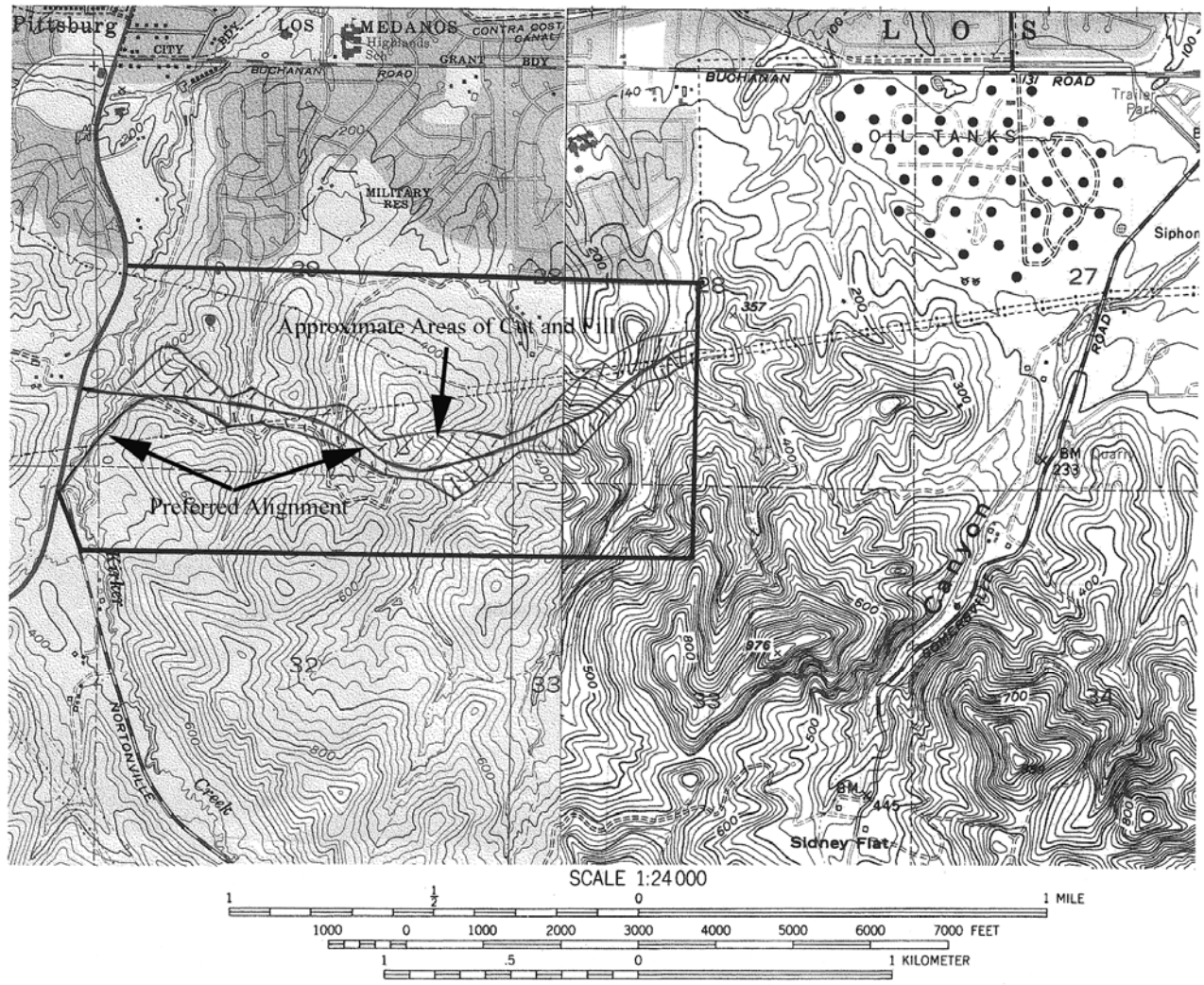
APPENDIX A:

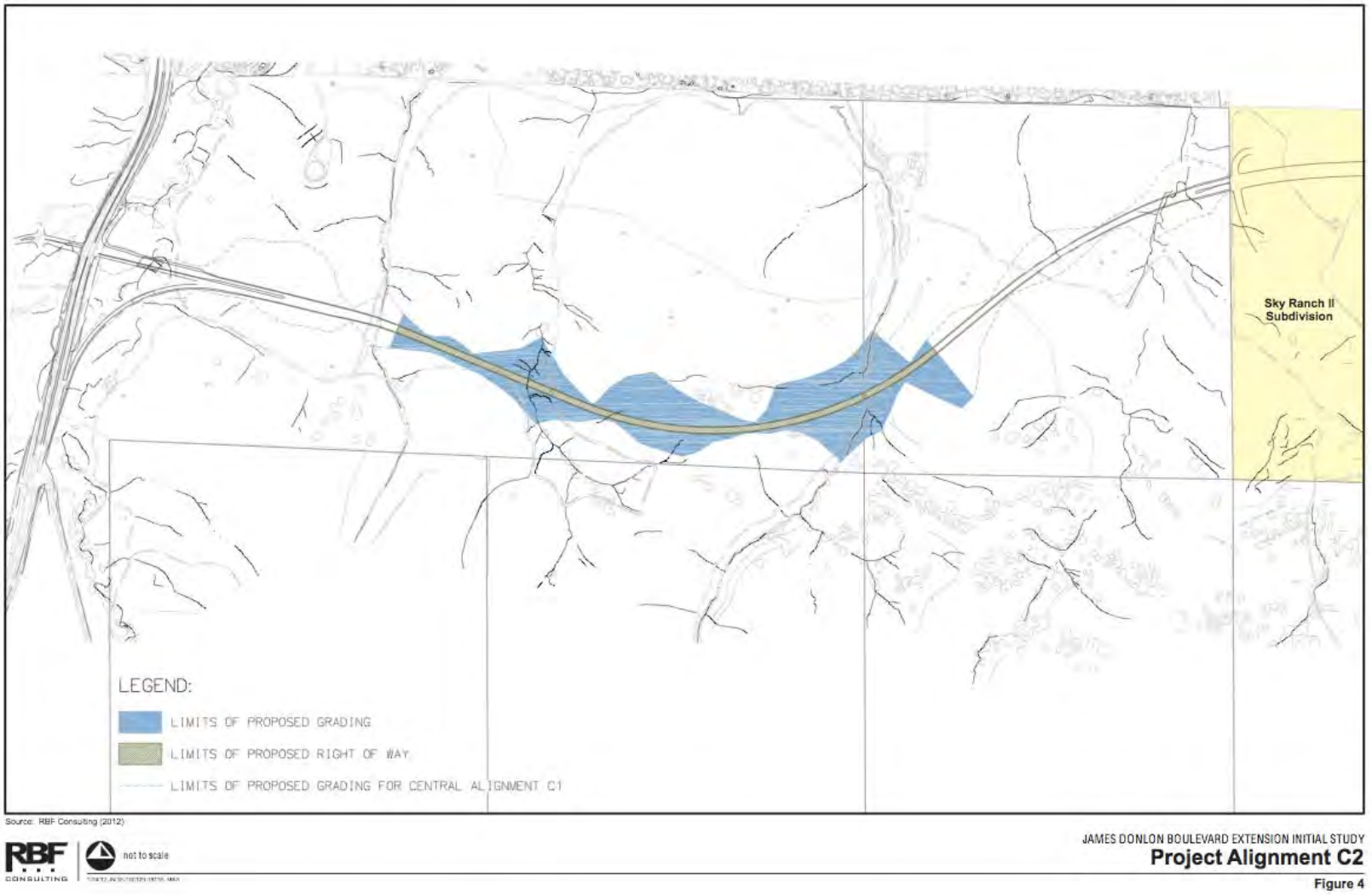
PROJECT MAPS



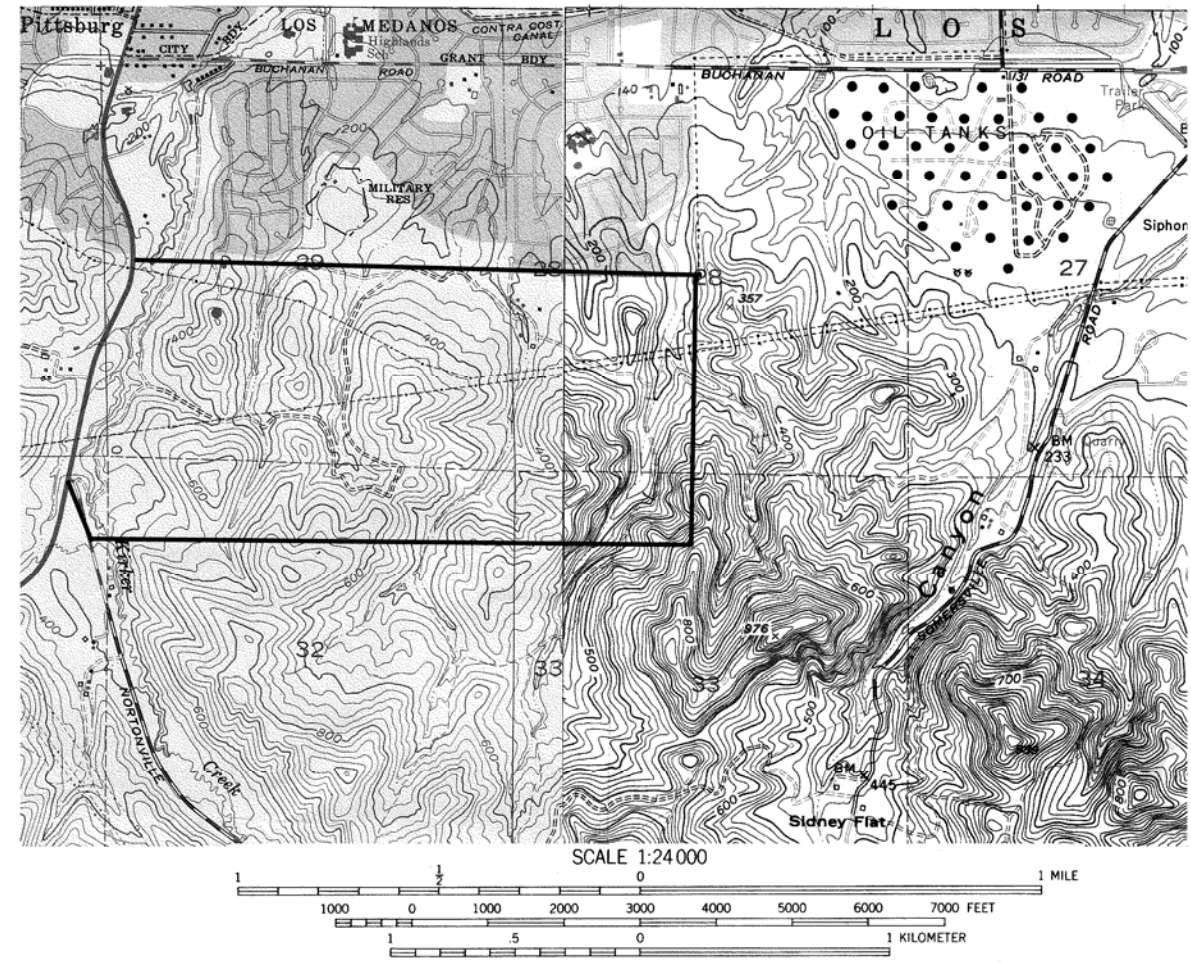
Map 1: Project Vicinity



Map 2: Location of Project Study Area with
Preferred Alignment and Approximate Areas of Cut and Fill
(USGS 7.4' Clayton Quadrangle 1980, 1994 revised)



Map 3: APE for Archaeology: Preferred Alignment and Areas of Cut and Fill



Map 4: Area of Potential Effect (APE) for All Cultural Resources
(USGS 7.5' Clayton and Antioch South Quadrangles)