

**TRACY HILLS SPECIFIC PLAN
RECIRCULATED
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT
VOLUME III
OCTOBER 2015**

APPENDIX J

CULTURAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT,
DATED MAY 2015

Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Tracy, San Joaquin County, California

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May 19, 2015

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MANAGEMENT SUMMARY

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to The Tracy Hills Project Owner, LLC (Client), to provide cultural and paleontological resources services for the Tracy Hills Specific Plan (Project) located in the City of Tracy, San Joaquin County, California. The proposed project will construct residential, light industrial, commercial, transportation and open space on approximately 2,732 acres. The purpose of this report is to document efforts made to comply with the California Environmental Quality Act (CEQA). The City of Tracy (City) is the lead agency for CEQA.

In 1991 a records search was conducted for the Project. In 1996 an updated records search and field survey were conducted. This report presents the results of a new records search and field survey conducted in 2015. Research was conducted at the Central California Information Center (CCIC) and the University of California, Museum of Paleontology. In addition, Native American input was solicited from local Native American groups. An intensive field survey was conducted of 97 percent of the 2,732-acre Project. The remainder of the Project was surveyed at the reconnaissance level, attempting to identify archaeological and historic features and structures. This was due to active crops and slopes greater than 30 percent.

Cultural Resources

The intensive pedestrian survey identified nine cultural resources within the Project (five previously unrecorded historic archaeological sites, one previously unrecorded prehistoric isolate, two previously recorded historic resources, and one previously unrecorded portion of a previously recorded historic resource). All of these cultural resources were evaluated for significance and eligibility as a *historical resource/unique archaeological resource* according to CEQA. It was determined that one of the cultural resources is considered a *historical resource*, the California Aqueduct. The California Aqueduct crosses the Project but will not be directly impacted by the project; the impact is indirect and therefore less than significant under CEQA. None of the remaining cultural resources are significant and do not qualify as *historical resources/unique archaeological resources* according to CEQA. Therefore, DUKE CRM recommends that implementation of the Project will have a less than significant impact on the California Aqueduct, a CEQA *historical resource*. No other *historical resources* will be impacted. A portion of the Western Pacific Railroad, now Union Pacific Railroad, is within the outer boundaries of the Project, but is not part of the Project; it will not be impacted by the project.

The Lammers Road Homestead (P-39-000120) has some potential for buried features (such as a privy) that could contribute to scholarly knowledge of ranching life or homesteading in the late 19th century. The Lammers Road Homestead could possess buried resources that would illuminate the life of early homesteaders. Therefore, DUKE CRM recommends that a trained archaeological monitor be present within 100 feet of the Lammers Road Homestead during ground disturbance associated with the Project. No additional mitigation is recommended.

If additional archaeological discoveries are made during construction, work in the immediate vicinity of the find shall be halted and a qualified archaeologist shall assess the nature and significance of the

find and make recommendations. If the discovery is prehistoric in age and/or cultural affinity, local Native Americans shall be consulted.

Paleontological Resources

The records search and field survey did not identify any paleontological resources within or adjacent to the project boundaries. Our research indicates that surficial sediments in most of the project area (Qa, Qoa, and Qoa2) have a low sensitivity for paleontological resources, but this sensitivity increases with depth (below 3-5 feet). In addition, the exposures of Oro Loma Formation (Tol) in the southeastern portions of the project may contain significant fossil resources. Therefore any ground disturbance below 5 feet beneath the current ground surface has a high potential to directly impact unique paleontological resources. This would result in a potentially significant impact to paleontological resources according to CEQA. In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE CRM recommends paleontological spot check monitoring of excavations deeper than five feet in depth within the project area, and spot check monitoring of any excavation in valleys in the southeastern portion of the project area.

Paleontological monitoring will reduce the impact of the project to less than significant.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

INTRODUCTION

Duke Cultural Resources Management, LLC (DUKE CRM) is under contract to The Tracy Hills Project Owner, LLC (Client), to provide cultural and paleontological resources services for the Tracy Hills Specific Plan (Project) located in the City of Tracy, County of San Joaquin, California. The purpose of this report is to document efforts made to comply with the California Environmental Quality Act (CEQA). The City of Tracy (City) is the lead agency for CEQA. In 1991 a records search was conducted for the Project. In 1996 an updated records search and field survey were conducted. This report presents the results of a new records search and field survey conducted in 2015.

The Project is approximately 2,732 acres in size. The Tracy Hills Specific Plan will allow the construction of up to 5,499 residential units in a mix of low, medium and high density neighborhoods, office, commercial, and light industrial uses, in addition to parks, schools, and additional open space. Residential development of varying density comprises approximately 1,639 acres. Light industrial development will comprise approximately 363 acres and mixed-use business park will occur on 215 acres. General Highway Commercial related development will include approximately 102 acres. Approximately 120 acres will be set aside for conservation easements. The balance of the acreage (293 acres) within the Project is already developed as Interstate 580 (I-580), the California Aqueduct, and the Union Pacific Rail Road (UPRR) and are not a part of the Project. See Appendix A for a Land Use Concept Plan of the Project.

The Project is located in the southwestern part of the City of Tracy, California. The project area can be characterized as located on both the north and south sides of Interstate 580, west and north of Corral Hollow Road, south of the Delta Mendota Canal, and south and east of the approximate 600 ft. elevation of a series of hills northeast of Black Butte, Tracy, CA (Figure 1). One small portion of the project area is east and north of Corral Hollow Road. The project is located within portions of Sections 1, 2, 12, 13, and 24; of Township 3 South and Range 4 East, and Sections 6, 7, 17, 18, and 19, of Township 3 South and Range 5 East. The project location is depicted on the USGS *Tracy, Calif* 7.5' Quadrangle maps (Figure 2).

The project area is located upon a series of rolling, grass-covered hills and plains located on the east facing slope of the Coastal Range Mountains. Currently, the majority of the project area is being used for cattle grazing and row crops with little to no commercial and/or residential development. The use of the project area both in historic times to the present day for agriculture has resulted in the removal of almost all natural vegetation. The property is crossed by several large linear features such as the California Aqueduct, I-580, and the UPRR as well as being situated southwest of the Delta Mendota Canal.

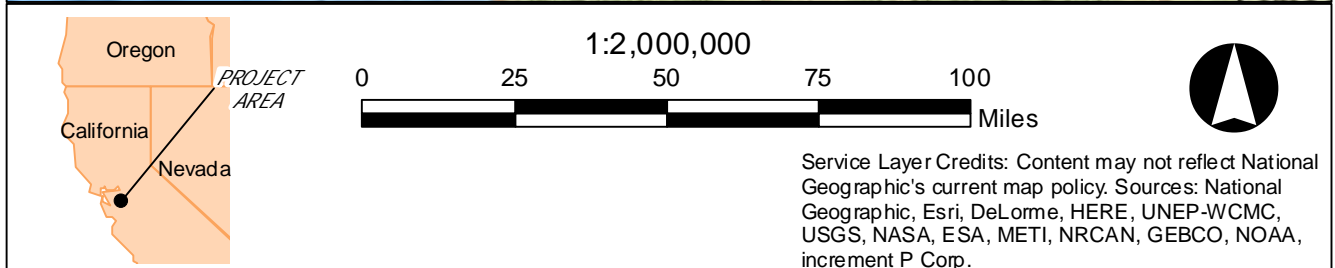
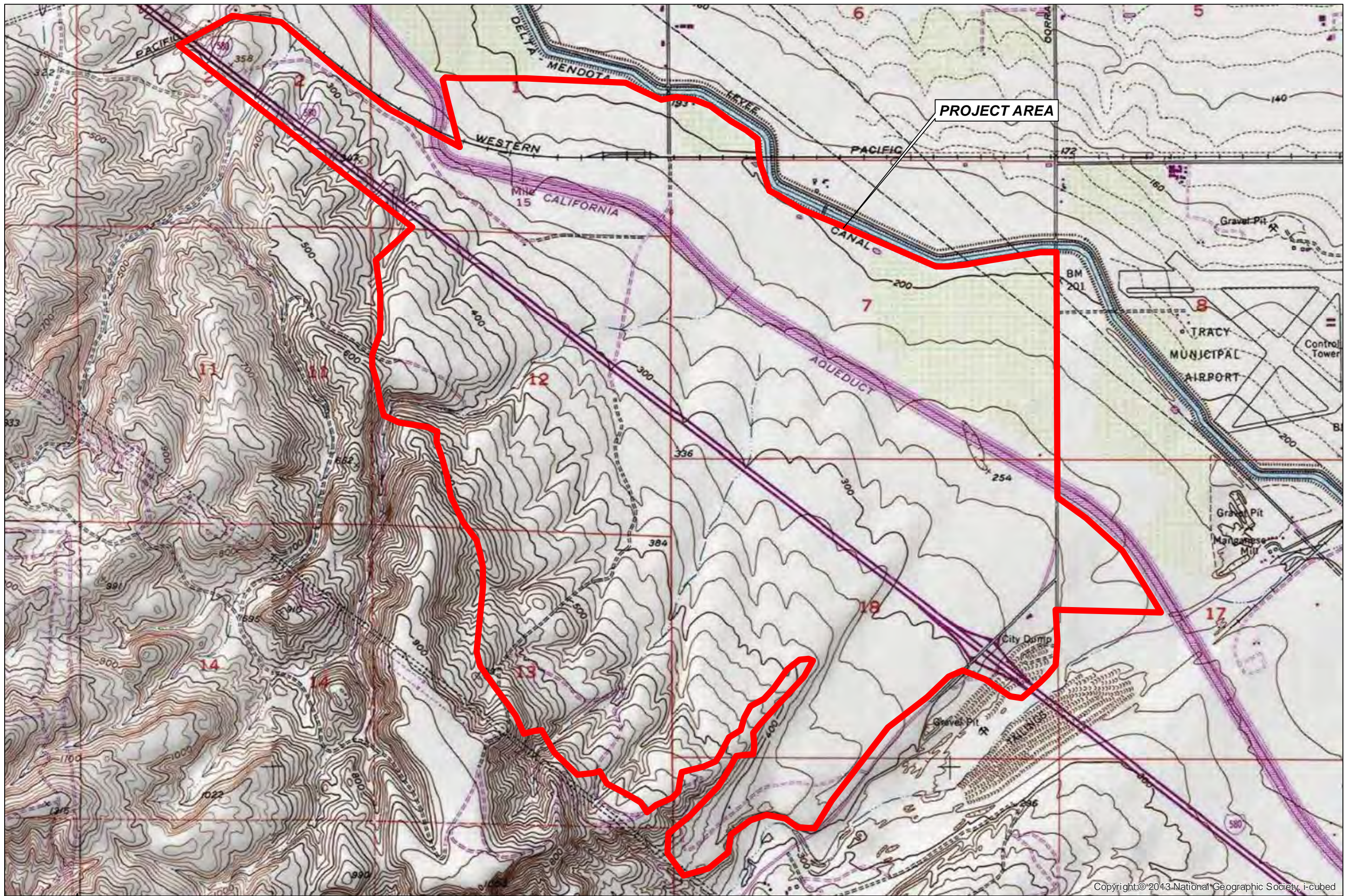
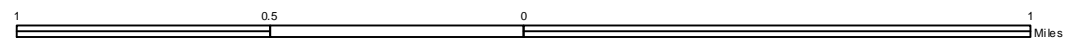


Figure 1 Project Vicinity Map



PROJECT AREA

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 Tracy, Calif. 7.5' USGS Quadrangle



SCALE 1:24,000

Figure 2 Location Map

SETTING

Natural

California is divided into 11 geomorphic provinces, each naturally defined by unique geologic and geomorphic characteristics. The project is located in the center of the Central Valley geomorphic province, an elongate, northwest-trending structural trough bound by the Sierra Nevada Range to the east, the Coast Ranges to the west, to the south by the San Gabriel and San Bernardino Mountains and the San Andreas Fault, and to the north by the Klamath Mountains (California Geological Survey 2002). The province is drained by the Sacramento River in the north and the San Joaquin River in the south. DFASDFSADF

The Central Valley initially formed as a forearc basin in response to the formation of the Sierra Nevada Range, approximately 160 million years ago (Hackel 1966). Accumulation of marine sediments continued until approximately 23 million years ago, resulting in an extensive fossil record of microfossils, fossil fauna, and fossil flora (Hilton and Kirkland 2003, Finger 2013) and extensive petroleum deposits (Scherier 2007 and Scherier et al. 2007). A combination of sea level regression and the formation of the San Andreas Fault 23 million years ago resulted in the subaerial exposure of the basin, and a switch to accumulation of terrestrial sediment (Hackel 1966).

The project is located southwest of the City of Tracy in San Joaquin County. This area is near the southern border of the Sacramento Basin, the northern subdivision of the Central Valley province. The southern border of the Sacramento Basin is defined by the Stockton Arch, a buried, northeast-trending fault zone where marine rocks are truncated under terrestrial sediments (Beyer 1991). Because of the truncation of the marine beds and the overlying terrestrial sediment, the extensive marine fossil deposits of the Central Valley province are not exposed in the project area. However, the project area is underlain by terrestrial sediments with potential fossil resources. Sediments shed from the Coast Ranges to the west in the Pliocene (5.3 to 2.8 million years ago) to early Pleistocene (2.8 million to 10,000 years ago) Epochs may record a period of expanding North American grasslands and global cooling, and alluvial deposits from the late Pleistocene Epoch (2.6 Ma) may contain fossils from the end of the last ice age.

The geology in the vicinity of the project has been mapped by Dibblee and Minch (2006) at a scale of 1:24,000. A review of this map indicated that three separate formations will be encountered in the project area:

Surficial Sediments (Qa) (Holocene)

Alluvial gravel, sand, and clay underlie the northeastern portion of the project, from the northeastern project boundary to the southwestern side of the canal. Due to their recent deposition, they have low potential for containing fossil resources.

Older Surficial Sediments (Qoa, Qoa2) (Late Pleistocene to Holocene)

Dissected alluvial fan deposits underlie the majority of the project area. Deposits from the Pleistocene Epoch elsewhere in San Joaquin County have produced fossils of western camel (*Camelops hesternus*), mastodon (*Mammuth*), bison (*Bison*), horse (*Equus*), smooth-toothed pocket gopher

(*Thomomys*), Columbian mammoth (*Mammuthus columbi*), and Jefferson’s ground sloth (*Megalonyx jeffersoni*).

Oro Loma Formation (Tol) (Pliocene to early Pleistocene)

Sediments of the Oro Loma Formation are present in valleys in the south and southeast portion of the project. Some of the valleys are just outside the project boundaries, but at least one prominent valley of Oro Loma Formation in the southeast portion of the project is within the project area. The Oro Loma Formation is largely alluvial fan deposits (Briggs 1953), and while coarser-grained members of alluvial fan deposits typically are not assigned a high paleontologic sensitivity, fine-grained members have a higher potential for containing fossils. Deposits from the Pliocene Epoch elsewhere in the San Joaquin County have produced horse (*Equus*) fossils. In addition, construction in Pliocene deposits in nearby Contra Costa County produced dozens of microfossils, plant, invertebrate, and vertebrate fossils (UCMP 2015).

Table 1: Geologic Units and Their Paleontological Potential

Age	Geologic Unit	Fossils Present	Paleontological Sensitivity
Holocene	Surficial Sediments (Qa)	None	Low
	Older Surficial Sediments (Qoa, Qoa2)	Terrestrial mammals	Low to High
Pleistocene	Oro Loma Formation	Terrestrial mammals	High
Pliocene	(Tol)		

Cultural

Prehistory

The prehistoric archaeology of the Central Valley has been highly impacted by the destruction of sites through agricultural development, modern construction, and natural alluvial processes some generalizations can be made. The chronological classification presented here is based on the synthetic work presented in Rosenthal et al. (2007) and references therein. Five basic periods are present in the project vicinity: Paleo-Indian (11,550 to 8550 cal B.C), Lower Archaic (8550 to 5550 cal B.C), Middle Archaic (5550 to 550 cal B.C), Upper Archaic (550 cal b.c. to cal a.d. 1100) and Emergent Occupation (cal a.d. 1000 to Historic).

Paleo-Indian (11,550 to 8,550 cal B.C)

The climatic shifts between the Pleistocene and the Holocene resulted in extreme changes to the flora and fauna of western North America. This promoted adaptations in survival strategies throughout the west. Evidence for human occupation from this period in the San Joaquin Valley is sparse. Only five sites or localities have produced evidence of occupation during this period. These sites are Tracy Lake, the Woolfsen mound (MER-215), the Tulare Lake basin (Moratto 2004), a location in the Sacramento Valley near Thomes Creek and the Witt site (KIN-32) in the southern San Joaquin Valley. Evidence of Paleo-Indian occupation ranges from a single concave base point, to several hundreds of these points and locations with radiocarbon dated human bone. Regardless of artifact density at any one given site, the number of sites which date to this period is extremely low for the whole of San Joaquin Valley.

Lower Archaic (8550 to 5550 cal B.C.)

The end of the Pleistocene, with its accompanying change toward warmer and wetter climate, saw the infilling and sediment deposition of lakes and alluvial fans. This depositional environment likely obscured many sites and consequently occupation during this period in the Central Valley is mostly represented by isolated artifact finds of stemmed atlatl dart points, stone crescents and other flaked stone artifacts. Projectile point forms include stemmed points similar to Borax Lake, wide-stemmed points from the North Coast Ranges, as well as Lake Mojave, Silver Lake, and Pinto points similar to those found in the Great Basin. Sites with greater artifact density and variation than flake stone isolates demonstrate rich and varied subsistence practices including wetland utilization in the form of freshwater mussels and diverse assemblages of fish, waterfowl, and artiodactyl bones. Milling implements (manos, metates, and slabs) which date to this period have been found in the adjacent regions to the San Joaquin Valley and likely represent a heavy reliance on seed and nut food resources. Interestingly, the Lower Archaic Period has evidence of regional interaction spheres for the movement of marine shell beads from coastal provinces of California to the western and central Great Basin.

Middle Archaic (5550 to 550 cal B.C)

People of the early Middle Archaic in the Central Valley adapted their settlement-subsistence strategies to available resources in the foothills and the valley floor. The bifurcated subsistence adaptation as likely in response to an environmental change toward a warmer, drier climate. Inland lakes desiccated and their floodplains stabilized. Rich wetland habitat formed in the Sacramento/San Joaquin delta. Archaeological sites situated in the foothills are characterized by chopping and pounding tools, grinding tools, and projectile points which are highly variable in form such as notched, stemmed, thick leaf and narrow concave base darts. Pine nut and acorn are still primary foodstuffs like in the Lower Archaic. Items of personal adornment shift away from marine shell to tabular pendants, incised slate pieces, and stone plummets.

Sites which date to the early Middle Archaic period on the valley floor are rarer compared to sites in the foothills. This pattern shifts by the later parts of the Middle Archaic to an abundance of sites with year-round occupation adjacent to freshwater marshes and well-watered riparian settings. Sites from this period and in these locations reflect a wide and rich artifact assemblage including specialized tools, features, non-utilitarian artifacts, trade goods and some have a wide assortment of grave goods. Importantly, mortar and pestle generally demonstrated to be associated with acorn and pine nut processing have been interpreted to indicate an increase in residential stability and subsistence based upon the intensive collecting. Fishing may have increased in use, as represented by the increasing number of fish remains and hooks during this time. Faunal assemblages reflect the use of tule elk, mule deer, pronghorn, small and large fish, waterfowl, raptors, rodents, rabbits, and hares a subsistence base.

Baked clay (the precursor to ceramic technology) on twisted cordage and basketry becomes apparent in the Central Valley in the Middle Archaic. The trade of shell beads and obsidian also continued during this period.

Upper Archaic (550 cal b.c. to cal a.d. 1100)

The climate of the Upper Archaic period is marked by a turn to cooler, wetter, and more stable climatic conditions. Climatic changes filled and overflowed numerous western lakes by around 1000 A.D. and decreased the salinity of the Sacramento/San Joaquin watersheds. These same conditions deposited new alluvium in floodplains in the Central Valley. It is not known exactly what role these environmental conditions played in the lives of prehistoric people of the area, but what is known is that archaeological sites are more abundant giving a better picture of life at the time. Social differentiation between different sub-regions of the Central Valley become apparent as indicated by contrasts in burial practices and more distinct material cultural traditions. New types of bone tools, non-utilitarian bone and shell items, and possibly ceremonial obsidian bifaces first appeared during the Upper Archaic. Stone ornaments still appear but now were also purposefully put into caches.

The gathering, hunting, fishing and processing of bulk foodstuffs, such as shellfish, fish, acorn, deer, and rabbit structured seasonal occupation and encampments. Mortars and pestles continue to be used to process acorns in the valley bottoms, while along the edges of the valleys and foothills manos and metates were utilized, likely to process seed grains.

Villages and the accompanying rich midden deposits of habitation debris first appear in this period in some of the river delta systems. Burial clusters (cemeteries) indicative of changing cultural precepts appear in the San Joaquin Valley area. In areas where villages did not appear, such as the far northern Sacramento Valley along the Sacramento River, populations continued to be mobile and technologically did not differentiate in their tools and subsistence practices from the Middle Archaic. Consequently, sites in this area do not have dense midden deposits, have little to any food waste from river resources. In the San Joaquin Valley, bifacial blanks made from obsidian originating in the Bodie Hills, Casa Diablo, and Coso sources continued to be transported east to west over archaeologically defined travel corridors. The Sacramento Valley and most of the Central Valley, in contrast, tended to get lanceolate-shaped obsidian bifaces from quarries in the North Coast Ranges. The Tuscan and Medicine Lake Highlands quarries produced products for the northern and eastern valley.

Emergent Occupation (cal a.d. 1000 to Historic)

The general climatic stability and patterns established in Upper Archaic continued through the Emergent Occupation period though drought and precipitation pulses are also apparent. The archaeological remains of the Emergent Occupation period are the most substantial and comprehensive, partially due to the shorter time-depth and partially due to an increase in population, social complexity and sedentism. The Emergent Occupation period is signaled by the disappearance of archaic technologies and cultural traditions, and the onset of cultural conditions like those at the time at contact with the European explorers and pioneers. Oftentimes ethnographic place names correspond to archaeological resources.

The biggest change in hunting technology during the Emergent Occupation period of the Central Valley was the replacement of the atlatl with the bow and arrow. The use of bow and arrow is indicated by the change to smaller corner notched projectile points and the distinctive Stockton

Serrated point, the Gunthar style and the ubiquitous Cottonwood triangular style. In Central California obsidian tool production also changed from the production of bifaces at the quarries, to the movement of whole nodules of obsidian and large flake blanks to the consumers. Ceramic technology also changed and advanced in this period through the local development of Cosumnes brownware in the Lower Sacramento Valley. Some groups in the Tulare Basin acquired their ceramic vessels through trade. Basketry is still used despite widespread ceramic technology availability.

Food production varied by region though, and in general, the importance of fishing and plant harvesting grew through this period. Variation of fishing equipment such as hooks, harpoons and weirs, became more elaborate. Bird and mammal bone diversity remains high as well. Food processing equipment like mortars and pestles remain strong as evidence of small starch grains in the lower Sacramento delta region is abundant. An increase in the grain size of certain seed grasses may indicate incipient horticulture as larger sized grain sizes might have been selected by Native Americans. In contrast, sites in the northern Sacramento Valley show a predisposition to acorn, pine nut and manzanita as foodstuffs. Little is known about plant use in the San Joaquin Valley for this period.

In general, multiple lines of data suggest an increase in social complexity in Central California during the Emergent Occupation period. The variation of burial position, burial practices, and grave furnishings increase through time and space. Settlement size continued to develop and increase along rivers and tributaries. The recovery of items of personal adornment such as beads and non-utilitarian goods like whistles, pipes, tubes, cylinders and bead drills also increases. The production of the marine shell beads interestingly becomes de-centralized away from the coastal sites to the interior sites. The widespread production of beads has been hypothesized to be linked to an adaptation towards monetized system of exchange.

Ethnography

The Project is located within the traditional area of the Northern Valley Yokuts. Linguistically they were Penutian language group speakers. These included the Costanoan, Miwok, Wintun, Maidu, and Yokut tribes (Heizer and Elasser 1980:137). The Yokuts differed from other groups in that they were divided again into tribes and that “each has a name, a dialect, and a territory” (Kroeber 1971:369; Kroeber 1976[1925]:474). The language spoken by these groups are all similar enough that Yokuts were mutually intelligible across their territory.

The Northern Valley Yokuts built houses of tule stalks woven into mats placed on light poles attached at the top. These structures were round or oval in shape while the floors were of hard packed earth, sunk approximately two feet below the natural ground level and were between 25 to 40 feet across (Wallace 1978:465).

The Yokuts held territory “from the San Joaquin Valley floor from the mouth of the San Joaquin River south to Tehachapi Pass to the lower Sierran foothills south of the Fresno River and the lower Kern and Kings river lands in the southern valley” (Heizer and Elasser 1980:14-15). There were at least 50 distinct true tribes within this area of approximately 250 by 100 miles (Heizer and Elasser

1980:15-16; Kroeber 1976[1925]:475; Kroeber 1971:369-370). Yokuts occupation density increased along the slopes of the Sierras with better water and along edges of the valleys and in the foothills (Jones 1971:91).

Northern Valley Yokuts subsistence patterns were generally a matter of variety rather than abundance, if one resource failed, other types would be used (Smith 1976:16; Spier, 1978:472). Salmon and acorns played a large part in subsistence (Heizer and Elasser 1980:38). Other resources included, other species of fish like sturgeon, pike, perch and suckers, birds, gophers, rabbits, hares, lizards, and deer. Pine nuts and grass seeds were other plant-based foods that the Northern Valley Yokuts harvested and consumed (Smith 1976:16). During 1826, while camped near the *Sukumwutnu* Yokuts Rancheria in the southern San Joaquin, Jedidiah Smith was visited by tribal members who nearly covered him in grass seed. This was in turn made into a mush and eaten with roasted fish (Hurtado 1988:39).

Socially the Northern Valley Yokuts were organized through paternal lineages and represented through totems. Tribal titles and roles generally passed from father to son. However as Spier (1978:481) noted in the ethnographic record of the Northern Valley Yokuts, that among the one group that women assumed the title messenger though she could not pass on this title to offspring. The population estimates for the Yokuts at the earliest contact by the Spanish range from between 25,000 and 31,000 with these unevenly distributed across their traditional territories (Wallace 1978:462 and Spier 1978:481). However, very little else is known of the Northern Valley Yokuts as they were decimated by diseases introduced by the Spanish and again in the 1830's with the outbreak of malaria (Phillips 1993:91).

History

In California, the historic era is generally divided into three periods: the Spanish or Mission Period (1769 to 1821), the Mexican or Rancho Period (1821 to 1848), and the American Period (1848 to present). Spain started to explore California as early as the 18th century with the Portolá expedition of 1769-1770. By 1774 Juan Bautista de Anza Bezerra Nieto, a member of the earlier Portolá expedition, with the help of a former California Native American guide, Sebastian Tarabal, explored an overland route across the Colorado deserts to the Sierra Mountains and through the San Jacinto Valley to Mission San Gabriel. Soon after routes were taken into what is now Tulare County through the Tejon and Tehachapi Passes (Bingaman 1968:1).

The San Francisco bay area was explored by Anza for colonization as early as 1774. The Jesuit Friar, Francisco Palóu, dedicated the San Francisco Mission and Presidio in 1776 (Bancroft 1888:279-283). Later Anza and José Joaquín Moraga reached the interior of what later would be known as the San Joaquin Valley by following the bay into the river delta somewhere near Antioch (Bancroft 1888:285). Their return trip may have been through what is now Corral Hollow. Corral Hollow was "originally known as 'El Arroyo de Buenos Ayres' and was part of El Camino Viejo" (Foster 1996:12, Hoover 1990)

In 1777 Missions were established at both Santa Clara and San Jose (Bancroft 1888:312). Hostilities broke out between Native Americans and the Spanish at several missions (Bancroft 1976:315; Phillips 1993:41) with many escaping from the coastal missions into the interior (Smith 1976:32).

By 1804 the Missions were no longer growing, mostly due to epidemics of European diseases which decimated Native populations and also due to a decrease of support from the Spanish government. The San Joaquin Valley was considered Indian Territory. By 1810 in the northern San Joaquin Valley the Spanish attempted to locate “fugitive neophytes and return them to mission sites” (Phillips 1993:52). These efforts were of little consequence as the efforts to secularize the California missions began as early as 1813 and had the effect of weakening the mission control over Native Americans (Robinson 1979:29-30). The weakening of the mission control occurred at the same time as strong sentiments for Mexican Independence grew further south.

The Mexican Period (1821-1848) began with Mexican independence from Spain and continued until the end of the Mexican-American War. The final blow to the Mission system came from the Secularization Act of 1834 and it resulted in the transfer of land grants of large former Mission tracts to politically prominent individuals. The land grants were called *Ranchos* and three were granted in the area that later became San Joaquin County. The first in this area, called *Rancho Pescadero*, was granted to Antonia Maria Pico in 1843. It encompassed an area of 35,446 acres and included the area that would later become the City of Tracy and Alameda County. Currently it is unknown if project location is located in what was *Rancho Pescadero* due to the inaccuracy of the original Rancho map (UC Berkeley 2011). The two other ranchos were called *Sanjon de los Moquelumnes* and *Campo de los Franceses* located in Galt and Stockton/French Camp areas respectively. As the name implies, fishing might have been a substantial portion of economic activity on the *Rancho Pescadero*, while other activities would have been cattle ranching and trade in hides and tallow. Livestock and horticulture dominated California's economy until the Gold Rush of 1849.

The American Period (1848-present) began with the Treaty of Guadalupe Hidalgo after US victory in the Mexican-American War. This treaty recognized the right of California Native Americans “to occupy their lands until voluntary relinquishment.” (Robinson 1979:13, 14; Cossley-Batt 1928:133-141 Rawls 1986:148). In 1850, California was accepted into the Union of the United States primarily due to the population increase created by the Gold Rush of 1849. Following the cattle industry of Alta California in the Spanish and later Rancho Periods, the cattle industry reached its greatest prosperity during the first years of the American Period. Mexican Period land grants had created large pastoral estates in California, and demand for beef during the Gold Rush led to a cattle boom that lasted from 1849–1855. It was during this period that San Joaquin County was formed, on February 18, 1850 as one of the original 27 counties in California (San Joaquin County 2013). By the beginning of 1855, the demand for beef began to decline due to imports of sheep from New Mexico and cattle from the Mississippi and Missouri Valleys. When the beef market collapsed, many California ranchers lost their ranchos through foreclosure.

Corral Hollow, Coal, and Railroad development in the late 19th and early 20th centuries

The early Spanish explorers called Corral Hollow the *Arroyo de los Buenos Ayres*, or stream of good air, and it was part of *El Camino Viejo*, or the old road. The route began in what is now Oakland in the 1820's and was used as a primary route into the San Joaquin Valley to search for escaping Native American neophytes from Missions San Jose and Santa Clara. The road extended south all the way to Los Angeles. The history of the name Corral Hollow is unclear. It grew from corrals that were built by the Spanish for wild mustangs that were rounded up in the San Joaquin Valley or from remnants of corrals built by the Capitan Charles Imus Party who wintered in the hollow in 1846 (Mosier 2011).

Corral Hollow is a natural thoroughfare, but the discovery of coal in Corral Hollow in 1861 or 1862 is probably the most significant event in the history of the Hollow (Hamilton 1919: 19-24; 1921:21). This discovery is credited in part to Edward B. Carrell, but this was only pursued on a small scale with the coal hauled by wagon to Mohr's Landing, at Old River in the San Joaquin Valley, where it was loaded on barges for shipment to San Francisco (Foster 1995:15). Carrell later became a partner with Horatio P. Wright, William Brayton and John A. Stockholm in the Zink house located in Corral Hollow. Today, Carrell's Zink house site is listed as California Historical Landmark #755 (Schmitt 2009). Ten years after the discovery of coal in Corral Hollow, rail development in the 1870's expanded into the San Joaquin Valley. Locally, the Western Pacific Railroad (now UPRR) built a four mile long spur line in 1870 reaching Corral Hollow Canyon. The railroad opened a gravel pit at this location to acquire gravel for railroad ballast, and loaded coal from Corral Hollow coal mines (Ward and Williams 1971:4).

The Town of Tracy was established "when the Southern Pacific reached the place on September 8, 1878 and was named after Lathrop J. Tracy, an official of the railroad" (Gudde 1962:326). The Southern Pacific made Tracy a terminal point between the routes of San Francisco-Martinez and the line that was on the west side of Fresno. Terminal points like Tracy would then need to support up to hundreds of railroad workers, thereby forming the population backbone of the town. Like many railroad towns of their day, the entire survival of the town depended upon the success and good favor of the railroad. Establishing Tracy meant that a nearby town, Ellis, was totally abandoned within a few years of the founding of Tracy (Tinkham 1923 in Foster 1995).

By 1888, Corral Canyon had been surveyed by several railroad companies, including the San Francisco and San Joaquin Valley Railroad, the Southern Pacific Railroad, and the Livermore Valley Railroad (California Department of Parks and Recreation 1981:C- 21-22). John Treadwell, as general manager, and James Treadwell, as president, organized the Alameda and San Joaquin Railroad in 1895 to extend nearly 37 miles from the Tesla Mine to the coal bunker in Stockton, passing through Corral Hollow. Five bridge trestles were required for the crossings of Corral Hollow Creek with the wood lumber for the trestles coming from Oregon. The Treadwell brothers' railroad employed about 200 Chinese laborers, and numerous Euro-American teamsters, mule skinnners, and bridge builders. The activity in Corral Canyon meant that the Zinc House was reopened following a 25 year closure to serve the construction workers (U. S. Department of Energy 1980:33). The modern Corral Hollow Road generally follows the rail road grade (Ward and Williams 1971: 3, 6, 16; California

Department of Parks and Recreation 1981: C-21-22; DoE 1980:37). The rail road's rolling stock eventually consisted of two locomotives built in 1906 by the Richmond Locomotive Works and a third locomotive leased from the construction contractor. The engine house was located in Stockton, and a turntable was located at Tesla. Generally, one round trip was made each day between Stockton and Tesla (Ward and Williams 1971:14; DoE 1980:34).

As part of their efforts with the Alameda and San Joaquin Rail, the Treadwell brothers acquired control of the coal resources in Corral Hollow during the 1890s. The Treadwell's organized the San Francisco and San Joaquin Coal Company to develop the Tesla Mine. The company spent about \$500,000 on mine developments and another \$500,000 to build a railroad to transport the coal to tidewater. The investments were initially successful. Coal production reached 500 tons daily, with an annual production of about 90,000 tons between 1897 and 1902. Unfortunately the coal was depleted by 1902 (Ward and Williams 1971:12, 14).

The Treadwell's auctioned their property in 1916 to pay debts, and the physical plants were dismantled by a competitor who acquired the property. Most of the rail road track was salvaged during the 1920s for scrap metal (Ward and Williams 1971: 14; California Department of Parks and Recreation 1981: C-26-27). The United States Railroad Administration ordered closure of the rail road at Carnegie in 1918, but the rail remained intact until 1922, when it was removed between Tesla and Moy, near the site of Zinc House (Ward and Williams 1971:16).

METHODS

Records Search

On February 25, 2014 Mark Kile, M.A., of DUKE CRM conducted a cultural resource records search at the Central California Information Center (CCIC), located at the California State University in Stanislaus. The CCIC is part of the California Historical Resources Information System (CHRIS). The records search included a review of all recorded historic and prehistoric archaeological sites within one-half mile radius of the project area, as well as a review of known cultural resource survey and excavation reports. In addition, Mr. Kile examined the California State Historic Property Data File (HPD), which includes the National Register of Historic Places (National Register), California Register of Historical Resources (CRHR), California Historical Landmarks (CHL), and California Points of Historical Interest (CPHI). Paleontologist Benjamin Scherzer conducted a search of the University of California Museum of Paleontology (UCMP) online collections. The internal archives at DUKECRM were also inspected for relevant background information.

Field Survey

The goal of the intensive pedestrian survey was to identify and record all historic built environment resources, and prehistoric/ historic period archaeological resources within the project boundaries. Pedestrian survey transects were spaced 30 meters apart. A Trimble Geo XH global positioning system (GPS) with submeter accuracy, a Garmin Etrex GPS, an iPhone 4S with Google Earth and Theodolite Apps, and field map was used to locate the project boundary and to record the location of identified cultural resources. Sites, isolates, and built-environment resources were documented on

State of California Department of Parks and Recreation (DPR) 523 series forms with photographs taken on a Canon Powershot 8.0 MP digital camera and a Canon SureShot A220.

Personnel

The records search, field survey and sections of the report were led and authored by Mark Kile M.A. RPA. Nicholas F. Hearth, M.A., RPA participated in field survey. He also edited and authored sections of the report. Paleontologist Ben Scherzer, M.S., reviewed and contributed to the geology section. All work was conducted under the direct supervision of Curt Duke, M.A., RPA. He reviewed the records search conducted a site visit of the project, and reviewed the report. Mr. Duke is the Principal Archaeologist of DUKE C R M. Mr. Duke meets the professional qualifications of the Secretary of the Interior for prehistoric and historical archaeology; he is also a Registered Professional Archaeologist (RPA) who has worked in all phases of archaeology (archival research, field survey, testing and data recovery excavation, laboratory analysis, construction monitoring) since 1994. Mr. Duke holds a Master of Arts degree in Anthropology with an emphasis in archaeology from California State University, Fullerton and a Bachelor of Arts degree in Anthropology from the University of California, Santa Cruz. Mr. Duke has worked throughout southern and Northern California and parts of Arizona and Nevada. Please see Appendix C for resumes for, Mr. Kile, Mr. Duke, and Mr. Hearth.

RESULTS

Records search

Five cultural resource studies have included portions of the project area and two of these extend to areas outside the project area. LSA Associates, Inc conducted a records search for the entire Project in 1991 and the entire Project was surveyed previously by Foothill Archaeological Services (Foster 1996). Partial surveys were completed for the PG&E Pipeline Expansion Project (Infotech Research Inc. 1990, 1992) and the South Schulte Specific Plan (Foster 1995). Additionally there have been as least nine cultural resource studies within one half mile of the project area. Most cultural resource surveys have been large, from over 100 acres to many hundreds of acres in size and one was linear along the PG&E corridor through the project. Approximately 20% of the ½ mile radius has been surveyed. See Table 1 for a list of the cultural resource studies within the project and the record search area.

There are two previously recorded cultural resources mapped within the Project. Both of these are historic in age and date to the American Period. See Table 2 for a summary of these and other cultural resources within ½ mile of the Project.

Table 2: Reports within ½ Mile of the Project

CCIC Report No.	Year	Author(s)	Affiliation	Title	Resources
SJ-2857*	1996	Foster, John W.	Foothill Archaeological Services	An Archaeological and Historical Resource Investigation of the Proposed Tracy Hills Project Tracy, California	P-39-000118; P-39-000119; P-39-000120; P-39-000121; P-39-000122
SJ-2646*	1995	Foster, John W.	Foothill Archaeological Services	A Cultural Resource Survey and Assessment of the South Schulte Village Property Tracy, California	P-39-000066
SJ-4220	2001	Okeefe, Timothy	Caltrans	Negative Archaeological Survey Report	None
SJ-2759	1995	Hattoff, B. et al.	Woodward-Klyde	Cultural Resources Inventory report for the Proposed Mojave Northwest Expansion Project	As many as 190 sites., One, P-39-000098, in two locations, in the search of Project Area
ME-1846*	1990	Moratto, M. et al	Infotec Research Inc. and BioSystems Analysis Inc.	Cultural Resources Assessment Report PGT-PGE Pipeline Expansion Project Idaho, Washington, Oregon and California	317 cultural resources total; One, P-39-000048, in search of Project Area
SJ-1562	1992	Napton, L. Kyle	Institute for Archaeological Research	Cultural Resources Investigations of 342 Acres of a Proposed Gravel Extraction Alternate Area in Tracy, California	None
SJ-1852	1993	Price, Barry	Infotec Research Inc	Letter Report: Archaeological Site Testing Evaluation, and Data Recovery Context for NRHP Evaluation of Historical Site CA-SJO-242H (PEP 12-8)	P-39-000355
SJ-4509	2001	Egherman, Rachael	URS	GWF Tracy Peaker Project Cultural Resources (Archaeological and Historic Built Environment Resources)	Eight cultural resources total. One, P-39-000090, in search of Project Area

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CCIC Report No.	Year	Author(s)	Affiliation	Title	Resources
SJ-6517	2007	None Listed	Basin Research Associates	Letter report: Archaeological Resources Review-Tracy Municipal Airport Runaway 12-30 grading Project, City of Tracy San Joaquin County California	None
FJ-2494	1993	Dougherty, John	Archaeology Services Inc.	Cultural Resource Survey of the Corral Hollow Landfill Closure	P-39-000362
SJ-6625	1998	None Listed	ASI Archaeology and Cultural Resource Management	Cultural Resources Survey South County Surface Water Project San Joaquin County, California	None
SJ-748*	1991	Padon, Beth et al	LSA Associates, Inc.	Cultural/Scientific Resources, Tracy Hills Community, County of San Joaquin, CA	None
SJ-7779	2007	None Listed	US Department of the Interior DOR	Reclamation: Managing Water of the West: California's Central Valley Project	P-39-000089
SJ-1846*	1992	Canaday, Tim et al.	Infotech Research Inc.	Archaeological Survey Rights-of-Way Corridor and Extra Work Spaces Construction Spread 5B, California	P-39-00048

*- within Project

Table 3: Cultural Resources within ½ Mile of the Project

Primary No.	Brief Description	NRHP/CRHR Eligible	Proximity to Project Area
P-39-000120	Historic Homestead	No	Within Project
P-39-000090	Historic California Aqueduct	Yes	Within Project
P-39-000098	Historic Railroad Segment	Unknown	¼ mile
P-39-000089	Historic Delta Mendota Aqueduct	Yes	Immediately adjacent
P-39-000048	Historic Isolate Horse Drawn Seed Drill	No	½ mile
P-39-000066	Prehistoric Artifact Scatter	No	¼ mile
P-39-000118	Historic Edward Carrell's White House	No	½ mile
P-39-000119	Historic Corral Hollow Shepherder's Homestead	No	¼ mile
P-39-000121	Prehistoric Bedrock Mortar	No	Adjacent
P-39-000362	Dredge Tailings	Unknown	¼ mile

Primary No.	Brief Description	NRHP/CRHR Eligible	Proximity to Project Area
BR 29C-196	Bridge along Corral Hollow Rd. over Delta Mendota Aqueduct	Unknown	¼ mile
BR 29C-185	Bridge along Corral Hollow Rd. over California Aqueduct	No	¼ mile
BR 29C-179	Bridge along Corral Hollow Rd. over Corral Hollow Creek	No	¼ mile

P-39-000120 is a historic homestead consists of a dilapidated three-room house, corrals, a pumphouse, a well/water tank, and trough. At the time of recordation the trough was still used for sheep ranching (Sandelin 1996a). P-39-000120 was determined to not be a significant resource under CEQA though it was noted as having “historic value” because it represents a “rural way of life that is rapidly disappearing across the landscape” (Foster 1996:21).

P-39-000090 is the 444 mile long main line of the California Aqueduct which begins in the Sacramento-San Joaquin Delta and terminates at the southern end of the state at Lake Perris, Riverside County. The California Aqueduct is divided into five divisions: North San Joaquin, San Luis, South San Joaquin, Tehachapi, and the East Branch that are oriented in a general north to south direction. The aqueduct has two branches: the Coastal branch, which generally extends southwest from 16 miles south of Kettleman City and terminates in San Luis Obispo and Santa Barbara Counties, and the West branch which extends southwest from the Tehachapi Afterbay in Kern County to Castaic Lake north of Santa Clarita in Los Angeles County. Each division contains such features as bridges, siphons, culverts and canal drains. The combination of these features and the canal itself forms a unified water conveyance system. The California Aqueduct appears to meet the criteria for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) at the state level of significance under NRHP/CRHR Criterion A/1 representing a comprehensively planned and publicly sanctioned water conveyance public works project to facilitate development throughout the state. It also appears to meet the criteria under NRHP/CRHR C/3 for its complex design necessary to redistribute water throughout the state of California on such a massive level. The period of significance for the resource is 1960-1974 the years of construction.

Cultural Resources Located Within ½ Mile of the Project

Eleven cultural resources are located within ½ mile of the project. The Western Pacific Railroad (WPRR) contains two elements recorded separately. P-39-000098 is a segment of the WPRR constructed in 1895 with investments from James and John Treadwell as part of their expansion of coal production at Tesla. The portion of the WPRR within the Project was not included in the recordation of P-39-000098; the closest segment that was recorded is located approximately ¼ mile east of the Project (Segment WPW 5). This segment was noted to have new ballast and ties. Along with rail lines from Corral Hollow to Stockton the Treadwell’s helped organize the Alameda and San Joaquin Railroad which was sold to WPRR in 1903 and completed in 1906 (Ward and Williams 1971:16). The Tesla line (P-39-000242H) was abandoned by 1916 and the rail removed by 1922 (Ward and Williams 1971:14).

The Delta-Mendota Canal, P-39-000089, is a 117-mile long canal completed in 1951. It appears to be eligible for listing in the National Register of Historic Places under Criteria A and C, at a state level of significance, with a period of significance of 1946-1952. Its significance is founded in the role of the canal as a key component in the original Central Valley Project (Foster 1995:13).

P-39-000048 is a horse-drawn seed drill recorded as a historic isolate. Manufactured by Van Brunt, the seed drill consists of a wooden plank box, molded iron brackets, hardware, and a gear mechanism. Two 30 in. diameter metal-spoked rims are located on either side of the seed box. Two 4 x 4 in. timbers are connected to the partially-buried tongue. The metal seat attaches to the box. Two foot rests and two lever adjustments are extant on either side of the seat (Bower, et al. 1992).

P-39-000066 is a prehistoric artifact scatter consisting of a “minor milling cache of three sandstone artifacts” located along the Delta-Mendota Aqueduct (Foster 1995:15). P-39-000066 is not eligible for listing on the NRHP or CHRH and the data potential was exhausted by the initial recordation of the site.

P-39-000118 is the ruins of Edward Carrell’s Zink House in Corral Hollow which has been designated as California Historical Landmark Number 755. The House was located atop in the Indian village, and also along El Camino Viejo, the old Spanish Trail that followed Corral Hollow into the San Joaquin Valley (OHP 2015). The remains of the home included two concrete slabs and corral posts (Sandelin et al. 1996).

P-39-000119 records the Corral Hollow Shepherders homestead consisting of a small cabin, a water tank, a sheep pen, a concrete water trough, and a windmill. The pen is still in use to hold sheep and the windmill has a modern pump attached and is at present being used to pump water into the troughs (Sandelin 1996b).

P-39-000121 is a prehistoric bedrock mortar located on granite outcrop. The mortar has been damaged such that only approximately two-thirds of this shallow cupule is present. The cupule measures 10 x 8 x 2 cm (Sandelin and Lasick 1996).

P-39-000362 records a small portion of a larger gravel mine. Dougherty (1993) noted that many more gravel related features were recorded outside of his project area. He noted “these tailings appear to date the construction of a private railroad line used to ship coal to Stockton during the late 19th and early 20th centuries. More work should be conducted in this locality, a more complete examination of the creek course and tailings would be in order.”

Three bridges, BR-29C-196; -185; and -179 are located along Corral Hollow Rd at the Delta Mendota Aqueduct, California Aqueduct and Corral Hollow Creek respectively. Bridges BR-29C-179 and -185 are not eligible for the National Register and it is unknown if BR-29C-196 is eligible. The search of the University of California Museum of Paleontology (UCMP) online collections revealed eighteen vertebrate fossil localities in San Joaquin County in sedimentary deposits similar to

those that occur in the project area. The fossil localities from UCMP are detailed in the Natural Setting above.

Field Survey

The intensive archaeological field survey of the project area was conducted from March 16 through 20, 2015, by archaeologists Mark Kile, Nicholas F. Hearth, Sam Suarez, Tim Kennedy, and Chris Simon. The survey and site recordation continued March 28 and March 29, 2015 with archaeologists Mark Kile and Sam Suarez as a field was not cleared of vegetation during the initial survey.

Survey transects were spaced 30 meters apart and most of the Project was successfully surveyed intensively (97 percent). Thirty meter transects were justified primarily because the Project was subject to prior archaeological field survey in 1996 by Foothill Archaeological Services (Foster 1996). Portions of the Project that were not surveyed intensively included the steep hill sides where the slope exceeded 30 percent which occurred in the southwestern project area, and an approximately 90 acre portion of a field in the northern portion of the Project due to a lack of ground visibility caused by thick crop cover. These areas were surveyed at a reconnaissance level for historic and prehistoric features (mines, outcrops, structures, etc.). Most of the project area has been subject to shallow ground disturbance as they were under pasture for cattle grazing or crop cultivation while other parts were more heavily disturbed due to orchards, vineyards and/or residential development, see Figures 3-8.



Figure 3: Project overview, cattle pasture.



Figure 4: Project overview, rolling hills.



Figure 5: Project overview, typical ground visibility.



Figure 6: Project overview, harvested alfalfa field.



Figure 7: Project overview, unsurveyed alfalfa field.



Figure 8: Project overview, vineyard and residential development.

Ground surface visibility varied by the current land use of each area. Within the rolling hills southwest of I-580 and some portions northeast of the interstate, vegetation was sparse and consisted of ruderal grasses due to the use of the land for cattle ranching. Consequently, surface visibility averaged around 35 percent. Within the flatter areas northeast of I-580, a mix of active cultivation of vineyards, orchards, and alfalfa fields, fallow fields and cattle pastures and two residences were apparent. In the vineyards and orchards surface visibility averaged 25 percent. Like in the portions of the project southwest of I-580, the cattle pastures northeast of I-580 was around 35 percent and was covered with sparse ruderal grasses. At the two residences, surface visibility was near or at zero percent due to lawns, driveways and structures. In the uncut alfalfa fields surface visibility was zero percent and multiple attempts were made to coordinate survey with the in-progress alfalfa harvest; however, an approximately 90 acre portion of a field was not surveyed intensively as it was covered in waist high grasses and alfalfa. In this area an attempt was made to identify archaeological and historical features (bedrock, structures, etc.).

Six previously unrecorded archaeological resources were located during survey. One of these is a prehistoric isolate and five are historic. The field survey crew identified a component of another cultural resource within the Project that was previously recorded outside and immediately adjacent to the Project. Of the two cultural resources previously located within the project boundaries, one historic site was successfully relocated and updated during survey, while the other resource is the

California Aqueduct and will not be impacted by the Project. All sites potentially impacted by the project were updated with the appropriate California Department of Parks and Recreation (DPR) 523 forms, see Appendix F. No artifacts were collected during the current recordation process. The sites discovered and updated are summarized below.

C-0166-001H

C-0166-001H consists of an abandoned, ruined well and well-related artifact scatter which existed as early as 1949 according to the analysis of a historic aerial photograph from that year (NETR 2009), see Figure 9. The features at C-0166-001H consists of a concrete pad with a partial well head and an accompanying belt drive system, a second concrete pad which likely held the now-missing motor that brought water to the surface, a mound of backdirt likely from the excavation of the well, and four galvanized angle iron pieces of unknown function that are protruding from the area around the well pad. The diffuse and sparse artifact scatter is all well or agriculture-related. Measuring 105' (E-W) x 38' (N-S), C-0166-001H is located on a gently north facing, 1° sloping grassland within an in-use cattle ranch resulting in a poor site condition. Surface visibility averaged 50% in the site.

C-0166-002H

C-0166-2H is an early to mid-20th century domestic and agriculture-related refuse and architectural debris scatter located in the confluence of two washes with a rolling, open, hilly grassland. The site consists of two artifact concentrations and a diffuse and sparse artifact scatter between the two concentrations within an area which measures 145' (E-W) x 167' (N-S). Concentration A consists primarily of household refuse, see Figure 10, and Concentration B consists primarily of structural debris. The diffuse artifact scatter contains refuse that is similar to what is found in both Concentrations A and B. Though the site may possess buried deposits as it is located within an alluvial depositional environment, the surface has been heavily impacted by cattle grazing within its boundaries. Surface visibility averaged 20% in the site.



Figure 9: C-0166-001H, Datum and well head close-up



Figure 10: C-0166-002H, domestic refuse close-up

C-0166-003H

C-0166-003H consists of two abandoned segments of the historic in age alignment of Corral Hollow Rd. Segment 1 is gravel, oriented north to south and appears to be in use possibly as early as 1850 as recorded on GLO maps which date to this period (see Figure 11). Segment 2 is a more recent

alignment of Corral Hollow Rd. It dates to around 1955 as documented in historic aerial photographs (NETR 2009) and is finished with asphalt. The 1950s era realignment left the older Segment 1 for use as an access road to the city dump as well as also potentially used for access to a mid-20th century gravel quarry, C-0166-004H below. Segment 1 is in poor condition, with no apparent maintenance of the roadbed and Segment 2 is also in poor condition with numerous cracks and missing segments of asphalt/concrete and is mostly obscured by ruderal grasses. Surface visibility averaged 30% within the site.

C-0166-004H

C-0166-004H consists of a mine and dump. This resource has seen intensive activities during the 20th century, see Figure 12. Currently the area within the boundary of C-0166-004H appears to be a largely rehabilitated landscape from a former city dump. Before this location was a city dump it likely was a gravel quarry, potentially part of P-39-000362, see below for an update. Currently the site has three features and one concentration. Feature 1 (F1) is a mechanically leveled and compacted area which forms the southern boundary of the site. F2 is a second mechanically leveled and compacted area which forms the northern portion of the site. A concrete foundation (F3) is located on the eastern side of the site. A discrete, mid-20th century refuse scatter (Concentrations 1) is located within the boundaries of F1. C-0166-004H is bounded on the north by open fields, to the east by the historic alignment of Corral Hollow Rd., to the south by open fields out of the current project area, to the SW by I-580 and to the west by the modern alignment of Corral Hollow Rd. The condition of the site is poor overall. Presently C-0166-004H is covered with stunted, secondary growth of and it is located within the rural landscape surrounding the city of Tracy. C-0166-004H is west of a modern gravel quarry active as recently as June of 2004 that has since been rehabilitated to flat land.



Figure 11: C-0166-003H, Segment 1 overview



Figure 12: C-0166-004H, Artifact concentration

C-0166-005H

C-0166-005H is a 1,883' long barbed wire fence alignment which spans across open, grass-covered land between Corral Hollow Rd. and I-580 in a north-south alignment. The fence has Allis Buckthorn (1881 Patent) and Gladdis (1878 Patent) and modern barbed wire and sheep fencing, see Figure 13. Posts within the fence line include historic-in-age, heavily weathered hand-split redwood posts and modern T-Bar posts. A dirt two-track road is located immediately adjacent to the fence to the west. Surface visibility averaged 50% in the site.

C-0166-ISO-001

C-0166-ISO-001 is an isolated, prehistoric in age, hand-stone roughly in the shape of an exhausted pestle, see Figure 14. It measures 13.5 x 8.0 x 8.7 cm. It is made of granite, has three ground lateral faces and both ends are heavily battered. It was found in a chisel-plowed field and the immediate ~75 m vicinity had 100% surface visibility. The isolated artifact had no “find” damage from the chisel plow in the form of recent impact damage or rust marks. Despite an intensive, 2m spaced survey, no other artifacts were found within a 30 m radius area of the hand stone.



Figure 13: C-0166-005H, Wire close-up



Figure 14: C-0166-ISO-001, Handstone close-up

P-39-000120 (Update)

This site was previously recorded in 1996 by Sandelin Archaeology and Forestry and it consisted of a three room house in a state of disrepair, corrals, a pumphouse, a well/water tank, and trough. This update to P-39-000120 details the condition of this site since 1996, adds resource codes, digitally records a sketch map, details the non-structural remains on an Archaeological Site Record and adds three features not originally recorded.

P-39-000120 as recorded herein consists of a dilapidated three-room structure (see Figure 15), two likely historic in age abandoned wells, a largely intact pumphouse, a concentric arrangement of concrete risers, a cattle trough, an open-air concrete water tank, seven scattered mature Pepper trees, and series of wood fences which form corrals, chutes and pens. The corral, chutes, pens, concrete water tank, and cattle trough are still in-use today for cattle ranching operations. A third but modern well is also located within the site boundaries. The dilapidated three-room structure is heavily leaning and in eminent danger of collapse likely due to its age, condition, and pressure exerted by cattle rubbing on its outer walls. A diffuse and sparse artifact scatter of 1940s age refuse consisting of small fragments of amethyst glass and window pane glass is present outside the structure, along with a pot belly stove, an electric stove and hot water heater both located within the structure as well as an electricity meter located outside of Structure 1. The entire site measures 490' (N-S) x 400' (E-W) and is located on a rural, grass-covered, alluvial plain with approximately 1° slope to the northeast.

There is a structure plotted at this location on a 1916 *Tracy, CA* USGS 7.5 quad topographic map as well as structures, features, and fencing depicted on 1949 aerial photography. Review of available historic aerial photos (NETR 2009) for the site location indicates the current arrangement of the

fences and other features have evolved through time with more constructions added and others have been demolished.

P-39-000362 (Update)

P-39-000362 was originally recorded in June 1993 by Archaeological Services, Inc., in a separate location that was not included in the current Project. The update to P-39-000362 herein does not replace the 1993 record for the site as the current Project area is different than the 1993 survey area. P-39-000362 described features which relate to the mining landscape originally recorded in 1993. Like in 1993, P-39-000362 does not entirely record the resource as more features were observed outside the current Project and survey area. The portion of P-39-000362 within the Project adds to the historic background for the original record for the site and records newly discovered features for the site.

P-39-000362 is a gravel mine site which potentially dates to as early as the 1890s (See Figure 16). The gravel quarry relied upon the WPRR (P-39-000098) for transport and consequently co-evolved with a spur of the WPRR to the Tesla coal mines in the 1890s. John and James Treadwell provided private backing to develop a 37 mile rail line between the Tesla Mine and the developing City of Stockton in the early 1900's. The segment built by the Treadwell's was abandoned in 1914 and all rail was removed after 1922.

The portion of P-39-000362 within the Project contains four linear features (one earthen berm, two trenches and a probable property line of the mine demarcated with a recently dismantled fence line) and one back dirt pile. Overall the site condition is poor with disturbances including cattle ranching, natural weathering of earthen and steel features. Likely portions of the site outside the current project area have been heavily impacted by the modern dump located east of Corral Hollow Rd as well as modern maintenance of Corral Hollow Rd. The portion of P-39-000362 within the Project measures 1,460' (N-S) x 3,020' (NE-SW). P-39-000362 has open exposure and is located upon a steeply banked secondary river terrace approximately 90' above Corral Hollow Creek in a rural, grass-covered landscape, with approximately 1° slope to the northeast.



Figure 15: P-39-000120 (Update), Three room structure overview



Figure 16: P-39-00000362 (Update), Trench overview

IMPACTS ANALYSIS AND RECOMMENDATIONS

This section addresses the project's potential to impact cultural resources. Impacts to cultural resources are generally considered to be direct (e.g. destruction or demolition of a resource) or indirect (e.g. visual or audible changes to the setting). Under CEQA cultural resources are evaluated for significance and eligibility for the California Register. If a resource is considered eligible for the California Register it is considered a historical resource under CEQA. For the purposes of CEQA impacts are only considered significant for eligible or *historical resources*.

CEQA

CEQA Guidelines define a *historical resource* as a resource listed in or determined eligible for listing in the CRHR. This includes cultural resources that have been determined for a local register or through a local historic resources survey. A resource may be considered potentially eligible for listing in the CRHR if it meets any of the four criteria listed below:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values.
4. Has yielded or may be likely to yield information important in prehistory or history.

To be considered a *historical resource* a cultural resource should also possess integrity of location, design, setting, materials, workmanship, feeling and association. As used here, integrity is defined as the ability of a historical resource to convey its significance. To determine which of these factors are most important will depend on the property being evaluated and which particular CRHR criterion under which the resource is considered eligible for listing.

Furthermore, CEQA necessitates that the lead agency consider whether the project will significantly affect unique archaeological resources that are ineligible for listing in the CRHR and to avoid these unique archaeological resources when possible or mitigate any effects to less than significant levels (PRC 21083.2). As stated by CEQA, a *unique archaeological resource* means an archaeological artifact, object, or site which clearly demonstrates with a high probability that it meets-without merely adding to the current body of knowledge-any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Cultural Resources

Six previously unrecorded archaeological resources were located during survey. One of these is a prehistoric isolate and five are historic archaeological resources. A component of a cultural resource that was previously recorded outside of and adjacent to the current Project was discovered to extend into the Project boundaries. Of the two cultural resources previously recorded within the project boundaries, one historic site was successfully relocated and updated during survey, while the other resource is the California Aqueduct and will not be impacted by the Project. A portion of the WPRR, now Union Pacific Railroad (UPRR) is within the outer boundaries of the Project, but is not part of the Project; it will not be impacted by the project.

The records search and field survey results indicate that the surrounding area has a low sensitivity for prehistoric archaeological resources and moderate sensitivity for historic archaeological resources. The significance, eligibility for the CRHR, and project impacts to each of the eight cultural resources is discussed below.

The application of the above guidelines for evaluating the significance and eligibility of each of the cultural resources within the Tracy Hills Specific Plan indicates that none of the cultural resources is considered a *historical resource* or a *unique archaeological resource* as defined in CEQA. Following is an explanation of our findings.

C-0166-001H, C-0166-002H, C-0166-004H and C-0166-005H are diffuse historic refuse scatters or have historic features or a combination of refuse deposits and features. Nothing suggests that these sites are directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the sites are directly associated with a prominent historical figure (CRHR Criterion 2). The refuse or features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, sites composed of the refuse, features or a combination of the two, have no archaeological data potential beyond what has already been documented. Further analysis of the artifacts or features at any of the sites is unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4). The recordation of these archaeological resources exhausts their information potential. Therefore, DUKE CRM finds that these sites are not *historical resources/unique archaeological resources* under CEQA. DUKE CRM does not recommend any specific mitigation measures for any of these historic archaeological sites.

Corral Hollow Road (C-0166-003) and the canyon system in Corral Hollow have been used as a transportation corridor throughout the historic and likely back into the prehistoric period. The prehistoric name or names are not currently known, but during the historic period they included El Camino Viejo, Arroyo de los Buenos Ayres, and Corral Hollow Road. The exact location of these routes has not been determined in the current or any previous studies, but these can be reasonably argued to generally follow the bottom of the canyon system of Corral Hollow.

The rich history of transportation along Corral Hollow Road suggests that the segment of C-0166-003H could be potentially directly associated with a prominent historical event like the development of the historic alignment of Corral Hollow Road (CRHR Criteria 1). To convey significance under CRHR Criteria 3, road segments like C-0166-003H should demonstrate the evolution of Corral Hollow Road in the area of Engineering. Under CEQA, roads or road segments like C-0166-003H, no specific length has been defined for a road segment to retain its integrity, but at a minimum the length should convey the sense of a continuous road experience an unobstructed view from the road segment to the horizon with only a view of a built environment dating to the period of significance should be seen. For Criterion 1 and 3, C-0166-003H does not meet the length requirements of a continuous road and travel experience through Corral Hollow Canyon nor does it retain any road related associated features. Impairment of these required essential physical features of a roadbed results in a loss of integrity of C-0166-003H under Criterion 1 and 3. No evidence has been found to suggest that the segment of Corral Hollow Road recorded as C-0166-003H is directly associated with a prominent historical figure (CRHR Criteria 2) nor is it likely that the road alignment will yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criteria 4). Therefore, DUKE CRM finds that C-0166-003H is not a *historical resource/unique archaeological resource* under CEQA. The recordation of this cultural resource exhausts its information potential. DUKE CRM does not recommend any specific mitigation measures for C-0166-003H.

In general, isolates like C-0166-ISO-1 are not considered significant, as their data potential is exhausted by the initial recordation. Therefore DUKE CRM finds that C-0166-ISO-1 is not a *historical resource/unique archaeological resource* under CEQA. DUKE CRM does not recommend any specific mitigation measures for C-0166-ISO-1.

Foster (1996) previously found P-39-000120 to be in adequate condition to convey integrity. However, it was also found to be of a “small scale, typical of the many enterprises surrounding Tracy” and that the site possesses no artifacts, structures, or equipment that would provide additional information about the past.” P-39-000120 was “not the work of an architectural master”, nor was it “particularly distinctive or associated with people or events of great significance.” DUKE CRM finds that P-39-000120 is still in adequate condition to convey integrity. While the update to P-39-000120 now records artifacts and features not previously noted on the initial recordation of this resource, the documentation of new artifacts and features exhausts their data potential. The artifact types are not unique and do not answer any potentially important questions. Therefore, DUKE CRM finds that P-39-000120 is not a *historical resource/unique archaeological resource* under CEQA. However, due to its age, there is some potential for buried features (such as a privy) that could contribute to scholarly knowledge of ranching life or homesteading in the late 19th century. The Lammers Road Homestead could possess buried resources that would illuminate the life of early homesteaders.

Because of this potential for buried resources, DUKE CRM recommends that a trained archaeological monitor be present within 100 feet of the Lammers Road Homestead (P-39-000120) during ground disturbance associated with the Project. The archaeological monitor shall work under

the direction of a qualified archaeologist (M.S./M.A. in anthropology, archaeology, or related discipline with an emphasis in archaeology and demonstrated competence in archaeological research, fieldwork, reporting, and curation). If a buried historic or archaeological feature or deposit is present it shall undergo archaeological excavation, analysis, technical reporting, and the collection shall be offered to a local repository, such as the Tracy Historical Museum. No additional mitigation is recommended.

P-39-000362 does not appear to have been evaluated in the initial recordation as its status is not included in the DPR forms for the site (Dougherty 1993). Problematically, in the initial recordation and in the current effort the entire resource has not been recorded and both have examined different portions of P-39-000362 though the site clearly continues across Corral Hollow Canyon between the two recorded portions. The continuity of site between and beyond the previously and presently recorded portions is visible across the landscape due to its large overall size and the size of visible, quarry-related features in Corral Hollow Canyon. The portion of P-39-000362 within the current Project is a diffuse historic refuse scatter and several historic features. Nothing suggests that this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the site is directly associated with a prominent historical figure (CRHR Criterion 2). The refuse or features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, sites composed of the refuse or features like P-39-000362 have limited archaeological data potential beyond what has already been documented. Further analysis of the artifacts or features is unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4). Therefore, DUKE CRM finds that the portion of P-39-000362 within the current Project is not a *historical resource/unique archaeological resource* under CEQA, nor does it contribute to the potential eligibility or significance of the larger P-39-000362, if it were to be considered potentially eligible or significant. The recordation of this cultural resource exhausts its information potential. DUKE CRM does not recommend any specific mitigation measures for P-39-000362.

P-39-000090 is the California Aqueduct which was determined eligible for the NRHP/CRHR in 2010 and is therefore considered a *historical resource* for the purposes of CEQA. It crosses through the Tracy Hills Specific Plan; however, there will be no direct impacts to the aqueduct. Therefore we recommend there is a potential for indirect impacts, but these would be visual and would not detract from the significance and NRHP/CRHR eligibility of P-39-000090. The level of impact to P-39-000090 is considered less than significant for the purpose of CEQA. DUKE CRM does not recommend any specific mitigation measures for P-39-000090.

The vast majority of the project area is natural and there is minimal disturbance to the surface of the Project. The lack of disturbance increases the sensitivity for potential historical or cultural resources within the project and the potential to impact these resources. However, most of the proposed project is located in soils with low potential for buried cultural deposits due to the stability of the landforms.

Paleontological Resources

The records search and field survey did not identify any paleontological resources within or adjacent to the project boundaries. Our research indicates that surficial sediments in most of the project area (Qa, Qoa, and Qoa2) have a low sensitivity for paleontological resources, but this sensitivity increases with depth (below 3-5 feet). In addition, the exposures of Oro Loma Formation (Tol) in the southeastern portions of the project may contain significant fossil resources. Therefore any ground disturbance below 5 feet beneath the current ground surface has a high potential to directly impact unique paleontological resources. This would result in a potentially significant impact to paleontological resources according to CEQA.

In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE CRM recommends paleontological spot check monitoring of excavations deeper than five feet in depth within the project area, and spot check monitoring of any excavation in valleys in the southeastern portion of the project area. Spot-checking 1-2 times per week shall be completed by a trained paleontological field monitor working under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation). The qualified paleontologist shall be present at the pre-construction meeting to discuss monitoring protocols. If significant fossil resources are encountered during excavation activities the following measures are necessary: fossil salvage, increase to part- or full-time paleontological monitoring, curation, and a technical report.

CONCLUSIONS

Nine cultural resources are located within the Tracy Hills Specific Plan. All of these cultural resources were evaluated for significance and eligibility as a *historical resource/unique archaeological resource* according to CEQA. It was determined that one of the cultural resources is considered a *historical resource*, the California Aqueduct. The California Aqueduct crosses the Project but will not be directly impacted by the project; the impact is indirect and therefore less than significant under CEQA. Therefore, DUKE CRM recommends that implementation of the Project will have a less than significant impact on the California Aqueduct, a CEQA *historical resource*. None of the remaining cultural resources are significant and do not qualify as *historical resources/unique archaeological resources* according to CEQA. No other *historical resources* will be impacted.

DUKE CRM recommends that a trained archaeological monitor be present within 100 feet of the Lammers Road Homestead (P-39-000120) during ground disturbance associated with the Project. The archaeological monitor shall work under the direction of a qualified archaeologist (M.S./M.A. in anthropology, archaeology, or related discipline with an emphasis in archaeology and demonstrated competence in archaeological research, fieldwork, reporting, and curation). If a buried historic or archaeological feature or deposit is present it shall undergo archaeological excavation, analysis, technical reporting, and the collection shall be offered to a local repository, such as the Tracy Historical Museum.

If archaeological discoveries are made during construction, work in the immediate vicinity of the find shall be temporarily halted within 100 feet (approximately 30 meters). A qualified archaeologist shall assess the nature and significance of the find and make recommendations including, but not limited to developing appropriate treatment measures in consultation with the City. If the discovery is prehistoric in nature, local Native Americans shall be consulted.

Our research indicates that surficial sediments in most of the project area (Qa, Qoa, and Qoa2) have a low sensitivity for paleontological resources, but this sensitivity increases with depth (below 3-5 feet). In addition, the exposures of Oro Loma Formation (Tol) in the southeastern portions of the project may contain significant fossil resources. Therefore any ground disturbance below 5 feet beneath the current ground surface has a high potential to directly impact unique paleontological resources. This would result in a potentially significant impact to paleontological resources according to CEQA. In order to mitigate this potential impact to a level that is less than significant under CEQA, DUKE CRM recommends paleontological spot check monitoring of excavations deeper than five feet in depth within the project area, and spot check monitoring of any excavation in valleys in the southeastern portion of the project area. Spot-checking 1-2 times per week shall be completed by a trained paleontological field monitor working under the direct supervision of a qualified paleontologist (B.S./B.A. in geology, or related discipline with an emphasis in paleontology and demonstrated competence in paleontological research, fieldwork, reporting, and curation). The qualified paleontologist shall be present at the pre-construction meeting to discuss monitoring protocols. If significant fossil resources are encountered during excavation activities the following measures are necessary: fossil salvage, increase to part- or full-time paleontological monitoring, curation, and a technical report.

If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. In addition, according to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052).

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Appendix A

Additional Maps

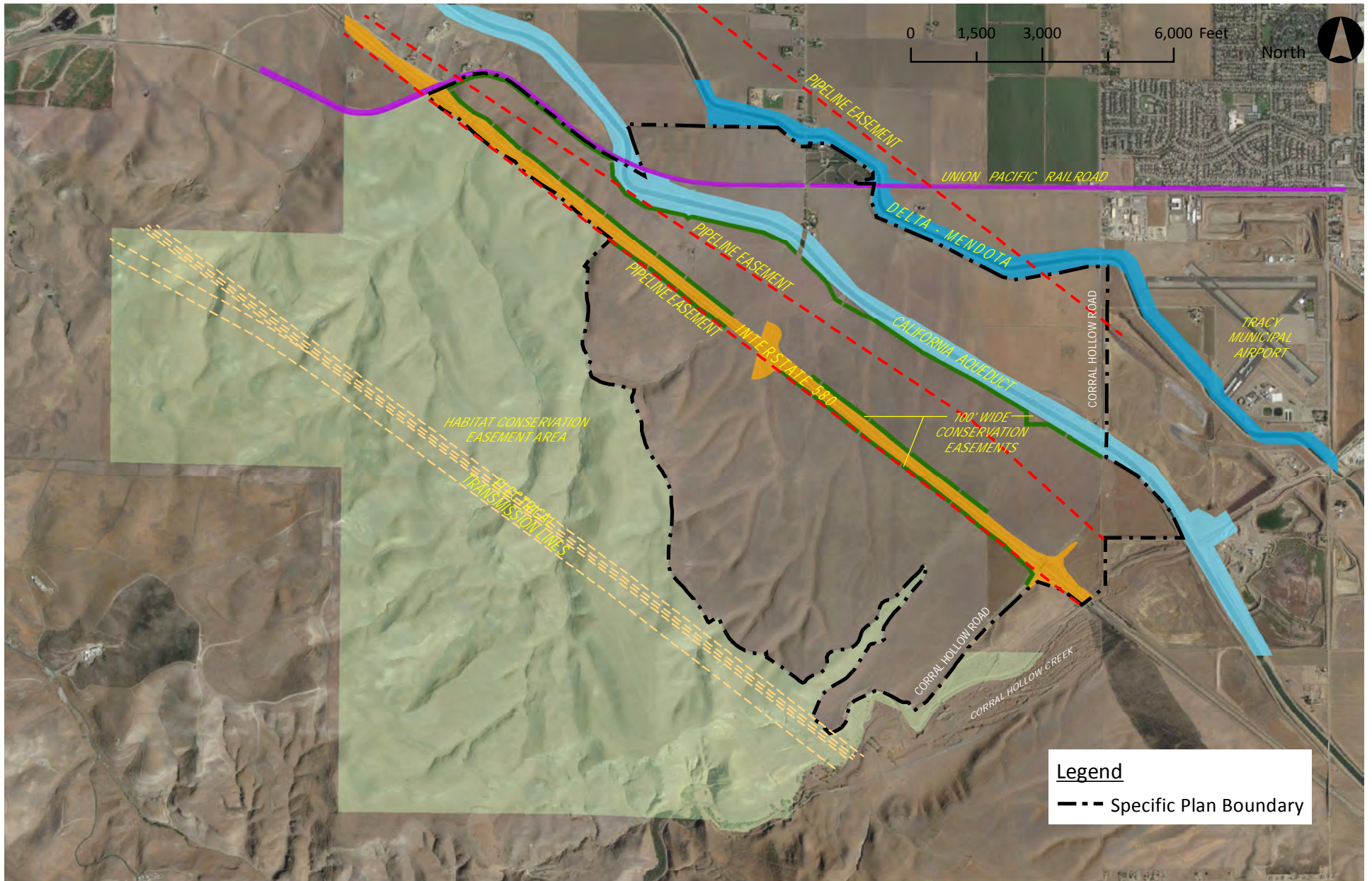
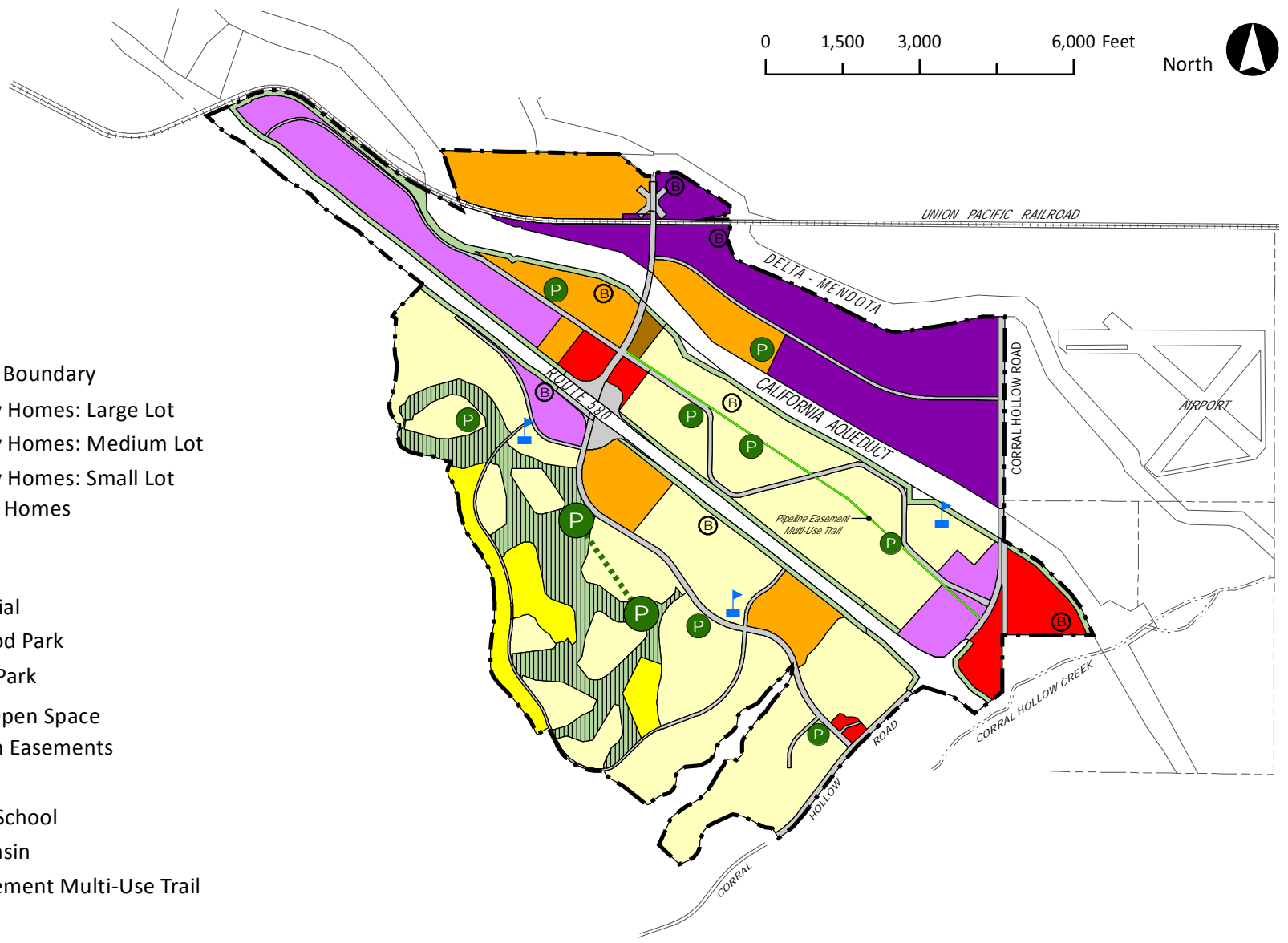


Figure 1-4
Existing Conditions



Legend

- Specific Plan Boundary
- Single Family Homes: Large Lot
- Single Family Homes: Medium Lot
- Single Family Homes: Small Lot
- Multi-Family Homes
- Mixed Use
- Commercial
- Light Industrial
- P Neighborhood Park
- P-P Community Park
- Recreation Open Space
- Conservation Easements
- Roads
- Elementary School
- B Retention Basin
- Pipeline Easement Multi-Use Trail

NOTES:
 1. The locations, numbers, and configurations of public schools, park sites, and public utilities are conceptual and subject to change.
 2. This exhibit is for conceptual purposes to show approximate locations.



Figure 1-3
 Land Use Concept

Appendix B

Native American Consultation

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471



May 11, 2015

Curt Duke
DUKE Cultural Resources Management
20371 Lake Forest Drive, A-2
Lake Forest, CA 92630

RE: SB 18 Consultation, Tracy Hills Specific Plan, City of Tracy, San Joaquin County.

Dear Mr. Duke,

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places in creating or amending general plans, including specific plans. Attached is a consultation list of tribes with traditional lands or cultural places located within the boundaries of the above project.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. A *Sacred Lands File* search was completed and no sites were found. Local governments should be aware that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

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

Sincerely,

A handwritten signature in cursive script that reads "Katy Sanchez".

Katy Sanchez
Associate Government Program Analyst

cc: State Clearinghouse

Appendix C

Resumes

Curt Duke

President/Archaeologist



Expertise

Cultural Resources Management
California Prehistory
Section 106 Compliance
CEQA Compliance
Native American Consultation

Education

CSU, Fullerton, M.A., Anth, 2006
SDSU, Grad Studies, Anth, 1996/97
UC Santa Cruz, B.A., Anth, 1994

Professional Registrations

RPA, No. 15969
County of Riverside (No. 151)
County of Orange

Professional Memberships

Society for California Archaeology
Society for American Archaeology
Pacific Coast Archaeological Society
Assoc. of Environmental Professionals

Professional Experience

President/Archaeologist, DUKECRM, April 2011 to present.
Archaeologist/Principal, LSA Associates, 1997-2011.
Archaeological Technician, SRI, 1997.
Archaeological Technician, Petra Resources, 1997.
Archaeological Technician, KEA Environmental, 1997.
Archaeological Technician, Keith Companies, 1997.
Archaeological Technician, KEA Environmental, 1997.
Archaeological/Paleontological Tech., LSA Associates, 1996.
Archaeological/Paleontological Tech., Petra Resources, 1996.
Archaeological Technician, Affinis Environmental Services, 1996.
Archaeological Technician, KEA Environmental, 1996.
Archaeological Tech., Macko Archaeological Inc., 1995 to 1996.
Archaeological Technician, Heritage Resource Consultants, 1995.
Archaeological Technician, Chambers Group, 1995.
Archaeological Tech./Teachers Assistant, Cabrillo College, 1994
Anthropological Laboratory Technician, UC Santa Cruz, 1994.

Selected Project Experience

Skyridge Residential, Mission Viejo, 2011-present. Role: Project Manager/Principal Investigator. Mr. Duke conducted a Phase II test excavation of prehistoric archaeological site CA-ORA-507. This work included research, preparation of a research design/work plan, excavation, lab analysis, Native American consultation, and preparing a detailed technical report. The report was reviewed by the City, ACOE, and SHPO. Employer: DUKE CRM.

Olive View Medical Center, San Fernando, 2012-present. Mr. Duke's role on this project was Principal Investigator. Under contract to the City of Los Angeles and Chattel Architecture, Planning, and Preservation, Inc. DUKE CRM prepared a Phase I Archaeological Survey Report and conducted archaeological monitoring. For the Phase I Mr. Duke conducted the records search, field survey and report preparation. He also led the consultation efforts with Native Americans on behalf of the County and FEMA. The results of the survey were negative, meaning that no archaeological resources were identified and there were no delays to the project. However, SHPO recommended archaeological monitoring due to a perceived high potential for historical archaeological resources. Employer: DUKE CRM.

6th Street Viaduct Replacement Project, City of Los Angeles, 2013. DUKE CRM is under contract to GPA Environmental, Inc. and the City to provide archaeological and paleontological support for the construction phase of this project. The viaduct is

comprised of two bridges: 1) a bridge over the Los Angeles River and the UPRR, BNSF, Metrolink, and Metro Railroads; and 2) a bridge over U.S. Highway 101. Mr. Duke's role on this project is Project Manager and Principal Investigator for archaeology. DUKE CRM prepared an Environmentally Sensitive Area (ESA) Action Plan for archaeology and worked with Bruce Lander who prepared a Paleontological Mitigation Plan (PMP). These documents will be used to specify how archaeological and paleontological resources shall be treated during construction of this multi-year, multi-phase project. DUKE CRM will be responsible for overseeing the implementation of the archaeological and paleontological monitoring program on behalf of the City to ensure that mitigation measures are adhered to. Employer: DUKECRM.

AT&T Mobility, On-Call, 2011-present. Role: Project Manager/ Principal Investigator. Mr. Duke conducts records searches, field surveys and prepares reports for various wireless facilities throughout southern and central California. Employer: DUKECRM.

Sepulveda Boulevard Bridge Widening, Manhattan Beach, 2012-13. Mr. Duke's role on this project is Project Manager/Principal Investigator. Under contract to the City of Manhattan Beach and GPA Environmental, Inc. Mr. Duke is preparing a Phase I Archaeological Survey Report. He conducted the field survey, records search, and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Caltrans is the lead agency for NEPA; the City is the lead agency for CEQA. Employer: DUKECRM.

Lamb School Residential Subdivision, Huntington Beach, 2013. Mr. Duke is the Project Manager/Principal Archaeologist for this project. DUKE CRM is conducting the cultural resources mitigation measures required by the City. This includes historical documentation of the school building and site, and archaeological and paleontological construction monitoring. This work is on-going. The DPR site record will be submitted to the South Central Coastal Information Center and the monitoring report will be submitted to the City upon completion of construction. Employer: DUKECRM.

Wardlow School Residential Subdivision, Huntington Beach, 2013. Mr. Duke is the Project Manager/Principal Archaeologist for this project. DUKE CRM is conducting the cultural resources mitigation measures required by the City. This includes historical documentation of the school building and site, and archaeological and paleontological construction monitoring. This work is on-going. The DPR site record will be submitted to the South Central Coastal Information Center and the monitoring report will be submitted to the City upon completion of construction. Employer: DUKECRM.

Scalzo Property, San Juan Capistrano, 2012. Role: Project Manager/Principal Investigator. Mr. Duke conducted a due diligence study for this 16-acre property. This work included research, site visit, and brief letter report. Employer: DUKECRM.

1st Street over Glendale Boulevard, Los Angeles, 2012. Mr. Duke's role on this project was Project Manager/Principal Investigator. Under contract to the City of Los Angeles and GPA Environmental, Inc. Mr. Duke prepared a Phase I Archaeological Survey Report and Historic Property Survey Report. Mr. Duke was the project manager for this project. He conducted the field survey and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: DUKECRM.

San Fernando Road Widening at Balboa Road, Los Angeles, 2012. Role: Project Manager/Principal Investigator. Under contract to the City of Los Angeles and GPA Environmental, Inc. Mr. Duke prepared a

Phase I Archaeological Survey Report and Historic Property Survey Report. Mr. Duke was the project manager for this project. He conducted the research, field survey, and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. DUKE CRM will be preparing the Paleontological Identification Report. Employer: DUKE CRM.

Mobilitie, On-Call, 2011-12. Role: Project Manager/Principal Investigator. Mr. Duke conducts records searches, field surveys and prepares reports for various wireless facilities throughout southern and central California. Employer: DUKECRM.

California Avenue Widening, Long Beach, 2011. Role: Project Manager/Principal Investigator. Under contract to the City of Long Beach and GPA Mr. Duke prepared a Phase I Archaeological Survey Report. Mr. Duke was the project manager for this project. He conducted the research, field survey, and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: DUKECRM.

Palomar Mountain Fuels Modification, 2011. Role: Project Manager/ Principal Investigator. Under contract to the Palomar Mountain Fire Safe Council, Mr. Duke conducted a Phase I archaeological survey of 11.5 acres. The survey report was completed quickly and was accepted by the Palomar Mountain Fire Safe Council and the BLM without any comments. Employer: DUKE CRM.

Mid County Parkway, Riverside County, CA, 2004-2011. Role: Task Manager/ Principal Investigator. The studies for the Mid County Parkway project included a 32-mile corridor (from Interstate 15 to State Route 79) in western Riverside County. The archaeological survey covered 3,680 acres and identified 91 archaeological sites. An extended Phase I survey (limited excavation) was conducted at 79 of the sites. Ultimately Phase II excavations were conducted at eight of the sites. Four archaeological sites were determined eligible for the National Register. A built environment historic resources survey was conducted and one historic dairy was determined eligible for the National Register. This project included extensive consultation with Indian Tribes. All work was conducted in compliance with Section 106 of the NHPA, NEPA, and CEQA. FHWA, Caltrans, and RCTC were the lead agencies and Jacobs Engineering was the lead engineering firm under contract to RCTC. Employer: LSA Associates.

Colton Crossing Rail-to-Rail Grade Separation, Colton, CA, 2008-2011. Role: Project Manager/ Principal Investigator. The Colton Crossing project involved the separation of the at-grade crossing of the UP and BNSF railroads. The Colton Crossing is a historically significant railroad crossing where a stand-off between the SP and California Southern railroads took place. Despite SP's efforts the California Southern railroad was granted access across SP's right-of-way. Research showed that the project's APE contained numerous historic buildings and was very active in historic times. Under Mr. Duke's direction an archaeological survey and an extended Phase I survey (limited excavation) were conducted. Sixteen historical archaeological sites were discovered; these included building remnants and refuse deposits. None of the archaeological sites were determined eligible for the National Register. A built environment historic resources survey evaluated the UP and BNSF railroads, the SP passenger depot, the American Railway Express Company building, and the historic South Colton neighborhood; none of which were determined eligible for the National Register. All work was conducted in compliance with Section 106 of the NHPA, NEPA, and CEQA. FHWA and Caltrans were the lead agencies working in cooperation with SANBAG, FRA, UP, and BNSF. HDR was the lead engineering firm under contract to SANBAG. Employer: LSA Associates.

I-15/I-215 Interchange Project, Devore, San Bernardino County, 2008-11. Role: Task Manager. Mr. Duke was the cultural resources task manager. Under Mr. Duke's direction an ASR, HRER, and HPSR were prepared. An archaeological site was recorded immediately adjacent to the project boundaries, within the APE. Mr. Duke and his staff worked closely with the Caltrans archaeologist to record and evaluate this site for the National Register without conducting a Phase II excavation. In doing this, the client saved thousands

of dollars and almost one year on their schedule. His staff also evaluated a portion of historic Route 66 and several related historic buildings. Employer: LSA Associates.

24th Street Improvements, City of Bakersfield, 2008-2011. Mr. Duke's role on this project was Cultural Resources Task Manager/Principal Investigator. Under contract to the City of Bakersfield and Parsons Brinckerhoff, Inc. Mr. Duke prepared the Historic Property Survey Report. He managed a team of archaeologists, paleontologists, and historians to complete the HRER, ASR, PIR/PER, and APE map. He conducted the archaeological field survey. His team identified 93 historic period buildings/structures, including two historic districts. Employer: LSA Associates.

Alta East Wind Project, Mojave, Kern County, CA 2010-11. CH2M HILL, Inc., requested a paleontological resources assessment for the Alta East Wind Project northwest of the City of Mojave in southeastern Kern County, California. The project includes developing pads for wind generation turbines, turbine access and service roads, management facilities, and a transmission line running from the center of the project south to connect with an existing distribution grid. The study area includes five sections of land that contain sediments that have potential for paleontological resources. The early Pliocene Horned Toad Formation contains the late Hemphillian Warren Local Fauna, with 24 fossil mammalian taxa. The literature review identified 34 fossil localities in the Horned Toad Formation, 12 of which were verified within project boundaries. The field survey located an additional 69 localities within project boundaries. Because of the potential for direct impacts to all paleontological resource localities, mitigation procedures are summarized. A project-specific paleontological resources impact mitigation program (PRIMP), including fossil salvage by qualified paleontologists, was recommended to accompany development of this project. Employer: LSA Associates.

I-215/SR-74 Interchange Improvements Project, Perris: Paleontological Mitigation Monitoring, 2010-11. Mr. Duke was the Task Manager for this project. The scope of work included paleontological monitoring during grading operations and environmental awareness (paleontological focus) training. He was responsible for working with the qualified paleontologist and coordinating field assignments for this project. Mr. Duke and his staff worked a communication system with the grading contractor that allowed for minimal field effort while achieving compliance. This allowed for savings to the overall budget. Employer: LSA Associates.

Aliso Canyon Park Improvements, Los Angeles, 2010. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke prepared a Phase I Archaeological Survey Report. Mr. Duke was the project manager and principal-in-charge for this project. He oversaw the research, field survey, and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: LSA Associates.

Five Winds Ranch Conservation/Mitigation Bank, Yucaipa, San Bernardino County, 2010. Mr. Duke served as the Principal-in-Charge for this project. He coordinated with staff biologists and archaeologists to complete a general biological survey, a waters/wetland delineation, a cultural resources survey, a Mitigation Banking Feasibility Study, a draft and final Mitigation Banking Prospectus, and a Bank Enabling Instrument. Several cultural resources were identified, both historic and prehistoric in nature. These resources were not impacted and therefore no additional work was necessary. Employer: LSA Associates.

Mammoth Lakes Parks and Recreation and Trail System Master Plan, 2010. Mr. Duke prepared a cultural resources assessment for the Draft Parks and Recreation Master Plan (PRMP) and the Draft Trail System Master Plan (TSMP) EIRs. He conducted a records search, site visits, and prepared a report documenting the effort and making management recommendations. The cultural resource assessment was completed pursuant to California Environmental Quality Act (CEQA). Employer: LSA Associates.

Rancho Vista Boulevard (Ave. P) Grade Separation Project, Palmdale, 2007-10. Mr. Duke's role was Principal Archaeologist, providing project supervision and regulatory expertise. Under contract to the City of

Palmdale and LAN Engineering, Mr. Duke's team conducted a records search and field survey, and prepared an Archaeological Survey Report and Historic Properties Survey Report which was reviewed and approved by Caltrans. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: LSA Associates.

California Valley Solar Ranch, California Valley, San Luis Obispo County, 2009-10. Role: Principal-in-Charge. California Valley Solar Ranch is a 4,000-acre project located on the Carrizo Plain in eastern San Luis Obispo County. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, field survey, Native American scoping, and prepared an archaeological survey report. His team identified, recorded, and evaluated several historical archaeological sites. Employer: LSA Associates.

Melrose Triangle, West Hollywood, 2009-10. Under contract to the City of West Hollywood Mr. Duke oversaw the preparation of a historic resources survey which included research, field surveys, and preparation of a historic context and survey report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates.

Hollyhock House, Barnsdall Park, Los Angeles, 2009-10. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke oversaw the preparation of a supplemental historic structure report which included research, field inspection, and preparation of a report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates.

Delano-Alpaugh Water Reclamation Pipeline, Kern and Tulare Counties, 2006-2009. Mr. Duke prepared a cultural resources assessment study for the Delano-Alpaugh Water Reclamation Pipeline (DAWRP) while working for a previous employer. His role was cultural resources task manager and principal investigator. The project was approximately 11 miles Long. The research and field survey were conducted to determine whether the DAWRP project would result in impacts to any historical resources and/or unique archaeological resources. The cultural resources assessment was completed pursuant to CEQA and Section 106 of the NHPA. His team completed a cultural resources records search and a field survey. The project was immediately adjacent to Allensworth State Historic Park and National Register Historic District. The field survey identified two historical archaeological sites adjacent to the project alignment. Employer: LSA Associates.

Professional Hospital Supply, Temecula, 2008. Mr. Duke and his staff were retained by the Garrett Group to conduct an Archaeological and Paleontological Monitoring Program for the 32-acre Professional Hospital Supply Project in the City of Temecula. The construction monitoring program is the result of an agreement between the City of Temecula and the Pechanga Band of Mission Indians due to the presence of a portion of an archaeological site near the project boundaries. No cultural or paleontological resources were identified. Employer: LSA Associates.

Lancaster Highlands Project, Meridian Land Development Company, 2007. Mr. Duke oversaw the completion of a cultural resource assessment for the 1,891-acre project. All work was completed for Meridian Land Development Company. Tasks included a records search and field survey for archaeology and paleontology. Employer: LSA Associates.

Temecula 32, Archaeological Phase II Testing, 2007. Mr. Duke and his staff were retained by the Garrett Group to conduct an intensive pedestrian survey and test excavation in and around the reported location of a prehistoric lithic scatter. However, no remnants associated with the site were identified on or beneath the surface. Therefore, Mr. Duke recommended that this site should not be considered "a unique archaeological resource" or "historical resource" under CEQA. LSA worked with the Pechanga Band of Luiseño Indians and they monitored all field activities. Employer: LSA Associates.

I-15/SR-79 Interchange Project, Riverside County, 2006-10. Role: Task Manager. Mr. Duke was the cultural resources task manager. This project is located on top of a significant, National Register-listed

archaeological site that is also very sacred to the Luiseño Band of Indians. Under Mr. Duke's direction an ASR, ESA Action Plan, and HPSR were prepared. Due to the sensitivity surrounding the sacred site Mr. Duke and his staff consulted regularly with the Caltrans archaeologist, Native American Coordinator, and Native Americans. Employer: LSA Associates.

Residence "A," Barnsdall Park, Los Angeles, 2009. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke oversaw the preparation of a historic structure report which included research, field inspection, and preparation of a report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates.

Westlake Historic Resources Survey, Los Angeles, 2008-09. Under contract to the Community Redevelopment Agency of Los Angeles (CRA LA) and Chattel Architecture Planning and Preservation, Inc. Mr. Duke oversaw the preparation of a historic resources survey which included research, field surveys, and preparation of a historic context and survey report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates.

Needles Highway Improvement Projects, County of San Bernardino, 2004-08. Role: Cultural Resources Task Manager. To complete this project Mr. Duke oversaw the completion of archaeological and paleontological research and field surveys along Needles Highway between the City of Needles and Aha Macav Parkway. During the study a total of 45 cultural resources identified; 14 were previously recorded and 31 were newly recorded. These resources include 33 prehistoric cultural resources, four historic cultural resources, two cultural resources with historic and prehistoric components, and six cultural resources of unknown age. All work was completed in compliance with CEQA, NEPA, and NHPA. Employer: LSA Associates

Superstition Solar I Project, Salton Sea, Imperial County, 2008. Role: Principal-in-Charge. Superstition Solar I is a 5,600-acre project located on BLM Land. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, reconnaissance survey, Native American scoping, and prepared a Class III Intensive Survey Research Design. Employer: LSA Associates.

Thomas Mountain Fuels Reduction Project, near Idyllwild, CA, 2008. Mr. Duke and his colleague Virginia Austermann worked with the San Bernardino National Forest (SBNF) to complete a cultural resources assessment of the proposed 10,465-acre Thomas Mountain Fuels Reduction project located in the San Jacinto Ranger District of the San Bernardino National Forest, Riverside County, California. The proposed project was an undertaking that could have affected heritage resources, and the archaeological survey of the area of potential affect (APE) was conducted in compliance with Section 36 CFR Part 800 of Section 106 of the NHPA. The report presented the results of the records search, numerous field surveys completed by others from 1980 through 2007, and Native American consultation. In total nineteen cultural resources were documented and considered for planning purposes. Working with the SBNF archaeologist, our team applied the 1996 *Programmatic Agreement for Compliance with Section 106 of the National Historic Preservation Act for Undertakings on the National Forests of the Pacific Southwest Region*. Mr. Duke's role was Principal-in-Charge overseeing all contract negotiations and providing quality control. Employer: LSA Associates

Magnolia Boulevard Widening, Los Angeles, 2008. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke prepared a Phase I Archaeological Survey Report. Mr. Duke was the project manager and principal-in-charge for this project. He oversaw the research, field survey, and report preparation. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: LSA Associates

South District Maintenance Yard, Los Angeles, 2008. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke oversaw the preparation of a historic resources survey which included research, field surveys, and preparation of a historic context and survey report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates

Fire Station 82, Los Angeles, 2008. Under contract to the City of Los Angeles, Bureau of Engineering Mr. Duke oversaw the preparation of a historic resources survey which included research, field surveys, and preparation of a historic context and survey report. Mr. Duke acted as the principal-in-charge for this project. Employer: LSA Associates

Chuckwalla Solar I Project, Desert Center, Riverside County, 2007-08. Chuckwalla Solar I is a 4,000-acre project located on BLM Land. Mr. Duke was the Principal-in-Charge for this project. His team conducted a records search, intensive field survey, Native American scoping, and prepared a Class III Intensive Survey Report. Employer: LSA Associates

McSweeney Farms, Hemet, CA, 2004-2008. Mr. Duke directed all cultural resources efforts for the McSweeney Farms project. He conducted third-party review of prior Phase I archaeological survey and extended Phase I survey. His team conducted Phase II and geoarchaeological excavations at several sites throughout the project, one of which is a large, regional prehistoric village site. Mr. Duke worked with SunCal, the City of Hemet, the Army Corps of Engineers (ACOE), and local Indian Tribes to balance the needs of each party. In addition, his team provided archaeological and paleontological monitoring for the project. He worked with Tribal monitors to document important archaeological sites, while maintaining the overall project schedule. Employer: LSA Associates

Hacienda at Fairview Valley Specific Plan, Apple Valley, Mojave Desert, CA, 2007-08. The Fairview Valley Specific Plan project is located near the Town of Apple Valley in the high desert. Under Mr. Duke's direction a team of archaeologists conducted a records search, field survey, and prepared a technical report for the County of San Bernardino. The team identified 73 cultural resources and determined that only 15 of these resources are considered significant under CEQA. The team worked with the project applicant and design team to avoid or mitigate impacts to all of the significant cultural resources. Employer: LSA Associates.

Majestic Hills Specific Plan, Hesperia, Mojave Desert, CA, 2006-07. The Majestic Hills Specific Plan project is located in the City of Hesperia in the high desert. Under Mr. Duke's direction a team of archaeologists conducted a records search, field survey, and prepared a technical report for the City. The team identified 32 cultural resources and determined that 11 of these resources are considered significant under CEQA. The team worked with the project applicant and design team to avoid or mitigate impacts to all of the significant cultural resources. Employer: LSA Associates.

Temecula Education Center, 2006. Mr. Duke and his staff were retained by the City of Temecula to conduct an Archaeological Monitoring Program for the Temecula Education Center Project. The construction monitoring program for the 40-acre site is the result of an agreement between the City of Temecula and the Pechanga Band of Mission Indians due to the presence of a portion of site CA-RIV-237 within the project boundaries. Minimal archaeological data were recovered.

Mesquite Regional Landfill, Imperial County, CA, 2004-2006. Under contract to the Sanitary Districts of Los Angeles County, Mr. Duke conducted a Class III Data Recovery project for ten Native American cultural resources within the boundaries of the proposed Mesquite Regional Landfill (MRL) Project, located in Imperial County, California. This effort was combined with a supplementary cultural resource reconnaissance of adjacent Bureau of Land Management (BLM) land to identify the extension of these resources beyond the project boundaries. Employer: LSA Associates.

20th Street West Extension, Palmdale, 2006. Mr. Duke's role was Principal Archaeologist, providing project supervision and regulatory expertise. Dr. Lange led the field survey and prepared the report. Under contract to the City of Palmdale and LAN Engineering, Mr. Duke and his team conducted a records search and field survey, and prepared an Archaeological Survey Report. The results of the assessment were negative, meaning that no archaeological resources were identified and there were no delays to the project. Employer: LSA Associates.

Southern California Edison, Southern and Central, CA, 2003-2005. Mr. Duke worked with SCE on its deteriorating poles program. As poles are deteriorating, SCE replaces them with new poles. Prior to pole replacement archaeological surveys were conducted of each pole location. The majority of this work has been conducted on federal lands. Under his direction archaeologists have surveyed over 2,000 pole locations in the Inyo National Forest, Angeles National Forest, San Bernardino National Forest, Sequoia National Forest, and under the jurisdiction of California and Arizona offices of the Bureau of Land Management (5 different field offices). In this process, his team recorded more than 35 archaeological resources ranging from isolated chipped stone to historic mining sites. His historian evaluated the Catalina Tile Company manufacturing plant on Catalina Island for the California Register of Historical Resources. Mr. Duke worked closely with SCE staff and various Federal agencies to ensure a quick review and approval of the cultural resources efforts. Employer: LSA Associates

Community and Environmental Transportation Acceptability Process (CETAP), Riverside, CA, 1999-2001. Mr. Duke participated in a reconnaissance survey that recorded over 500 prehistoric and historic resources. The results of the cultural resource efforts were reported in a HPSR, HRER and an ASR. Mr. Duke assisted in preparing the reports and provided management for the cultural resources aspect of this project. Employer: LSA Associates

Los Coches Creek Elementary School, near Alpine, CA, 2003-2006. Mr. Duke conducted a Phase I archaeological survey and oversaw subsequent Phase II test excavations. All work was conducted under the authority of the U.S. Army Corps of Engineers (ACOE). Mr. Duke worked with the El Cajon Union School District and the ACOE to avoid impacts to a majority of the cultural resources on site. Employer: LSA Associates

Whipple-Havasu Circuit, SCE, near Lake Havasu, CA, 2003. Role: Project Manager/Principal Investigator. Mr. Duke's team conducted an archaeological survey of 249 poles along 25 miles of land located on the Chemehuevi Indian Reservation and BLM lands. The project was located within the boundaries of the Desert Training Center (DTC); however, no DTC cultural resources were observed. Seven cultural resources were identified: four prehistoric sites, two prehistoric isolates, and one 1920s historic camp. All work was completed in compliance with NHPA and NEPA. Employer: LSA Associates

McCoy Circuit, SCE, Near Blythe, CA, 2003. Role: Project Manager/Principal Investigator. Mr. Duke's team conducted an archaeological survey of 388 poles along 19 miles of land located on BLM lands. The project was located within the boundaries of the Desert Training Center (DTC); however, no DTC cultural resources were observed. Four cultural resources were identified within or adjacent to the project boundaries: one historic/prehistoric site with an intaglio, two historic sites, and one prehistoric site. All work was completed in compliance with NHPA and NEPA. Employer: LSA Associates.

Orchard Hills (Planning Area 1), Irvine, 2002. Under contract to the Irvine Company, Mr. Duke conducted Phase II archaeological excavation on several sites. Mr. Duke served as the field director and co-Principal Investigator. This work was completed by Mr. Duke while with another employer.

Muddy Canyon Archaeological Project (Crystal Cove-Phase IV), Newport Coast, Orange County, 1999-02. Mr. Duke served as field crew and cartographer for the Phase II test excavations and field director and cartographer for Phase III data recovery excavations. Mr. Duke supervised up to 15 archaeologists excavating at eight prehistoric archaeological sites.

Fort Irwin, National Training Center, CA, 1999. Role: Crew Chief/Teaching Assistant. Mr. Duke assisted in a Field School for CSU, Fullerton. He instructed students in proper survey techniques, artifact identification, and site record preparation. In addition, Mr. Duke co-authored the survey report.

San Nicolas Island, Naval Base Ventura County, CA, 1997. Role: Field crew. Mr. Duke was part of an excavation and lab crew conducting test excavations at various archaeological sites. Laboratory sorting was conducted in the evenings. Employer: Petra Resources

Salton Sea Navy Test Base, CA, 1996-97. Role: Field crew. Mr. Duke was part of a survey crew conducting intensive surveys on the west shore of the Salton Sea. Excavation was conducted at sites that appeared to be significant. Employer: KEA Environmental

Chocolate Mountains Gunnery Range, CA, 1996. Role: Field crew. Mr. Duke was part of a survey crew conducting intensive surveys in the Chocolate Mountains. Employer: KEA Environmental

Other Projects

Stadium Arco Station, San Diego, 2003-04

Cingular/PBMS, ~2,000 Facilities, Southern Calif., Nevada, and Arizona, 1997-2001

AT&T Wireless, ~1,000 Facilities, Southern California, 1998-2001

Bonita Canyon Sports Park, Newport Beach, 1997

Hicks Canyon Retention Basin, Irvine, CA, 1996

Testing of Phase III, Las Trancas Canyon, Newport Coast, 1995

Data Recovery of Site CA-ORA-64, Newport Beach, 1995

Nicholas F. Hearth

Archaeologist



Expertise

Cultural Resources Management
California Prehistory
Lithic Analysis
Maya Archaeology

Education

UC, Riverside, PhD Candidate,
Anthropology
UC, Riverside, M.A., Anthropology, 2006
UMass, Amherst, B.A., Anthropology,
2003

Professional Registrations

RPA, No. 989903

Professional Memberships

Society for American Archaeology
Prehistoric Quarry and Early Mines
Interest Group
Coachella Valley Archaeological Society

Professional Experience

Archaeologist, Duke CRM, March 2014 to present.
Associate Archaeologist, Applied EarthWorks, Inc, 2012 to 2014.
Archaeologist, Public Archaeology Laboratory, 2011 to 2012.
Project Leader/Archaeologist, Valles Caldera National Preserve, 2011.
Field Director, Florin Cultural Resource Services, 2010.
Archaeologist, Bighorn Archaeological Consultants, 2009 to 2010.
Lithic Analyst/Field Supervisor, Northwestern University Archaeology Project,
2007 to 2009.
Crew Chief, Yalahau Regional Human Ecology Project, 2005 to 2007.
Report Writer, CRM Tech, 2006.
Field Technician, Yalahau Regional Human Ecology Project, 2004.
Field/Laboratory Technician, Public Archaeology Survey Team, 2003 to 2004.
Laboratory Director/Laboratory Assistant/Field Technician, UMass
Archaeological Services, 2002 to 2003.

Selected Project Experience

Skyridge Residential, Mission Viejo, 2014-present.
Rialto Unified School District CNG, Rialto, 2014.
PG&E TCS Remediation, Needles, 2012 to 2014.
Clinton Keith Road Expansion, Murrieta, 2014.
Mission Hills Reservoir, Indio, 2013.
Crowder Canyon Arch. District Data Recovery Plan, 2013.
San Gabriel Mission, 2013.
Regent Crossroads, Winchester, 2013.
Nadal Family Dollar, San Jacinto, 2013.
Old Place Neck Data Recovery, Staten Island, NY. 2012.
Various transportation, wildfire and biological related studies, Jemez Springs, NM.
2012.
Buffalo Ridge III Windfarm, Duell County, SD, 2010.
Buffalo Ridge II Windfarm, Brookings County, SD, 2010.
New Harvest Windfarm, Crawford County, IA, 2010.
Health Care Center, Menomonie, WI, 2010.
Phase I Archaeological Survey and Geomorphological Replacement of Bridge
#9114, Montevideo, MN, 2010.
Encantanto Estates, Imperial, 2006.
Paleontological Resources Assessment on Tentative Tract Number 32947, Perris,
2006.
Well Plants 35 and 36, Ridgecrest, 2006.
Perris Retail Center, Perris, 2006.
Black Angel Mine Project, Helendale, CA, 2006.

Mark Kile

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DISCIPLINE/SPECIALTY

- Field transects
- Excavation
- Mapping
- Recordation
- Laboratory analysis
- Site records
- GIS
- Trimble GeoXT/XH
- Trimble Pathfinder
- ArcGIS 10.2

EDUCATION

- Ph.D. Program World Cultures
U.C. Merced 2011/2012
- M. A. Interdisciplinary Studies
Anthropology/ Geography,
California State University,
Stanislaus 2003
- B.A. Anthropology
/Archaeology, Minor Geography
2000

TEACHING EXPERIENCE

2002-2003 –Teachers Assistant,
Field Methods, CSU Stanislaus,
Turlock, Ca.

2003 – Teachers Assistant GIS
laboratory CSU Stanislaus,
Turlock, Ca.

2008 – Guest Lecturer, California
State University Stanislaus,
Turlock, Ca.

2011-2012– Teachers Assistant,
University of California, Merced,
Ca.

SAFETY/CERTIFICATIONS

- WFA CPR/First Aid Certified
expiration 3/05/2016

PROFESSIONAL AFFILIATIONS

- Society of California
Archaeologists
- Society of American
Archaeologists
- Register of Professional
Archaeologists
- BLM Permit CA-10-03

SUMMARY OF QUALIFICATIONS

Mr. Kile has over 13 years of archaeological experience including all phases of investigations, historical evaluations of mines, logging and railroads. Mr. Kile has worked for several CRM firms and has owned and managed a CRM firm providing investigations within Mariposa County for the past 6 years. The experience that was gained in archaeological methodologies and records systems has been put to use in the Cultural Resource Management industry on various projects throughout Nevada and California.

AREAS OF EXPERTISE:

- A working knowledge of California Environmental Quality Act
- National Environmental Policy Act
- National Historic Preservation Act
- Consultation with Native American groups and concerned persons
- Preparation of Archaeological Research Design proposals,
- Preparation of Archaeological Technical Reports

records searches, site plotting, rectifying field records, field transects, excavation, mapping, recordation, laboratory analysis, organization of site records, use of Total Station, and Geographical Information Systems.

RELEVANT EXPERIENCE

Principal Investigator, Historical Properties Survey Report and Archaeological Survey Report for Tully Road Reconstruction STPL 5411 (014) Hughson, Stanislaus County Ca. 2014 Culturescape. Phase I survey and report for compliance with FHWA guidelines.

Field Technician, LSA, Field Survey for Historic Resources Evaluation Report for the North County Corridor Project. Oakdale, Stanislaus County. Ca. 2014 Phase I survey of historical buildings for the evaluation of eligibility for inclusion into the National Register.

Principal Investigator, Cultural Inventory for 13-MPRO-191 WaterSmart Grant for Madera Irrigation District Water Conservation, Telemetry and Delivery System Management Improvement Project, Madera County California. 2013 Culturescape

Phase I Survey in conjunction with a Bureau of Reclamation grant to replace manual controls and gauges with automated flume gates and flow meters. This included research into California irrigation and generally focused on built environment.

Principal Investigator, Central Valley Independent Network, The Central Valley Next Generation Broadband Infrastructure Project; Avoidance of Site CA-COL-245/H (NTIA 101004A) Colusa, California. 2013 Culturescape Phase III Investigation. This research was conducted in an effort to avoid a previously located site within downtown Colusa and to determine if there were undisturbed cultural

deposits for the purpose of securing a viable route for fiber optics cables. The project consisted of excavation of 8 test units from 1 X 1 meters to 2 X 1 meters that were excavated to a depth of 2.5 meters. The conclusion was that this substrata was disturbed throughout the proposed route.

Principal Investigator, Central Valley Independent Network, The Central Valley Next Generation Broadband Infrastructure Project, Cultural Resource Inventory, Evaluation and Cultural Mitigation of APN 092-030-100 El Dorado County, California. 2013 Culturescape, Extended Phase I Investigation and evaluation of two sites affected by a bentonite spill

Principal Investigator, Preconstruction Survey for Apex Natural Renewable Generation LLC. Proposed Solar Farm, Orange Cove, Tulare County, Ca. 2013 Culturescape Phase I Survey for a proposed solar farm.

Field Technician, NERC monitoring of Transmission lines 2013. URS

This program is in its early stages. I am familiar with the protocol. I have taken prerequisite WEAP and HASP training as required and have conducted monitoring work for this program on the Melones-Curtis transmission line with URS. I am familiar with and have used the KitFox reporting system.

Project Archaeologist, Gil Ranch Storage LLC, Madera County, Ca. 2009 ENTRIX

This project consisted of placement of 26.5 miles of pipeline for a natural gas storage facility in Madera County. Investigations included monitoring, coordinating with GRS management and various construction crews on a daily basis and coordination with Native American Monitors during excavations through recorded sites. Daily reports were used for compliance with the California Public Utilities Commission, Army Corp of Engineers, and Office of Historic Preservation

Field Supervisor, Sweetwater Mine Evaluation. Mariposa County 2006, Applied Earthworks

Field supervision and assessment of mine property for evaluation for eligibility for inclusion into the National Register of Historic Places. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act

Field Supervisor, San Joaquin/ Big Dreamer Mine Evaluation North Fork, Madera County, 2006, Applied Earthworks.

Duties included field supervision and assessment of mine property for evaluation for eligibility for inclusion into the National Register of Historic Places. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act

Field Supervisor, Seismic Retrofit of the Crane Valley Dam. Bass Lake 2006, Applied Earthworks

This project was for the seismic retrofit of buttresses for the Crane Valley Dam. Tasks included relocation and record updates of historic and prehistoric features for mitigation purposes including modification to forest roads and development of quarries for buttress materials.

Principal Investigator, CALTRANS Contract 10- OP7704

Emergency Road Widening for Ferguson Slide, Highway 120 Priest Grade

This project consisted of monitoring emergency road widening conducted as a result of the landslide of Ferguson Ridge on highway 140 in Mariposa County. Duties included recordation of mine trails subsumed by highway construction and identification of historic and prehistoric artifacts. Reports for this project complied with Caltrans requirements California Environmental Quality Act and Section 106 of the Nation Historic Preservation Act

Principal Investigator, Phase I and extended Phase I Survey for proposed subdivision, Mariposa,

Project consisted of resource inventory survey of 70 acres for Charles Worley proposed subdivision. Tasks included Research design, Native American Consultation, survey and excavation. This project included a cooperative effort between the landowner and the Southern Sierra Miwok that resulted in a mitigated open space easement of 6 acres. The report met requirements for California Environmental Quality Act.

Principal Investigator Blue Bonnet Estates Tentative Subdivision Survey, Mariposa

Project consisted of resource inventory survey of 120 acres for Louie and Joan Edwards of Mariposa for a proposed subdivision. Tasks included Research design, Native American Consultation, survey, recordation of located features, Historic research and subsequent report that met California Environmental Quality Act.

EMPLOYMENT HISTORY

- Cardno ENTRIX, Inc., Technician, September 2009 to present
- LSA Associates, Field Technician, Pt. Richmond, 2009 to present
- URS, San Francisco, San Diego, Sacramento Field Technician, 2009 to present
- California State University, Stanislaus, Guest Lecturer, 2008
- Culturescape, Owner/Principal Investigator, 2006
- Applied Earthworks, Field Technician, 2002
- Far Western Anthropological Research Group, Field Technician, 2002
- The Foundation, CSU Stanislaus, Archaeological Field Technician, 1998
- Grace Note Chimes Inc., Chief Operating Officer, 1986-2002

PUBLICATIONS

PEER-REVIEWED, PUBLISHED PAPERS

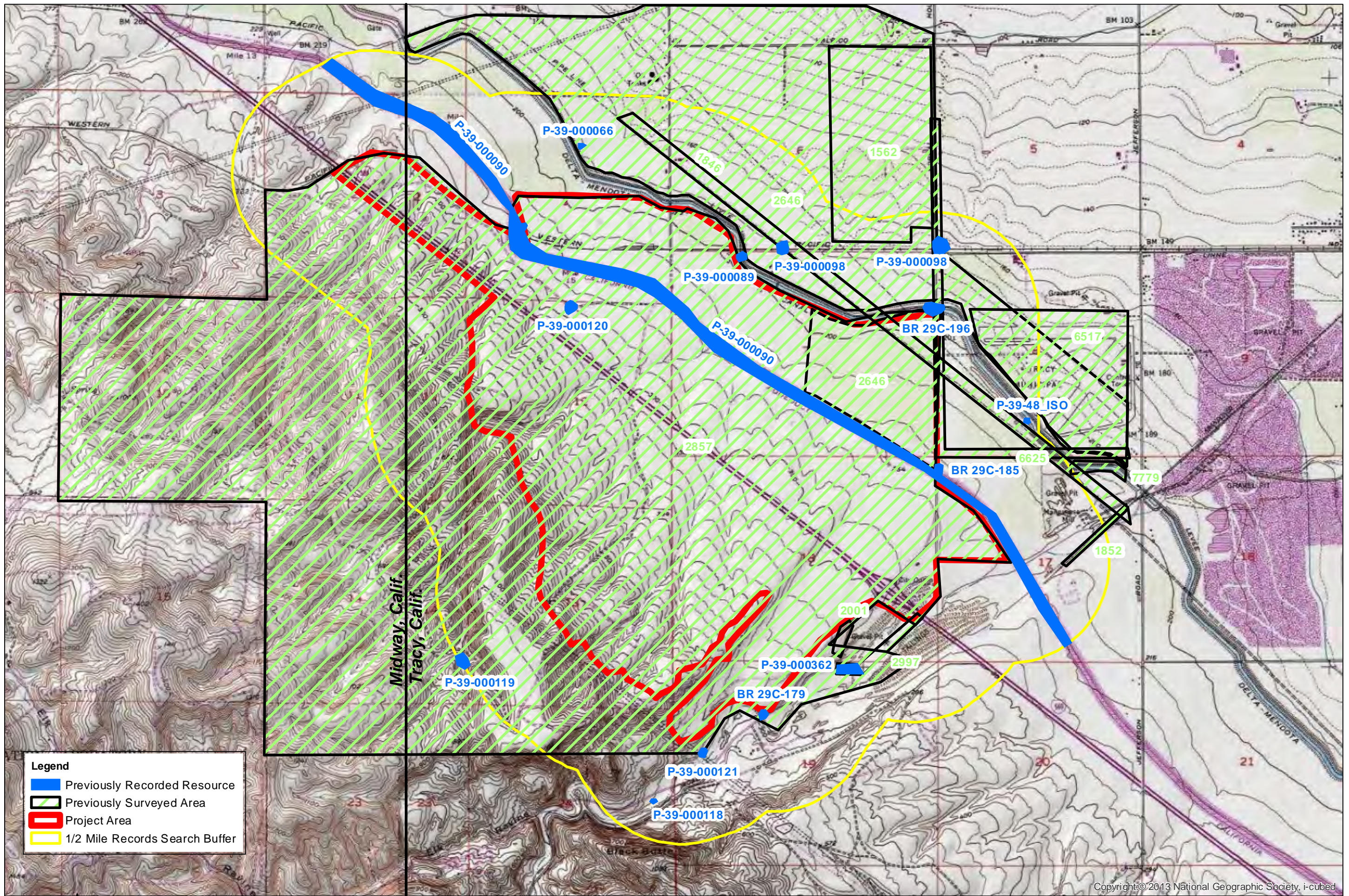
- Kile, Mark 2014 Cultural Inventory for Madera Irrigation District Water Conservation 13-MPRO-191 MID Job#27-13-2 Submitted to Madera Irrigation District 12152 Road 28 ¼ Madera, Madera County Ca.93637
- Nadolski, John, Mark Kile 2013 Subsurface Testing Report for the Central Valley Independent Network, Central Valley Next Generation Broadband Infrastructure Project; Avoidance of Site CA-Col-245/H (NTIA 101004A)
- Nettles, Wendy M., Randy Baloian, Barry A. Price, and Mark Kile. 2008 *National Register of Historic Places Eligibility Evaluation of the Sweetwater Gold Mine in Mariposa County, California*. Applied EarthWorks, Inc., Fresno, California. Submitted to Sierra National Forest, Clovis, California.
- Price, Barry A., Randy Baloian, and Mark Kile. 2008 *National Register of Historic Places Eligibility Evaluation of the San Joaquin/Big Dreamer Tungsten Mine, Madera County, California*. Applied EarthWorks, Inc., Fresno, California. Submitted to Sierra National Forest, Clovis, California.
- Kile, M. C. 2008. *Cultural Resource Inventory for Tentative Subdivision of APN 017-480-037*. Submitted to Charles S. Worley, Mariposa California.
- Kile, M.C. 2008. *Cultural Resource Inventory for Tentative Subdivision of APN ROS 1489-4 MCR*. Submitted to Dustin Macdonald Mariposa, California.
- Kile, M.C. 2008. *Cultural Resource Inventory for Tentative Subdivision of APN 001-090-004*. La Grange, California Submitted to K and Z LLC.
- Kile, M.C. 2007. *Cultural Resource Inventory for Tentative Subdivision of APN 001-150-002*. Coulterville, California Submitted to Gustavo Gonzales.
- Kile, M.C. 2007. *Cultural Resource Inventory for Tentative Subdivision [APN 016-250-048]*. Submitted to Cyndi Gates Catheys Valley, California.
- Kile, M.C. 2007. *Cultural Resource Inventory for Tentative Subdivision APN 014-010-086*. Submitted to Thomas Wieg Et Al, Mariposa California.
- Kile, M.C. 2007. *Cultural Resource Inventory for Proposed Minor Subdivision Submitted to Wieg*. Development LLC and Pine and Oaks LLC Mariposa, California.
- Kile, M.C. 2007. *Cultural Resource Inventory for Proposed Subdivision*. Submitted to Conrad B. and Cindy J. Fournier, Merced, California.
- Kile, M.C. 2006. *Cultural Resource Inventory for Proposed Minor Subdivision*. Submitted to Mary Lou and Clifford Gardner, Mariposa, California.

- Kile, M.C. 2006. *Cultural Resource Inventory for Proposed Minor Subdivision*. Submitted to Phillip Sammet and Kimberly Campbell, Mariposa, California.
- Kile, M.C. 2006. *Chaulkin Subdivision LDA 2005-229 Survey*. Submitted to Mike and Diane Chaulkin, Coulterville, California.
- Kile, M.C. 2006 *Caltrans Contract 10-OP7704 Emergency Road Widening Highway 120 Moccasin California*. Submitted to Teichert Construction.
- Kile, M.C. 2006 *Blue Bonnet Estates*. Submitted to Louie and Joan Edwards, Mariposa California.
- Kile, M. 2000. *Maya Net*. California State University California Stanislaus Student Research Journal.

Appendix D

Records Search Map

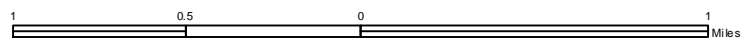
CONFIDENTIAL- Not for Public Disclosure



Legend

- █ Previously Recorded Resource
- ▨ Previously Surveyed Area
- ▨ Project Area
- ▬ 1/2 Mile Records Search Buffer

Copyright © 2013 National Geographic Society, i-cubed
 Midway, Calif. and Tracy, Calif. 7.5' USGS Quadrangles

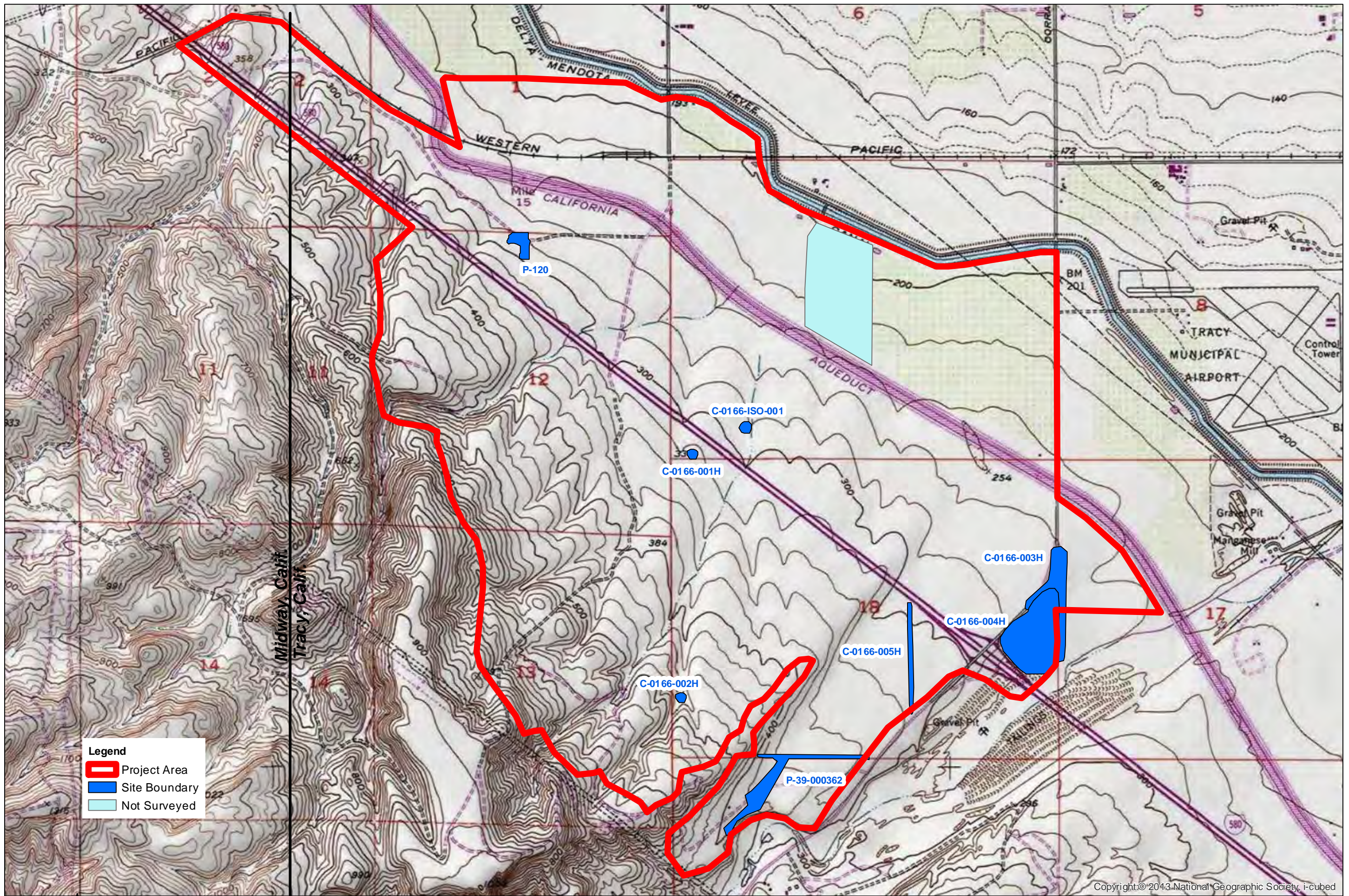


SCALE 1:35,000

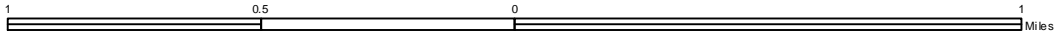
Appendix E

Sites Discovered or Re-located During Survey

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Legend
▬ Project Area
▬ Site Boundary
 Not Surveyed



SCALE 1:24,000

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 Midway, Calif and Tracy, Calif. 7.5' USGS Quadrangle

Appendix F

California DPR 523 Forms

CONFIDENTIAL- Not for Public Disclosure

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) Lammers Road Homestead, P-39-000120(Update)

Page 1 of 11

P1. Other Identifier: TH-3

***P2. Location:** Not for Publication Unrestricted

***a. County** San Joaquin

***b. USGS 7.5' Quad** Tracy **Date** 1954 (Photorevised 1981) **T** 3S; **R** 4E; NW ¼ of NE ¼ of Sec 12; MD B.M.

c. Address: None. **City** Tracy **Zip**

d. Zone 10S 633556 mE/ 4172716 mN NAD 83

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Valpico Road (Rd.) and South Lammers Rd. in Tracy, CA, travel south on South Lammers Rd. 1.0 miles to the intersection of South Lammers Rd. and the Western Pacific Railroad (WPRR). Approximately 20' south of this intersection, take a slight right to proceed south in a field access road immediately adjacent to a private driveway. Follow this same field access road for .3 miles through a series of gates, passing over the California Aqueduct. Approximately 460' from the mid-line of the California Aqueduct, the field road splits south and to the west. Follow the western field road approximately .4 miles to the UTM coordinates above. P-39-000120 is located in APN 25106007.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This site (TH-3) was previously recorded in 1996 by Sandelin Archaeology and Forestry and it consisted of a three room house in a state of disrepair, corrals, a pumphouse, a well/water tank, and trough. This update to P-39-000120 details the condition of this site since 1996, adds resource codes, digitally records a sketch map, details the non-structural remains on an Archaeological Site Record and adds three features not originally recorded.

P-39-000120 (Update) as recorded herein consists of a dilapidated three-room structure, two likely historic in age abandoned wells, a largely intact pump house, a concentric arrangement of concrete risers, a cattle trough, an open-air concrete water tank, seven scattered mature Pepper trees, and series of wood fences which form corrals, chutes and pens. The corral, chutes, pens, concrete water tank, and cattle trough are still in-use today for cattle ranching operations. A third but modern well is also located within the site boundaries. The dilapidated three-room structure is heavily leaning and in eminent danger of collapse likely due to its age, condition, and pressure exerted by cattle rubbing on its outer walls. A diffuse and sparse artifact scatter of refuse consisting of small fragments of amethyst glass and window pane glass is present outside the structure, along with an electric stove and hot water heater both located within the structure as well as an electricity meter located outside of Structure 1. The entire site measures 490' (N-S) x 400' (E-W) and is located on rural, grass-covered, alluvial plain with approximately 1° slope to the northeast.

There is a structure plotted at this location on a 1916 Tracy, CA USGS 7.5 quad topographic map as well as structures, features, and fencing depicted on 1949 aerial photography. Review of available historic aerial photos (NETR 2015) for the site location indicates the current arrangement of the fences and other features have evolved through time with more constructions added and others have been demolished.

***P3b. Resource Attributes** (List all attributes and codes): AH15. Standing structures; HP 33. Farm/ranch; HP46. Fences/gates; AH2. Foundations footing; AH3. Landscaping/ orchard; AH5 Cisterns/wells; and AH6. Water conveyance systems.

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

P5b. Description of Photo: (view, date, accession #) Overview of Structure 1, House, IMG_179, looking west.

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

*Resource Name or #: (Assigned by recorder) Lammers Road Homestead, P-39-000120(Update)

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



- *P7. **Owner and Address:**
Owner unknown.
- *P8. **Recorded by** (Name, affiliation, address): Mark Kile and Sam Suárez, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630
- *P9. **Date Recorded:** March 20 and April 5, 2015.
- *P10. **Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian Survey at 30m transects.
- *P11. **Report Citation** (Provide full citation or enter "none"):
Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City

of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

*Attachments: None Location Map Site 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:

***A1. Dimensions:** a. Length: 490' (N-S) x b. Width: 400' (E-W)
Method of Measurement: Paced Taped Visual estimate Other Trimble
Geo XH GPS with submeter accuracy.
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (explain):
Reliability of Determination: High Medium Low Explain:
Limitations (Check any that apply): Restricted access Paved/built over Disturbances
 Site limits incompletely defined Other (Explain): Area is an active cattle ranch watering troughs and shade.

A2. Depth: Present due to below-ground foundations and wells. None Unknown Method of Determination:
Visual.

***A3. Human Remains:** Present Absent Possible Unknown (Explain): No visible grave stones visible within site.

***A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): Structures 1 and 2 are described on the attached BSO record. Feature (F)1 is the remnants of a well consisting of a concrete footing, a welded, steel frame and well shaft located at 633491mE/4172716 mN and 6'4" north of Structure 2. Overall, F1 measures 6' (E-W) x 3' (N-S). The concrete footing is poured in place and molded to form a platform with the ends approximately 16" taller than the middle. The lower in elevation middle is where the well is arises from the ground. Atop the footing is the steel frame attached via threaded steel rod embedded in the concrete and 1" square nuts. The steel frame is made from two lengths of C-channel which are welded together by a length of steel flat stock. The cut ends of the flat stock and C-channel are obscured by the well-executed weld holding the frame together.

F2 is the corral complex located to the south of Structure 1 and includes the fencing that surrounds the yard for Structure 1. It is roughly square in shape and measures about 215 feet N/S and about 140 feet at its widest. Each side of the corral has a gate and is constructed of non-full dimension lumber. The wooden posts measure 6 1/2" x 7 1/2" in cross section while the fence boards' dimensions vary. Part of the coral complex includes a cattle scale located along its eastern side. The southern portion of the corral is divided into an eastern and western area. The western area appears constructed of well-weathered but modern appearing lumber. The norther portion of the corral is not subdivided. The corral complex also has a scale and cattle chute 34' south of the scale which leads to a ramp for loading and offloading of cattle.

F3 is the second well at the site and it is an open shaft leading down with an upside-down five gallon steel bucket placed over the top as a cover. The bottom of the bucket has rusted through or has been pushed down into the well shaft by cattle in the area. F3 is located at 633470 mE/4172719 mN, approximately 39' at 250° of the modern well near Structure 2. F3 comes approximately 17" out of the ground and is 11" in diameter. The age of this well is not precisely known but was interpreted in the field to be historic in age. The current five gallon pail covering the well has a well developed oxidation patina. Also, the pail was not the first bucket to cover the well shaft as the upper rim of rusted-through enameled steel pail still encircles the well shaft where the shaft comes from the ground.

F4 is a series of 11 rectangular poured in place concrete risers arranged in a rectilinear shape which measures 25' (E-W) x 19' (N-S) located about 100 feet bearing 277° from the northwest corner of Str. 1. The concrete has coarse and irregular gravel inclusions, is made from what appears to be coarser, early 20th century cement. The concrete of the risers is exfoliating and damaged, likely by cattle hooves. Threaded rod, some with 1" square nuts attached protrude up upwards from some of the concrete risers. These may have held a water tank at one time. Though not precisely dated, the construction of the feature was interpreted in the field to be historic in age (possibly early 20th century) due to the presence of square nuts and the cement used in the concrete.

***A4. Features (continued):**

F5 is a open-air, concrete, water cistern measuring approximately 30' to the outer diameter. The wall of the cistern is approximately 1' thick and is constructed of unreinforced concrete with widely ranging sized gravel and cobble inclusions in the concrete. The tank measures 5.5 feet deep with 2 feet of the concrete protruding above the surface. The cistern has undergone multiple repair events since its initial construction. The wall of the cistern was likely originally constructed in the early 20th century, due to the presence of very coarse grained cement within the concrete, but was modified at some point, possibly in the early to mid 20th century due to the presence of slightly finer grained cement with the concrete within a cap along the upper lip of the cistern. The bottom of the cistern is covered in a thin veneer of fine-grained cement which potentially is modern but difficult to determine due to the water currently in the cistern. The cistern has also been repaired with asphalt and modern concrete to seal cracks. A crack in the northern portion of the cistern extends from the upper lip down to the ground surface. The cistern is likely still used for water storage related to cattle ranching as water partially filled it at the time of recordation and is surrounded by heavy panels of hog wire to prevent cattle from entering the cistern

F6 is a non-reinforced concrete cattle trough that is located 64" to the north of F5. F6 measures 72.5 feet in length by 4.5 feet wide oriented at 321°. It is 50" wide in cross section with a two, 9" thick walls and a 32" wide feed/water trough running the length of the feature. Though the trough was not being used at the time of recordation, the presence of several PVC pipes hooked up and protected from cattle at the east end of the feature with hog wire fencing and attempts to repair cracks in the trough using modern concrete, indicate that this trough was recently used.

A third well, likely modern due to the presence of PVC and galvanized pipe and a hog wire fence protective cover, is located at UTM coordinates 633482 mE/4172713 mN.

No privy was observed during survey.

***A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with feature): Several indistinct iron, other metal artifacts, fragmentary amethyst and aquamarine pane glass, cut animal bone and porcelain fragments (with no makers marks) were widely dispersed across the site. Two box springs were located along the F7; one west of structure 1 and immediately southwest of structure 1. Modern trash of various steel pipe segments and PVC pipe segments were located within the site boundary. A circa 1930's pot belly stove, a General Electric "Hot Point Model" electric stove and electric hot water heater, with other pieces of historic refuse, was observed inside Structure #1, however, several piles of rodent feces and the advanced state of decay of the building did not allow investigation within Structure 1.

***A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)

***A7. Site Condition:** Good Fair Poor (Describe disturbances): The overall condition of the site is poor with impacts of time, neglect and ranching have taken their toll. The location continues to be used for water conveyance as can be attested to by several wells that have been drilled at this location. The cattle who water at the site scratch their fur on structures, trees and features. The structures are unsafe and dilapidated.

***A8. Nearest Water** (Type, distance, and direction): The nearest permanent surface water is the San Joaquin River 6.5 miles north. Corral Hollow Creek intermittently has surface water and is about 2.3 miles southeast.

***A9. Elevation:** 280' amsl.

A10. Environmental Setting (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate): P-39-000120(Update) is located upon a Plio-Pleistocene alluvial fan which extends NE from the Diablo Mountain Range. The foothills of the range are approximately .7 of a mile to the SW and located within the current survey area. The site location is categorized as an upper Sonoran Grassland environment that has been heavily modified to accommodate cattle ranching and modern grain harvesting. Ruderal grasses such as fiddle neck and, foxtails are also present. The general location is rural, and site is located upon an alluvial plain with approximately 1° slope to the northeast. Exposure is open.

A11. Historical Information (Note sources and provide full citations in Field A15 below):

***A12. Age:** Prehistoric Pre-Colonial (1500–1769) Spanish/Mexican (1769–1848) Early American (1848–1880) Turn of century (1880–1914) Early 20th century (1914–1945)
 Post WWII (1945+) Undetermined Factual or estimated dates of occupation (explain): The Tracy, CA 1916 USGS 7.5 Quadrangle map plotted a structure at the site.

A13. Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known): P-39-000120 (Update) as recorded herein consists of a dilapidated three-room structure, two likely historic in age abandoned wells, a largely intact pump house, a concentric arrangement of concrete risers, a cattle trough, an open-air concrete water tank, seven scattered mature Pepper trees, and series of wood fences which form corrals, chutes and pens. The corral, chutes, pens, concrete water tank, and cattle trough are still in-use today for cattle ranching operations. A third but modern well is also located within the site boundaries. The dilapidated three-room structure is heavily leaning and in eminent danger of collapse likely due to its age, condition, and pressure exerted by cattle rubbing on its outer walls. A diffuse and sparse artifact scatter of 1940s age refuse consisting of small fragments of amethyst glass and window pane glass is present outside the structure, along with a pot belly stove, an electric stove and hot water heater both located within the structure as well as an electricity meter located outside of Structure 1. The entire site measures 490' (N-S) x 400' (E-W) and is located on rural, grass-covered, alluvial plain with approximately 1° slope to the northeast.

A14. Remarks: Foster (1996) previously found P-39-000120 to be in adequate condition to convey integrity. However, it was also found to be of a “small scale, typical of the many enterprises surrounding Tracy” and that the site possess no artifacts, structures or equipment that would provide additional information about the past.” P-39-000120 was “not the work of an architectural master”, nor was it “particularly distinctive or associated with people or events of great significance.” DUKE CRM finds that P-39-000120 is still in adequate condition to convey integrity. While the update to P-39-000120 now records artifacts and features not previously noted on the initial recordation of this resource, the documentation of new artifacts and features exhausts their data potential.

A15. References (Give full citations including the names and addresses of persons interviewed, if possible):

Foster, John W.

1996 *An Archaeological and Historical Resource Investigation of the Proposed Tracy Hills Project Tracy, California.* Foothill Archaeological Services. Submitted to Pacific Mutual Consultants. Copies available from the Central Coast Information Center.

National Environmental Title Research, LLC

2015 Electronic Document. www.historicaerials.com. Accessed April 2, 2015.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record): See attached Photograph Record.

***A17. Form Prepared by:** M.C. Kile, Sam Suarez, Nicholas Hearth **Date:** 3/22 and 4/6/15
Affiliation and Address: Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # (Assigned by recorder) Lammers Road Homestead, P-39-000120(Update) *NRHP Status Code

Page 6 of 11

B1. Historic Name: Unknown B2. Common Name: Lammers Road Homestead

B3. Original Use: Residence and Ranch B4. Present Use: Cattle Ranch

*B5. Architectural Style: Vernacular

*B6. Construction History: (Construction date, alterations, and date of alterations) See attached continuation sheet.

*B7. Moved? No Yes Unknown Date: Original Location:

*B8. Related Features: Lammers Road Homestead has six related features to water conveyance and ranching. See attached archaeological site record for description of F1-F6.

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Settlement Development Area Central Valley
Period of Significance Early 20th Century Property Type Residence and Ranch Applicable Criteria None
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
The property of Lammers Road Homestead was deeded to John Daugherty in February 1874. No records were found that recorded the construction of the house (Str. 1) though likely this structure was recorded on the 1916 USGS map for the area.

The property does not appear eligible for the California Register under any criteria. Under Criterion 1, the resource is not associated with events that have made a significant contribution to the broad patterns of American and California history and cultural heritage. The Lammers Road Homestead is from a time period when sheep ranching characterized land use in the San Joaquin Valley area, but this land use history by itself does not constitute a significant contribution to the broad patterns of California history, even at the local level. Structure 1, which was likely constructed before 1916, was probably built during the homesteading of the area and as such, potentially may have minor associations with any broad patterns of development that have characterized the area.(see continuation sheet)

B11. Additional Resource Attributes: (List attributes and codes) AH15. Standing structures; HP 33. Farm/ranch; HP46. Fences/gates; AH2. Foundations footing; AH3. Landscaping/ orchard; AH5 Cisterns/wells; and AH6. Water conveyance systems.

*B12. References: Bureau of Land Management
2015 Government Land Office. Electronic document, <http://www.glorerecords.blm.gov/>, accessed April 2, 2015.
National Environmental Title Research
2015 Historic aerial photographs and maps. Electronic document, www.historicaerials.com, accessed April 2, 2015.

B13. Remarks:

*B14. Evaluator: Nicholas F. Hearsh, M.A. RPA *Date of Evaluation: April, 30, 2015

(This space reserved for official comments.)

(Sketch Map with north arrow required.) See attached sketch map.

*Resource Name or #: (Assigned by recorder)

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Recorded by: Mark Kile and Sam Suarez, Duke CRM Date: 4/15/15 Continuation Update

***B6. Construction History:** (Construction date, alterations, and date of alterations) The construction date of the residence and ranch comprising the Lammers Road Homestead is unknown but at least one structure is present at the site location as early as 1916 (NETR 2015). Land ownership of 160 acres of T 3S; R 4E; NW ¼ of NE ¼ of Sec 12; M.D.B.M., where the site is located, was deeded to John Daugherty in February 1874 from the San Francisco General Land Office (BLM 2015).

Structure 1 is a three-room, wood frame construction, medium gable, single-story, single family residence on a wooden pier foundation which measures 20' x 24' and the main floor is located 2' above the ground surface. Measuring a sample of the lumber used in the construction of Structure 1 showed that all were true measure. The frame is made from 4"x4" studs set at 24" to 29" on center. The exterior accoutrement consist of wooden shiplap siding, projected eaves, and single sash, fixed windows, and doors. The east and west ends, both on the gable ends of the structure, both have doors. Sixteen-penny wire nails were used throughout the construction of Structure 1. The west-facing exterior of Structure 1 has an abandoned electricity meter. The connection from the meter is modern plastic Romex-style wiring while the interior of Structure 1 has cotton insulated cord style wiring. The roof has lost most of its wooden shingles and a riveted steel chimney rises out of the roof in northwest corner of the structure. The chimney is attached to a 1930's to 1940's style cast iron potbelly stove. A General Electric, "Hot Point Model" electric stove, probably made in the 1940's to 1950's, with two missing legs is also inside Structure 1. A circa 1940's Admiral Brand electric hot water heater is located in the NE corner of Structure 1.

Structure 2 is a single-story well or pump house located approximately 130 ft due west of Str. 1. The plan of the rectangular footprint of Str. 2 measures approximately 12 ft (N-S) by 10 ft (E-W). No foundation for the building exists, the vertical corner posts go into the ground. The exterior of Str. 2 has non-overlapping vertical board siding with no batten and a corrugated sheet metal roof. Some of the vertical board siding has fallen off and the sheet metal roof has rusted through in some locations. Pig fencing sheets covers where the siding has fallen off. The interior has no insulation and a dirt floor. Str. 2 does not have electricity as no circuit breakers or plugs were observed. Str 2 likely post-dates the initial construction of Str. 1. Str. 2 appears to have been constructed between 1949 and 1968, the two earliest referenced aerial photographs for this site (NETR 2015).

***B10. Significance:** Under Criterion 2, DUKE CRM has determined that the resource is not associated with the lives of persons important to our past and that no one of significant regional or national stature can be linked to the ranch house. The original or subsequent occupants of the Lammers Road Homestead are currently unknown.

Under Criterion 3, the Lammers Road Homestead does not retain adequate physical integrity due to the fact that Str. 1 is nearly fallen over; it has concrete water features which likely date the 20th century; has undergone later construction for Str.2; has a likely modern well immediately north of Str 2; and the corral has been maintained and upgraded during the modern period. As such, nothing suggests that the Lammers Road Homestead embodies the distinctive characteristics of a type, period, region, or method of construction, of the homesteading that occurred in the San Joaquin Valley in the later half of the 19th century. It does not represent the work of an important creative individual or possesses high artistic values. Due to substantial deterioration and loss of much of its historic design, materials, and workmanship, it can not be considered a significant example of a homestead as a property type.

Under Criterion 4, the site has no known data potential and does not appear to have the potential to yield information that would be important to local, state, or national history. Most of the artifacts observed near the ranch house date from mid 20th century and are largely scattered and disturbed due to the ongoing use of the area for cattle grazing. However, due to its age, and the probability that surficial soils moved due to cattle and erosion, there is some potential for buried features (in a privy, for example, though none were located during the survey) that could contribute to scholarly knowledge of sheep ranching life or homesteading in the late 19th century. It is speculative, but the Lammers Road Homestead could possess buried resources that would illuminate the life of early homesteaders.

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

Primary #
Trinomial

Page 8 of 11

Project Name: Tracy Hills Specific Plan

Year: 2015 :

Camera Format: Canon SureShot A220

Lense Size: NA

Film Type and Speed: Digital

Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
3	16	7:14	IMG_179	P-39-000120 Overview of Str. 1 House west elevation	WSW
3	16	7:15	IMG_180	P-39-000120 Overview of Str. 1 House north elevation	S
3	16	7:17	IMG_181	P-39-000120 Overview of Str. 1 House east elevation	W
3	16	7:22	IMG_182	P-39-000120 Overview of Str. 1 House south elevation	N
3	16	7:24	IMG_183	P-39-000120 Overview of Str. 2 pump house east elevation	W
3	16	7:26	IMG_184	P-39-000120 Structure 2 pump house north elevation, Feature 1 foreground	S
3	16	7:26	IMG_185	P-39-000120 Structure 2 pump house west elevation	E
3	16	7:28	IMG_186	P-39-000120 Structure 2 pump house south elevation	N
3	16	7:30	IMG_187	P-39-000120 F4 concrete footings	W
3	16	7:33	IMG_188	P-39-000120 F6 water trough	SW
3	16	7:33	IMG_189	P-39-000120 F5 Water cistern with F6 in background	NE
3	16	7:36	IMG_190	P-39-000120 Detail F6 water trough	NNW
3	16	7:39	IMG_191	Site P-39-000362 overview	E
3	16	7:41	IMG_192	P-39-000120 Detail of firebrick with IONE stamp	DOWN
3	16	7:42	IMG_193	P-39-000120 F-4 Footing for water conveyance	SSW
3	16	7:47	IMG_194	P-39-000120 Site Overview	W
4	5	10:22	IMG_280	P-39-000120 F1 Well footings overview	S
4	5	10:24	IMG_281	P-39-000120 F1 Well footings overview with scale	S
4	5	10:25	IMG_282	P-39-000120 F1 Well footings, weld detail with scale	D
4	5	10:28	IMG_283	P-39-000120 Modern Pressure Valve Wellhead	D
4	5	10:32	IMG_284	P-39-000120 F3 Capped Well	W
4	5	10:38	IMG_285	P-39-000120 F4 Concrete Footings with scale	S
4	5	10:43	IMG_286	P-39-000120 "IONE PATENT PENDING" Fire brick located within F5	D
4	5	10:51	IMG_287	P-39-000120 Cold concrete joint on F5 with modern 6"x6" mesh	D

Page 9 of 11

Project Name: Tracy Hills Specific Plan

Year: 2015 :

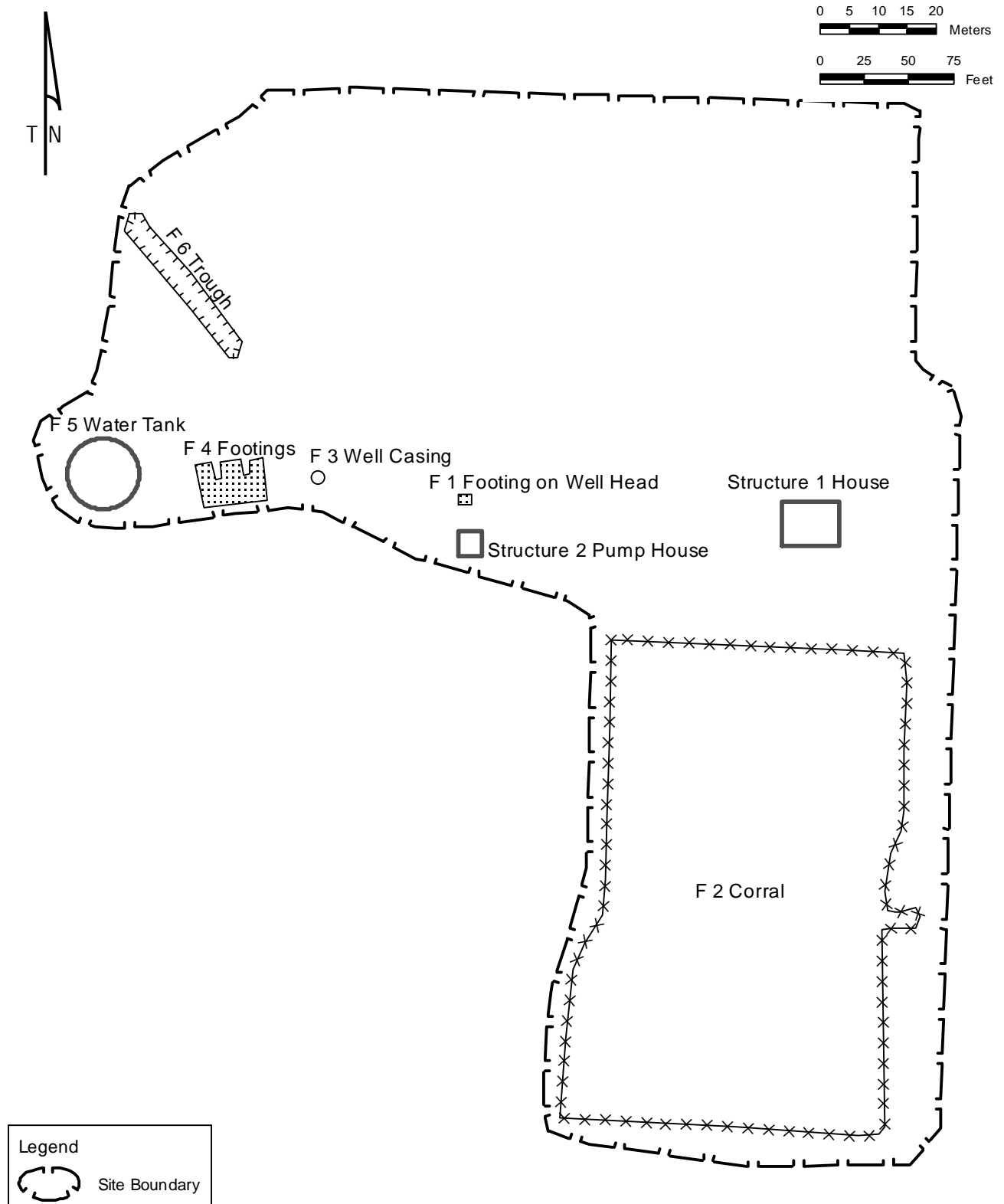
Camera Format: Canon SureShot A220

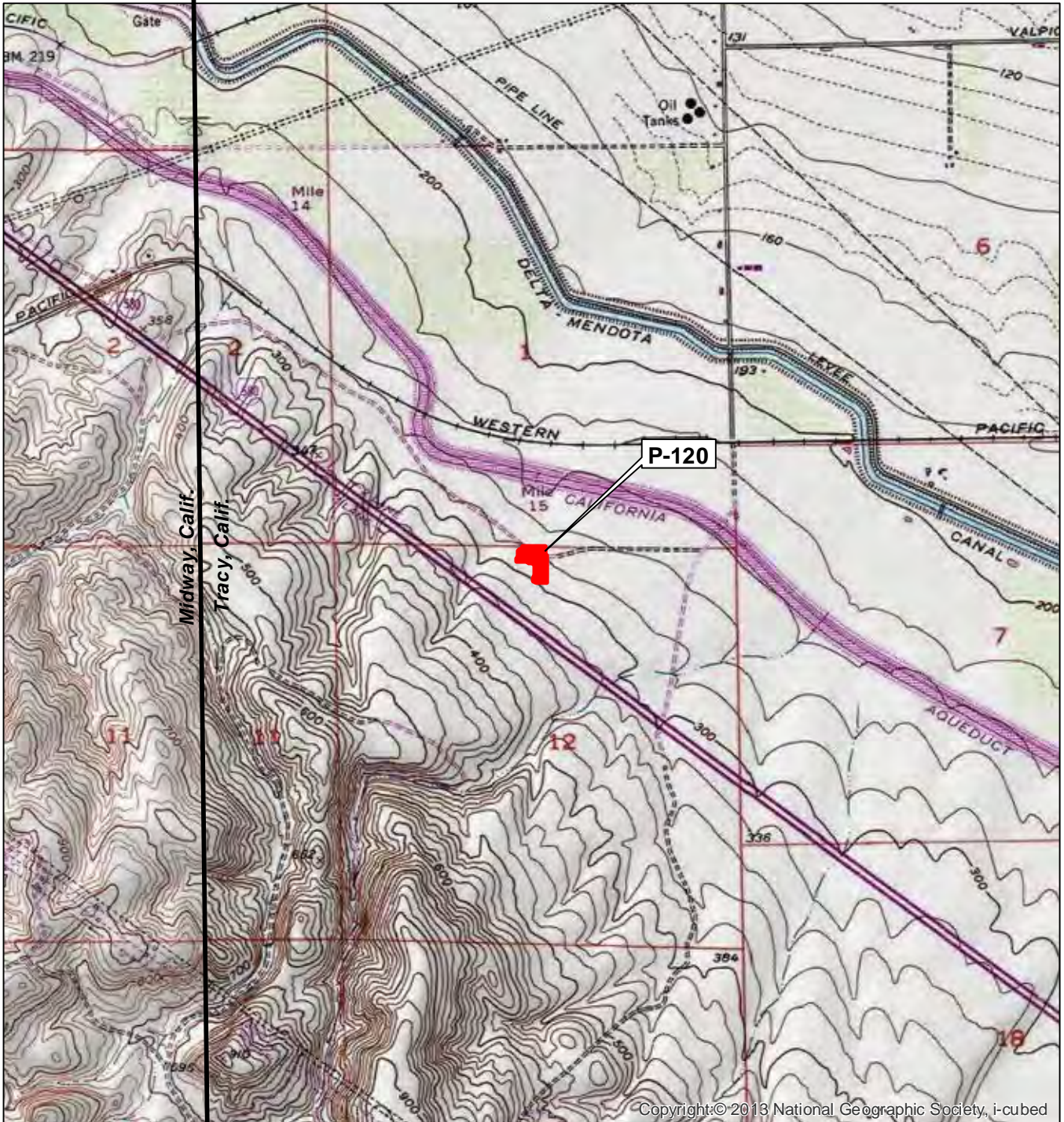
Lense Size: NA

Film Type and Speed: Digital

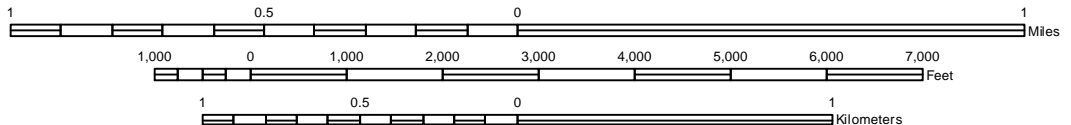
Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
4	5	10:53	IMG_288	P-39-000120, crack in F6, historic unreinforced concrete with modern concrete on top, 6"x 6" mesh	D
4	5	11:07	IMG_289	P-39-000120 Corral overview, posts 5' tall	E
4	5	11:10	IMG_290	P-39-000120 Corral, cattle scale	W
4	5	11:15	IMG_291	P-39-000120, Structure 1, SW corner, wooden pier block/post	D
4	5	11:19	IMG_292	P-39-000120 Water heater inside Structure 1	NW
4	5	11:23	IMG_293	P-39-000120 Bed spring	D/E
4	5	11:25	IMG_294	P-39-000120 Hot Point electric stove inside Structure 1	N





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) P-39-000362 (Update)

Page 1 of 10

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

*a. **County** San Joaquin

*b. **USGS 7.5' Quad** Tracy, CA **Date** 1954 (Photorevised 1981) **T** 3S; **R** 5E; **N**1/2 of NW 1/4 of **Sec** 19 and SW 1/4 of NE 1/4 of **Sec** 18; **M.D.B.M.**

c. Address: None

City Tracy

Zip

d. Zone 10N 634705 **mE/** 4169587 **mN** NAD 83, Datum, top of Feature 5

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Interstate 580 and Corral Hollow Road in Tracy, CA, travel SW on Corral Hollow Rd. approximately .5 miles to a farm gate on the right (NE) side. Pass through the gate, travel along the left-trending (SW) field road for a distance of .5 miles. From this point, the site datum, the top of a pile of waste rock (Feature 5), is located approximately 220 feet at 130° and at the coordinates above. Overall the recorded portion of the site is located south of I580 and west Corral Hollow Rd. The portions of P-39-000362 (Update) recorded herein are located in APNs 253040009

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): P-39-000362 was originally recorded in June 1993 by Archaeological Services, Inc., in a separate location that was not resurveyed in the current project. The update to P-39-000362 herein does not replace the 1993 record for the site as the current project area is different than the 1993 survey area. P-39-000362 (Update) described features which relate to the mining landscape originally recorded in 1993. Like in 1993, P-39-000362 (Update) does not entirely record the resource as more features were observed outside the current survey area. P-39-000362 (Update) does add to the historic background for the original record for the site and records newly discovered features for the site.

P-39-000362 (Update) is a gravel mining landscape site which potentially date to as early as the 1890s. The gravel quarry relied upon for transport and consequently co-evolved with a spur of the Western Pacific Railroad (WPRR) (P-39-000098) to the Tesla coal mines in the 1890s. John and James Treadwell provided private backing to develop a 37 mile rail line between the Tesla Mine and the developing City of Stockton in the early 1900's. The segment built by the Treadwells was abandoned in 1914 and all rail was removed after 1922.

P-39-000362 (Update) describes four linear features (one earth berm, two trenches and a probable property line of the mine demarcated with a recently dismantled fence line), one backdirt pile. Overall the site condition is fair with disturbances including cattle ranching, natural weathering of earthen and steel features. Likely portions of the site outside the current project area have been heavily impacted by the modern dump located east of Corral Hollow Rd as well as modern maintenance of Corral Hollow Rd. P-39-000362 (Update) measures 1,460' (N-S) x 3,020' (NE-SW) . P-39-000362 (Update) has open exposure and is located upon a steeply banked secondary river terrace approximately 90' above Corral Hollow Creek in a rural, grass-covered landscape, with approximately 1° slope to the northeast.

***P3b. Resource Attributes** (List all attributes and codes): AH9. Mine.

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

P5b. Description of Photo: (view, date, accession #) DSCF0153, 3/18/15, P-39-000362 (Update) in background, view east.

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) P-39-000362 (Update)

Page 2 of 10

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



at 30m transects.

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

***P7. Owner and Address:**
Owner unknown.

***P8. Recorded by (Name, affiliation, address):** Mark Kile and Sam Suárez, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

***P9. Date Recorded:** March 22, 2015.

***P10. Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian survey

***P11. Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

***Attachments:** None Location Map Site 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:

ARCHAEOLOGICAL SITE RECORD

Page 3 of 10

*Resource Name or # (Assigned by recorder) P-39-000362 (Update)

- *A1. Dimensions:** a. **Length:** (N-S) x b. **Width:** (E-W) Locus 1
Method of Measurement: Paced Taped Visual estimate Other Trimble
Geo XH with submeter accuracy and GoogleEarth.
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (explain):
Project boundary.
Reliability of Determination: High Medium Low Explain:
Limitations (Check any that apply): Restricted access Paved/built over Disturbances
 Site limits incompletely defined Other (Explain): Features related to the mine are located outside of the current project boundary.
- A2. Depth:** Likely. None Unknown Method of Determination: Earthen features have depth.
- *A3. Human Remains:** Present Absent Possible Unknown (Explain):
- *A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): One earthen berm, two trenches and a probable property line of the mine demarcated with a fence line. Each of the trenches has ejecta berms aligned on both sides excavation forming the trench. Feature(F) 1 is a 16' wide earthen berm which measures 6" tall with its northern end at UTM 634985 mE/4169962mN along a remnant of a fence line (F4) along the E-W line between Sections 18 and 19. From the northern end of F1, it extends for a visible distance of 210 feet trending at 211°and terminates just east of the north end Feature 2.
- F 2 is a trench with small berms of excavated soils deposited on either side. F2 has been excavated in a straight line from UTM 634929mE/4169905mN for a distance of 620' at 220°. Natural water collecting within the trench has created a small erosional gully from the SW end of the trench SW. F2 is 5' deep and 32' wide on average.
- F 3 is the most extensive of the two trenches. F3 begins where the ranch road crosses it at UTM 634900mE/4169809mN. F3 may have been filled back in at this coordinate for the road. F3 is 440' long from this point and is at 208° where it then becomes a bench cut that follows the contour of the cliff face above Corral Hollow Creek for a distance of about 800 feet trending about 240°. The height of F3 varies from approximately 10' deep to as little as 1' deep. Likewise, the width also varies from as much as 90' wide and to as little as 25' wide.
- F4 is remnant fence line along the E-W line between Sections 18 and 19. No trenching is located north of this line and it likely formed a property line for the mine when it was active. The wire has been removed and put into circular bundles. The wire appears to be a combination of modern barbed wire, Gladdis Barbed Wire (1878 Patten) and sheep fencing type. The fence posts are made from untreated RR ties.
- F5 is a roughly conical shaped, highly eroded pile of waste rock located at located at 634705mE/4169587mN. It measures approximately 95' (NE-SW)' X 60' (NW-SE) and serves as the site datum.
- *A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with feature): A very sparse and diffuse scatter of artifacts dot the lanscape within the boundary of P-39-000362 including sheet metal fragments, a hub from a wooden wagon wheel, a fragment of a Mason Jar and various lengths of rusted metal straps.
- *A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. Site Condition:** Good Fair Poor (Describe disturbances): The earthen features are heavily eroded and barely retain their original appearance.
- *A8. Nearest Water** (Type, distance, and direction): Corral Hollow Creek with intermittently flowing surface water, is immediately east of the boundary.

*A9. **Elevation:** 350-400 feet amsl.

A10. Environmental Setting (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate): P-39-000362(Update) is located upon a Pleistocene age quaternary non-marine terrace deposits which extends NE from Corral Hollow Canyon out of the Diablo Mountain Range. The site location is categorized as an upper Sonoran Grassland environment that has been heavily modified to accommodate cattle ranching and modern grain harvesting. Ruderal grasses such as fiddle neck and, foxtails are also present. The general location is rural, and site is located upon an alluvial plain with approximately 1° slope to the northeast. Exposure is open.

A11. Historical Information (Note sources and provide full citations in Field A15 below):

*A12. **Age:** Prehistoric Pre-Colonial (1500–1769) Spanish/Mexican (1769–1848) Early American (1848–1880) Turn of century (1880–1914) Early 20th century (1914–1945)
 Post WWII (1945+) Undetermined Factual or estimated dates of occupation (explain): P-39-000362 is a historic in age gravel quarry probably developed by John and James Treadwell in the 1890s and was continued to be used until after WWII (Ward and Williams 1971:16).

A13. Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known): P-39-000362 (Update) describes four linear features (one earth berm, two trenches and a probable property line of the mine demarcated with a recently dismantled fence line), one backdirt pile. Likely portions of the site outside the current project area have been heavily impacted by the modern dump located east of Corral Hollow Rd as well as modern maintenance of Corral Hollow Rd. Overall the condition of P-39-000362 (Update) is poor as it does not retain the feeling, design, or workmanship due to the removal of the equipment which formed the features recorded herein and erosion of the earthen features has erased their original form. While location and setting are retained, the extractive nature of gravel quarries prevents changes to these aspects though it should be noted that the rural character is retained. The elements of design and materials are less applicable to this site.

A14. Remarks: It is unknown if P-39-000362 was been evaluated in the initial recordation as its status is not included in the DPR forms for the site (Dougherty 1993). Problematically, in the initial recordation and in the current effort the entire resource has not been recorded and both have examined different portions of P-39-000362 though site clearly continues across Corral Hollow Canyon between the two recorded portions. The continuity of site between and beyond the previously and presently recorded portions of is visible across the landscape due to its large overall size and the size of visible, quarry-related features in Corral Hollow Canyon.

Nothing suggests that this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the site is directly associated with a prominent historical figure (CRHR Criterion 2). The refuse or features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, sites composed of the refuse or features like P-39-000362 has no archaeological data potential beyond what has already been documented. Further analysis of the artifacts or features is unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4) and this site is not a potential historical resource under CEQA.

A15. References (Give full citations including the names and addresses of persons interviewed, if possible):

Ward, Bert and Earle Williams

1971 Alameda and San Joaquin Railroad Company. *The Western Railroader* 34(10)3-18.

Dougherty, John W.

1993 CA DPR 523 records for P-39-000362. Archaeological Services, Inc., Stockton.

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record): See attached Photograph Record.

*A17. **Form Prepared by:** Mark Kile

Date: 3/22/15

Affiliation and Address: Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

L1. Historic and/or Common Name:

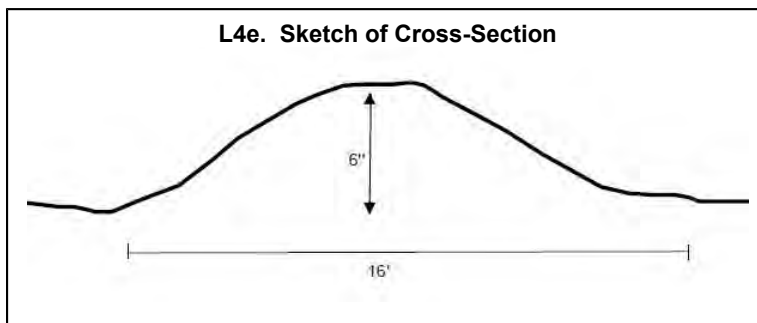
L2a. Portion Described: Entire Resource Segment Point Observation **Designation:**

- b. Location of point or segment** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map): The northern end of the Feature (F) 1 is at UTM 634985 mE/4169962mN while the southern end is 634943mE/44169892mN. F1 is located in the NE1/4 of the NW1/4 of Section 19, T 3S; R 5E on the Tracy USGS 7.5" Quadrangle map.

L3. Description (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate): F1 is composed of a single, earthen berm of unknown purpose that extends for a visible distance of 210 feet trending at 211° from a F4 and terminates east of the north end F 2.

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

- a. **Top width** NA
- b. **Bottom width** 16 ft.
- c. **Height or Depth** 6 in.
- d. **Length of Segment** 210 ft.



L5. Associated Resources: F2, F3, and F4.

L6. Setting (Describe natural features, landscape characteristics, slope, etc., as appropriate): Please see field A10 of the Archaeological Site Record.

L7. Integrity Considerations: Please see field A13 of the Archaeological Site Record.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.): IMG_241, Overview of F1, view NE. Person on F1.



L9. Remarks:

L10. Form Prepared by (Name, affiliation, and address): Sam Suarez and Marke Kile, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

L11. Date: 4/15/15

L1. Historic and/or Common Name:

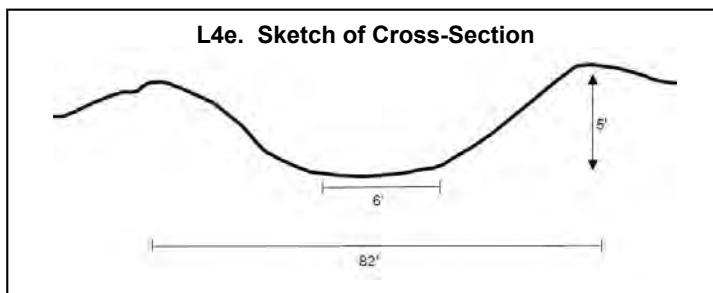
L2a. Portion Described: Entire Resource Segment Point Observation **Designation:**

- b. Location of point or segment** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map): The northern end of the Feature (F) 2 is at UTM 634929mE/4169905mN while the southern end is 634808mE/4169759mN. F2 is located in the NW1/4 of the NW1/4 of Section 19, T 3S; R 5E on the Tracy USGS 7.5" Quadrangle map.

L3. Description (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate): F2 is composed of a single trench that has ejecta piles aligned on both sides excavation forming the trench. From the northern end of F1, it extends for a visible distance of 620 feet trending at 220° and terminates east of the north end Feature 2. F2 is 5' deep and 82' wide on average. Various pieces of metal straps and sheet metal fragments, one with a circular in shape, rivet flange attached, were found in the bottom of F2.

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

- a. Top width** 82 ft.
- b. Bottom width** 6 ft.
- c. Height or Depth** 5 ft.
- d. Length of Segment** 620 ft.



L5. Associated Resources: F1, F3, F4

L6. Setting (Describe natural features, landscape characteristics, slope, etc., as appropriate): Please see field A10 of the Archaeological Site Record.

L7. Integrity Considerations: Please see field A13 of the Archaeological Site Record.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.): IMG_242, Overview of F2, view SE.

L9. Remarks:

L10. Form Prepared by (Name, affiliation, and address): Sam Suarez and Mark Kile, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

L11. Date: 4/15/15

L8a. Photograph, Map, or Drawing



L1. Historic and/or Common Name:

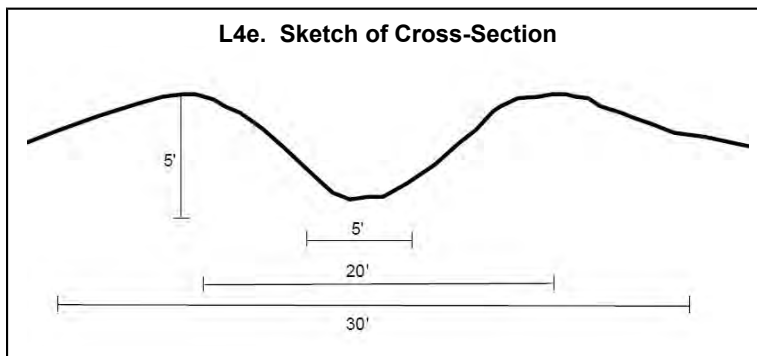
L2a. Portion Described: Entire Resource Segment Point Observation **Designation:**

b. Location of point or segment (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map): The northern end of the Feature (F) 3 is at UTM 634900 mE/4169809mN while the southern end is 634697mE/4169597mN. F3 is located in the NW1/4 of the NW1/4 of Section 19, T 3S; R 5E on the Tracy USGS 7.5" Quadrangle map.

L3. Description (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate): F3 is composed of a single trench that has ejecta piles aligned on both sides excavation forming the trench. No ejecta pile exists where the trench becomes a cut bank along the edge of the cliff face along Corral Hollow Creek, see photo below. F3 is 440' long from this point and is at 208° where it then becomes a bench cut that follows the contour of the cliff face above Corral Hollow Creek for a distance of about 800 feet trending about 240°.

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

- a. Top width** 20 ft. (average)
- b. Bottom width** 5 ft. (average)
- c. Height or Depth** 5 ft. (average)
- d. Length of Segment** 1,240 ft.



L5. Associated Resources: Other Locus
1 features including F1, F2, and F4.

L6. Setting (Describe natural features, landscape characteristics, slope, etc., as appropriate): Please see field A10 of the Archaeological Site Record.

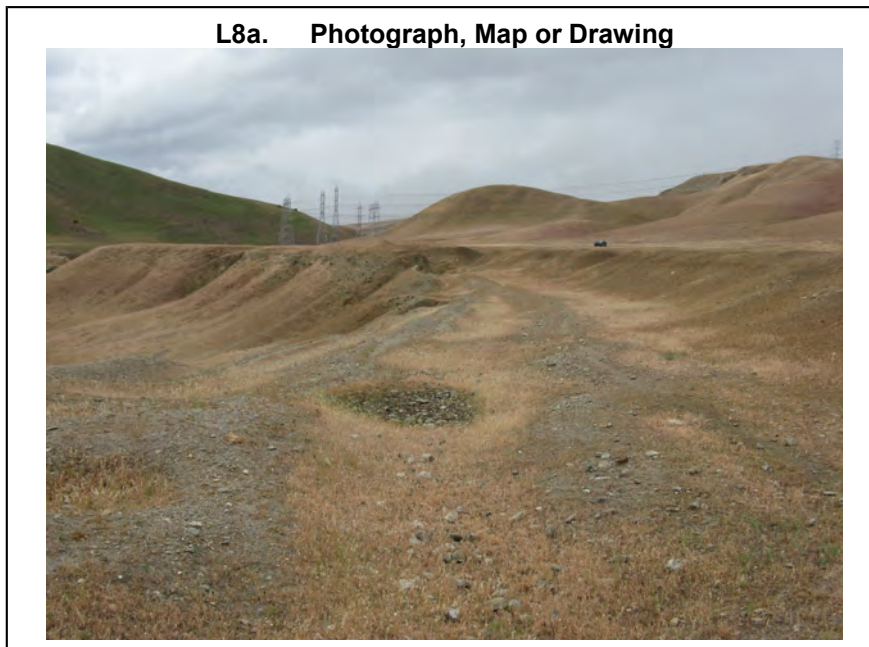
L7. Integrity Considerations:
Please see field A13 of the Archaeological Site Record.

L8b. Description of Photo, Map, or Drawing (View, scale, etc.): IMG_298, F3 overview from bench cut along edge of terrace view south

L9. Remarks:

L10. Form Prepared by (Name, affiliation, and address):
Mark Kile and Sam Suarez,
Duke CRM, 20371 Lake
Forrest Dr, Ste. A-2, Lake
Forrest, CA 92630

L11. Date: 4/15/15



Page 8 of 10

Project Name: Tracy Hills Specific Plan

Year: 2015 :

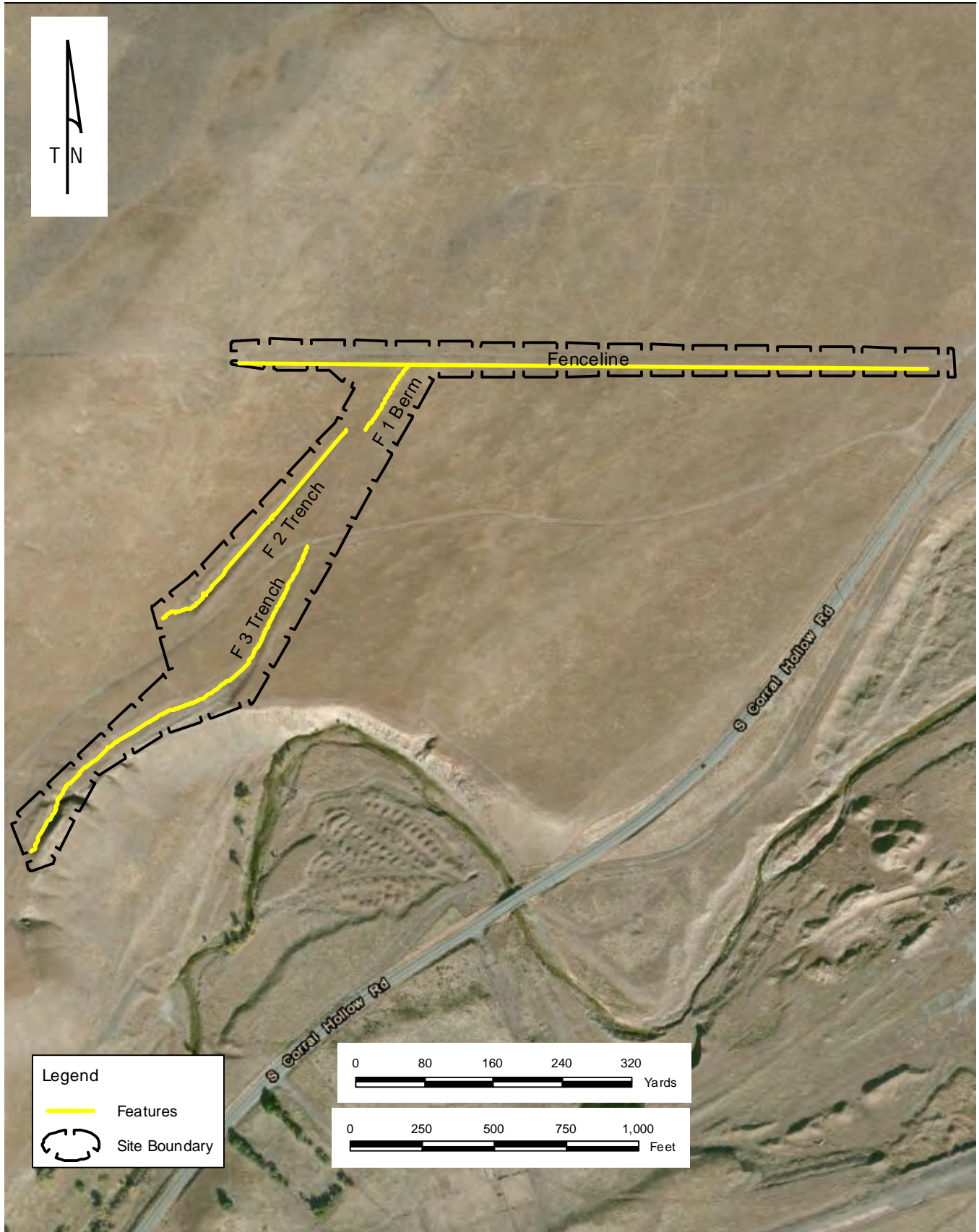
Camera Format: Canon SureShot A220

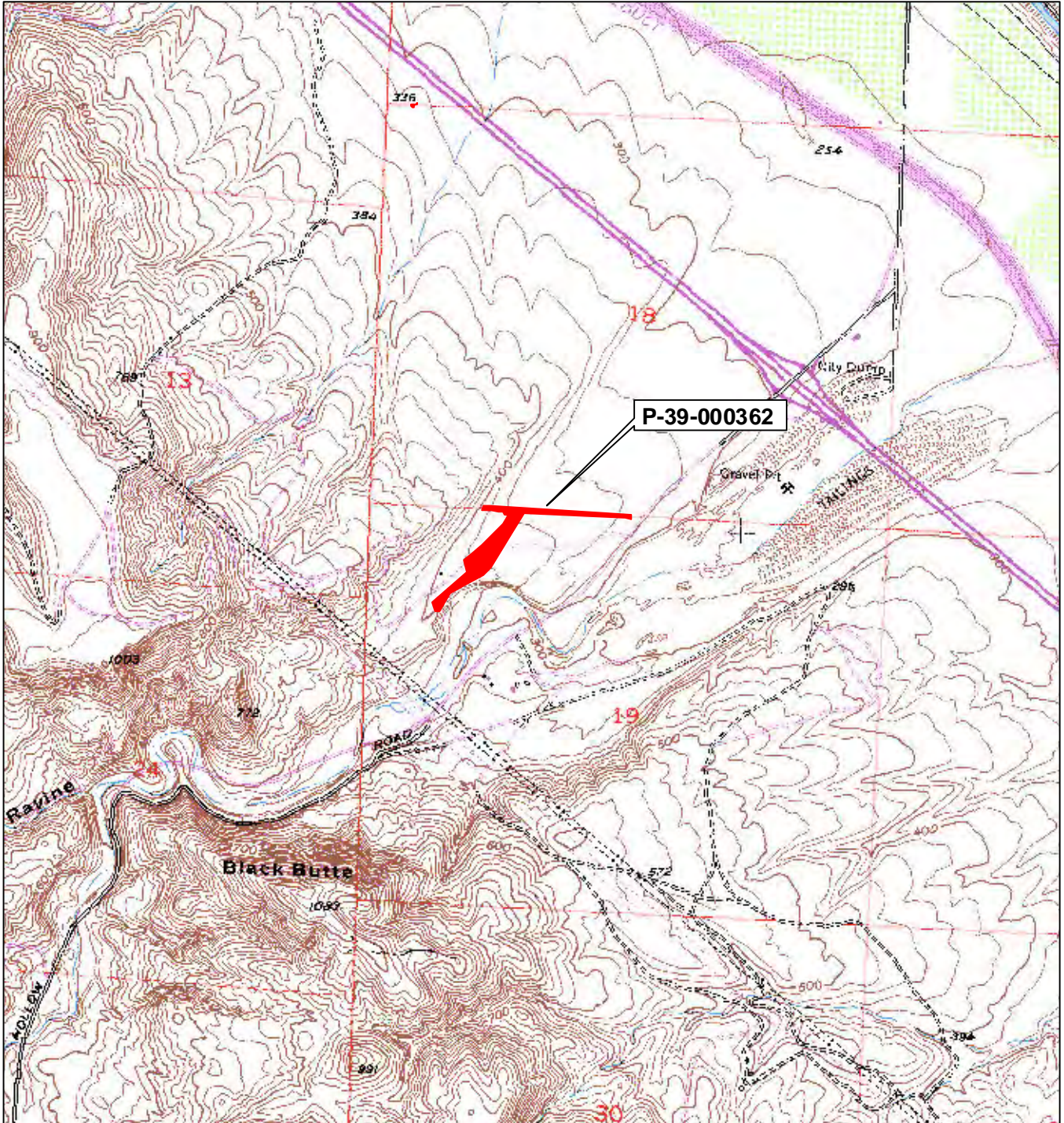
Lense Size: NA

Film Type and Speed: Digital

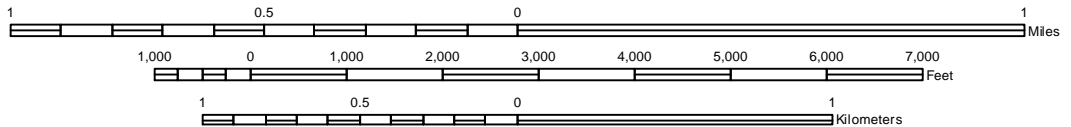
Negatives kept at: NA

Mo.	Da y	Time	Exp./ Frame	Subject/Description	Facing
3	18	7:34	IMG_213	Overview of P-39-000362	E
3	19	8:03	IMG_218	Project over view from eastern extent towards the P-39-000362	E
3	19	8:04	IMG_219	Overview of west end of P-39-000362	S
3	20	15:56	IMG_241	Overview of F1	NE
3	20	16:00	IMG_242	Overview of F2	SE
3	18	7:36	DSCF0153	Overview of P-39-000362	E
4	5	12:08	IMG_295	Overview of the approach to south end of F3 and F5	E
4	5	13:04	IMG_296	Overview of the south end of F3 and F5 atop terrace	N
4	5	13:08	IMG_297	F3 overview from top of F5/Datum	N
4	5	13:12	IMG_298	F3 overview from bench cut along edge of terrace	S
4	5	13:16	IMG_299	F3 overview from bench cut along edge of terrace	N
4	5	13:25	IMG_301	Wagon wheel hub	D
4	5	13:41	IMG_302	F4 overview	W
4	5	13:43	IMG_303	Fence-wire bundles removed from F4	D





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-1H

Page 1 of 7

P1. Other Identifier:

***P2. Location:**

Not for Publication Unrestricted

*a. County Tracy

*b. USGS 7.5' Quad Tracy, CA Date 1954 (Photorevised 1981) T 3S; R 5E; E 1/2 of SE¼ of Sec 18; M.D.B.M.

c. Address: None City Tracy Zip

d. Zone 10S 634461mE/ 4171577mN NAD 83, Datum at well head

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Valpico Road (Rd.) and South Lammers Rd. in Tracy, CA, travel south on South Lammers Rd. 1.0 miles to the intersection of South Lammers Rd. and the Western Pacific Railroad (WPRR). Approximately 20' south of this intersection, take a slight right to proceed south in a field access road immediately adjacent to a private driveway. Follow this same field access road for .3 miles through a series of gates, passing over the California Aqueduct. Approximately 460' from the mid-line of the California Aqueduct, the field road splits south and to the west. Follow the southern field road approximately .4 miles, passing under I-580. After I-580 continue south for a distance of approximately .3 miles. From this point turn due east and travel 286 yards to the meeting point of three fencelines, each with a different alignment. Travel on the north side of the east-west oriented fence line, which also is the east-west oriented line between Sections 7 and 18, for a distance of 128 yards to the UTM coordinates above. C-0166-1H is located in APN 253002036.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): C-0166-1H consists of an abandoned, ruined well and well-related artifact scatter. The features at C-0166-1H consists of a concrete pad (F1) with a partial well head and an accompanying belt drive system, a second concrete pad (F2) which likely held the now-missing motor that brought water to the surface, a mound of backdirt (F3) likely from the excavation of the well, and four galvanized angle iron pieces (F4) of unknown function that are protruding from the area around the well pad. The diffuse and sparse artifact scatter are all well or agriculture-related and consist of galvanized water pipe, wire rope, metal strapping, fence posts, irrigation pipe fitting, cut pieces of irrigation pipe, a drive shaft and a bolt. Measuring 105' (E-W) x 38' (N-S), C-0166-1H is located upon gently north facing, 1° sloping grassland within an in-use cattle ranch resulting in a poor site condition. Surface visibility averaged 50% in the site.

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



***P3b. Resource Attributes** (List all attributes and codes):
 AH5. Wells/Cisterns and AH4.
 Privies/dumps/trash scatters

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

P5b. Description of Photo:
 (view, date, accession #)
 DSCF0176, C-0166-1H
 overview, view E.

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

Other Listings
Review Code

Reviewer

Date

***Resource Name or #:** (Assigned by recorder) C-0166-1H

Page 2 of 7

***P7. Owner and Address:** Owner unknown.

***P8. Recorded by (Name, affiliation, address):** Nicholas Hearth M.A., RPA, and Tim Kennedy, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

***P9. Date Recorded:** 3/20/15

***P10. Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian survey at 30 m transects.

***P11. Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

***Attachments:** None Location Map Site 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:

ARCHAEOLOGICAL SITE RECORD

Page 3 of 7

*Resource Name or # (Assigned by recorder) C-0166-1H

- *A1. Dimensions:** a. Length: 105' (N-S) x b. Width: 38' (E-W)
Method of Measurement: Paced Taped Visual estimate Other
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (explain):
Reliability of Determination: High Medium Low Explain:
Limitations (Check any that apply): Restricted access Paved/built over Disturbances
 Site limits incompletely defined Other (Explain):
- A2. Depth:** Present None Unknown Method of Determination: Depth present due to well shaft continuing underground.
- *A3. Human Remains:** Present Absent Possible Unknown (Explain):
- *A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): Four features are present at C-0166-1H. Feature (F) 1 consists of a concrete pad with a partial well head and an accompanying belt drive system atop a surface level pad. The pipe of the cast iron well head measures 6" in diameter. Each side of the well head has two gears, a large one which measures 1'2" in diameter and a smaller one that measures 3 1/2" in diameter. The well head comes up between the pairs of a small and large gear. The small gears attached to a shaft which extends east and is attached to a larger set of belt-driven wheels which measure 1'3" in diameter and are 8" in width. The entire well head measures 2'9" x 2' and the well head pipe is 1'9" tall from the pad. All nuts within the well-head assembly are 1" square. Some square nuts remain on the base of the well head but some have fallen off and been replaced with more recent hexagonal head nut. The combination of the different sized gears and belt-driven wheels likely gave a mechanical advantage to pump water. The pad where the well head is located measures 3'3" x 3'2" x 6" in height. A second pad, likely to level the pad for the well-head extends under the well-head pad 1' to the west and has two bolts extending upwards from it. Atop the pad is the well head. It measures 1'3" from the top of the pad.
- F2 is the second concrete pad which likely held the now-missing motor that brought water to the surface. It is located immediately south of the pads supporting the well head. Like the well-head pad, the second concrete pad also has two pourings. The upper pad measures 3'6" x 2'6" x 4" thick and contains an upside down horseshoe which appears to have been intentionally placed on the edge of the form when the pad was poured. The bottom pad measures 5' x 2'6" and has an unknown thickness. The inference that this pad held a motor is based upon the experience of the archaeologists seeing similar set-ups and not based upon indicative evidence in the field.
- F3 is the mound of backdirt which likely was from the excavation of the well. This backdirt pile measures 40' x 24' and is 1'6" in height and is located east of the well head. The grass re-growth in the backdirt is well developed and the mound is heavily impacted by the combination of cattle hooves and erosion.
- F4 is composed four galvanized angle iron pieces which protrude from the ground from the area around the F1. They do not appear to be strong enough to have held a substantial structure and their purpose is unknown.
- *A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with feature): C-0166-1H has a diffuse and sparse artifact scatter of well and agriculture related refuse across it which forms the boundaries of the site. Artifacts included 1 galvanized 2" water pipe, 1 approximately 20' wire rope (braided cable), 1 piece of metal strapping, two wooden 4"x4" fence posts, 1 metal irrigation 5" diameter pipe fitting, three cut steel pipe pieces each measuring 12" diameter and 3" long, 1 5' long steel drive shaft, and 1 6 1/2" bolt.
- *A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. Site Condition:** Good Fair Poor (Describe disturbances): Cattle graze the area and walk directly through the site as it is located along a fence line.

- *A8. Nearest Water** (Type, distance, and direction): The California Aqueduct is approximately 2,784' northeast.
- *A9. Elevation:** 260' AMSL.
- A10. Environmental Setting** (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate): C-0166-1H is located upon a Plio-Pleistocene age non-marine deposit which extends NE from the Diablo Mountain Range. The site location is categorized as an upper Sonoran Grassland environment that has been heavily modified by the use of the area for cattle grazing. Ruderal grasses such as fiddle neck and foxtails are also present. Surface visibility varied from approximately 35% to 70% in the site. The general location is rural, and site location faces northeast with approximately 1° slope. Exposure is open.
- A11. Historical Information** (Note sources and provide full citations in Field A15 below):
- *A12. Age:** Prehistoric Pre-Colonial (1500–1769) Spanish/Mexican (1769–1848) Early American (1848–1880) Turn of century (1880–1914) Early 20th century (1914–1945)
 Post WWII (1945+) Undetermined Factual or estimated dates of occupation (explain): Analysis of aerial photographs of the site location and refuse found within the site indicate that the site was built before 1949.
- A13. Interpretations** (Discuss scientific, interpretive, ethnic, and other values of site, if known): -C-0166-001H consists of an abandoned, ruined well and well-related artifact scatter which existed as early as 1949 according to the analysis of a historic aerial photograph from that year (NETR 2009). The features at C-0166-1H consists of a concrete pad with a partial well head and an accompanying belt drive system, a second concrete pad which likely held the now-missing motor that brought water to the surface, a mound of backdirt likely from the excavation of the well, and four galvanized angle iron pieces of unknown function that are protruding from the area around the well pad. The diffuse and sparse artifact scatter are all well or agriculture-related. Measuring 105' (E-W) x 38' (N-S), C-0166-1H is located upon gently north facing, 1° sloping grassland within an in-use cattle ranch resulting in a poor site condition. Surface visibility averaged 50% in the site.
- A14. Remarks:** Nothing suggests this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the sites are directly associated with a prominent historical figure (CRHR Criterion 2). The refuse or features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, C-0166-001H has no archaeological data potential beyond what has already been documented. Further analysis of the artifacts or features at any site are unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4) and these sites are not a potential historical resource under CEQA. Regardless of their locations within the proposed project, the recordation of these archaeological sites exhausts their information potential.
- A15. References** (Give full citations including the names and addresses of persons interviewed, if possible):
National Title Research, LLC
2009 Historic aerial photographs and maps. Electronic documents, <http://www.historicaerials.com>. Accessed March 23th, 2015.
- A16. Photographs** (List subjects, direction of view, and accession numbers or attach a Photograph Record): See attached Photograph Record.
- *A17. Form Prepared by:** Nicholas Hearth M.A., RPA, and Tim Kennedy **Date:** 3/20/15
Affiliation and Address: Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

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

Primary #
Trinomial

Page 5 of 7

Project Name: Tracy Hills Specific Plan

Year: 2015 :

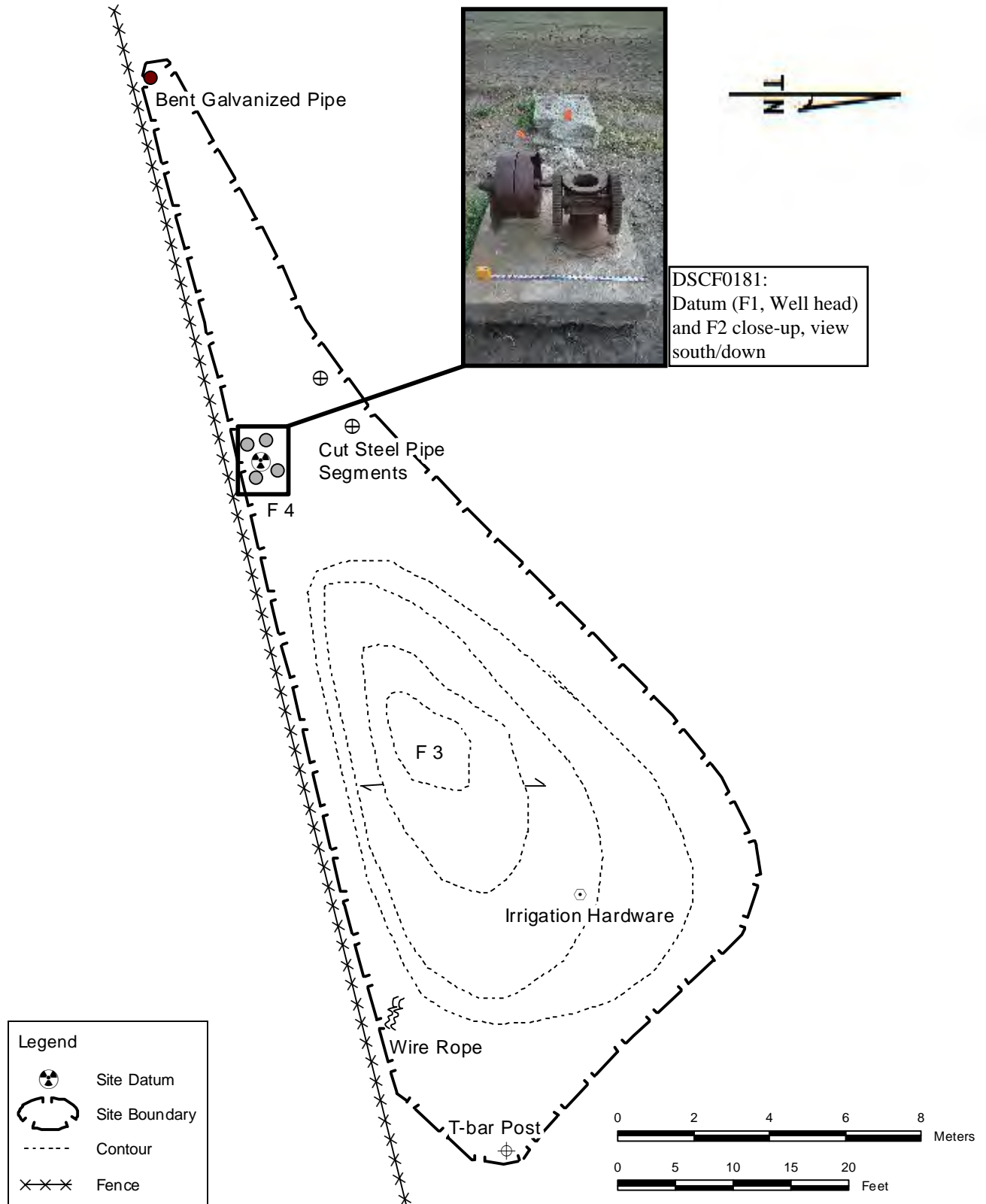
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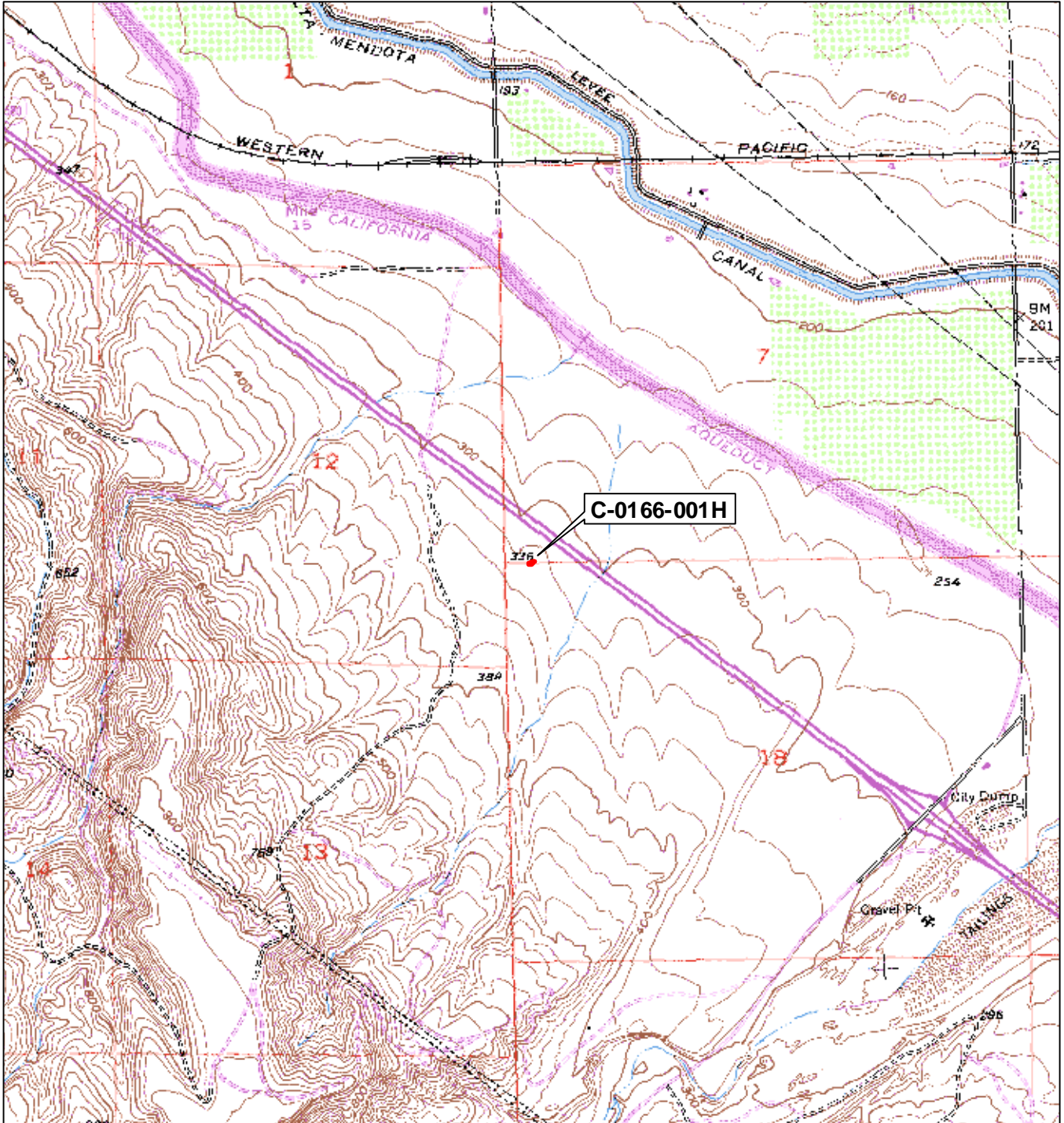
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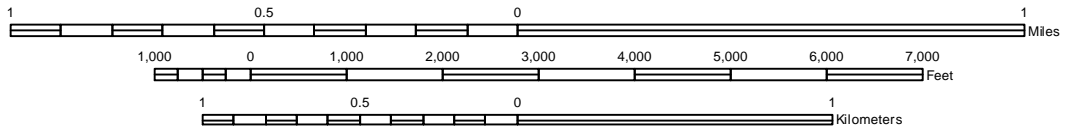
Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
3	20	15:38	DSCF0176	C-0166-01H, site overview	E
3	20	15:39	DSCF0177	C-0166-01H, site overview (DSCF0177, DSCF0178, DSCF0179 stitch)	S
3	20	15:39	DSCF0178	C-0166-01H, site overview	SSE
3	20	15:50	DSCF0179	C-0166-01H, site overview	SSW
3	20	15:51	DSCF0180	C-0166-01H, Datum, F1, Well head close-up	D/NW
3	20	15:51	DSCF0181	C-0166-01H, Datum (F1:Well head) and F2 close-up	D/S
3	20	15:51	DSCF0182	C-0166-01H, Datum, F1, Well head overview	SE
3	20	15:52	DSCF0183	C-0166-01H, Drive shaft close-up	D
3	20	15:52	DSCF0184	C-0166-01H, cut pipe close-up	D
3	20	15:52	DSCF0185	C-0166-01H, F4, galvanized angle iron (one of four)	D
3	20	15:53	DSCF0186	C-0166-01H, F2, Concrete base (motor missing)	NNE/D
3	20	15:53	DSCF0187	C-0166-01H, F2, Concrete base close-up with horseshoe	NNE/D
3	20	16:03	DSCF0188	C-0166-01H, F1, Pump base close-up	NE
3	20	16:03	DSCF0189	C-0166-01H, F1, Pump base close-up	SE
3	20	16:04	DSCF0190	C-0166-01H, F1, Pump base close-up	SW
3	20	16:04	DSCF0191	C-0166-01H, F1, Pump base close-up	NW
3	20	16:04	DSCF0192	C-0166-01H, F1, Pump base close-up, serial number	D
3	20	16:04	DSCF0193	C-0166-01H, F1, Pump base close-up, serial number	D
3	20	16:40	DSCF0194	C-0166-01H, unknown purpose irrigation hardware	D





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-2H

Page 1 of 7

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

***a. County** Tracy

***b. USGS 7.5' Quad** Tracy, CA **Date** 1954 (Photorevised 1981) **T** 3S; **R** 5E; **SW ¼ of SW¼ of Sec 18; M.D.B.M.**

c. Address: None **City** Tracy **Zip**

d. Zone 10S 634409mE/ 4170268mN NAD 83, Datum is a piece of 5" diameter, brown glaze sewer pipe

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Valpico Road (Rd.) and South Lammers Rd. in Tracy, CA, travel south on South Lammers Rd. 1.0 miles to the intersection of South Lammers Rd. and the Western Pacific Railroad (WPRR). Approximately 20' south of this intersection, take a slight right to proceed south in a field access road immediately adjacent to a private driveway. Follow this same field access road for .3 miles through a series of gates, passing over the California Aqueduct. Approximately 460' from the mid-line of the California Aqueduct, the field road splits south and to the west. Follow the southern field road approximately .4 miles, passing under I-580. After I-580 continue south for a distance of approximately .3 miles. From this point turn due east and travel 286 yards to the meeting point of three fencelines, each with a different alignment. Travel on the east side of the north-south oriented fence line, which also is the north-south oriented lines between Section 18 and Sections 12 and 13, for a distance of .8 miles to the UTM coordinates above. C-0166-2H is located in APN 253003012.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): C-0166-2H is an early to mid 20th century domestic and agriculture-related refuse and architectural debris scatter located in the confluence of two washes with a rolling, open, hilly grassland in rural Tracy, CA. The site consists of two concentrations and a diffuse and sparse artifact scatter between the two concentrations within an area which measures 145' (E-W) x 167' (N-S). Concentration A consists primarily of household refuse of glass and ceramic fragments and metal scraps. Concentration B consists primarily of structural debris of concrete encased sewer pipe, a piece of slit granit slab and concrete curb chunks. The diffuse artifact scatter of oxidized steel fragments, barb wire fragments and various structural and domestic related refuse similar to what is found in Concentrations A and B. Though the site likely possess buried deposits as it is located within an alluvial depositional environment, the surface has been heavily impacted by cattle grazing within its boundaries. Surface visibility averaged 20% in the site.

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



***P3b. Resource Attributes** (List all attributes and codes): AH4. Privies/dumps/trash scatters

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

P5b. Description of Photo: (view, date, ascesion #)
 DSCF0162, C-0166-2H
 overview, view south.

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

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-2H

Page 2 of 7

*P7. **Owner and Address:** Owner unknown.

*P8. **Recorded by (Name, affiliation, address):** Nicholas Hearth M.A., RPA, and Tim Kennedy, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

*P9. **Date Recorded:** 3/20/15

*P10. **Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian survey at 30 m transects.

*P11. **Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

***Attachments:** None Location Map Site 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:

ARCHAEOLOGICAL SITE RECORD

Page 3 of 7

*Resource Name or # (Assigned by recorder) C-0166-2H

- *A1. Dimensions:** a. Length: 167' (N-S) x b. Width: 145' (E-W)
Method of Measurement: Paced Taped Visual estimate Other
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (explain):
Reliability of Determination: High Medium Low Explain:
Limitations (Check any that apply): Restricted access Paved/built over Disturbances
 Site limits incompletely defined Other (Explain):
- A2. Depth:** Likely present None Unknown Method of Determination: Depth likely due to site location within an alluvial channel confluence.
- *A3. Human Remains:** Present Absent Possible Unknown (Explain):
- *A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): Concentration A consists primarily of household refuse and measures approximately 30' (N-S) x 25' (E-W) and is located on the west side of the site upon a gently rolling 2°, east-facing slope. Cattle have largely denuded the area of Concentration A and broken nearly all the glass and ceramic artifacts within it. Colorless glass artifacts, the most numerous within Concentration A, consist three colorless glass bottles and approximately 500 colorless glass fragments. The colorless glass bottles include a "Kraft" condiment, a cork-closure condiment with a Hazel Atlas Glass Co. makers mark, a Hazel Atlas Glass Co syrup bottle, and a ketchup condiment bottle with Owens Illinois makers mark with 1937 date from the Huntington, West Virginia plant. Brown glass artifacts were the second most numerous and consisted of approximately 100 fragments, a Maywood Glass Co. 1958 date, bottle-base, a possibly early makers mark Latchford bottle base, a Clorox brown glass bottle base, and a cork-closure, medicine bottle with Owens Illinois makers mark with 1936 date and Hunting, West Virginia plant code. Other glass fragments include approximately 20 cobalt, 5 amethyst, 25 green, 2 olive green, and 2 black glass. Metal artifacts within Concentration A consist of a hand-forged, small, iron hammer/pick head, an unknown type, triangular shaped piece of hand-forged iron and five metal straps. Ceramic artifacts were all fragmentary and consisted of 10 semiporcelain, 1 fiesta-ware, 5" diameter sewer pipe, and 5 gray stoneware. A few structure pieces of refuse consisting of 2 bricks with "Stockton" mark, and 4 concrete slabs were also located within Concentration A.
- Concentration B consists primarily of structural debris. The refuse consisted of 1 granite slab (Artifact 1) which was drilled and split and measures 24"x12"x8" thick, approximately 10 concrete curb chunks, 5 concrete encased sewer pipe pieces, 5 bricks, 10 barrel hoops, 2 unknown type electrical parts, 5 scrap metal fragments, 10 barbed wire pieces, and approximately 15 fragments white glass.
- *A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with feature): C-0166-1H has a diffuse and sparse artifact scatter of domestic refuse and structural debris of the same types observed in Concentrations A and B.
- *A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. Site Condition:** Good Fair Poor (Describe disturbances): Cattle graze the area and walk directly through the site and have broken nearly every artifact as well as dispersing the artifacts.
- *A8. Nearest Water** (Type, distance, and direction): The California Aqueduct is approximately 1.3 miles northeast.
- *A9. Elevation:** 450' amsl.

- A10. Environmental Setting** (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate): C-0166-2H is located upon a Plio-Pleistocene age non-marine deposits which extends NE from the Diablo Mountain Range. The site location is categorized as an upper Sonoran Grassland environment that has been heavily modified the earth removal at the site. Ruderal grasses such as fiddle neck and, foxtails are also present. The general location is rural, and site location faces north with approximately 2° slope. Surface visibility varied from approximately 0% to 35% in the site. Exposure is partially closed due to the steep ridges of the three alluvial channels within the site.
- A11. Historical Information** (Note sources and provide full citations in Field A15 below):
- *A12. Age:** Prehistoric Pre-Colonial (1500–1769) Spanish/Mexican (1769–1848) Early American (1848–1880) Turn of century (1880–1914) Early 20th century (1914–1945) Post WWII (1945+) Undetermined Factual or estimated dates of occupation (explain): Analysis of refuse found within the site indicate that the site was the site of repeated dumping events from the 1930's to the late 1950's.
- A13. Interpretations** (Discuss scientific, interpretive, ethnic, and other values of site, if known): C-0166-2H is an early to mid 20th century domestic and agriculture-related refuse and architectural debris scatter located in the confluence of two washes with a rolling, open, hilly grassland. The site consists of two concentrations and a diffuse and sparse artifact scatter between Concentration A, which consists primarily of household refuse, and Concentration B which consists primarily of structural debris. The diffuse artifact scatter refuse similar to what is found in Concentrations A and B lies between the two concentrations. Though the site likely possess buried deposits as it is located within an alluvial depositional environment, the surface has been heavily impacted by cattle grazing within its boundaries.
- A14. Remarks:** Nothing suggests this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the site is directly associated with a prominent historical figure (CRHR Criterion 2). The refuse do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, C-0166-002H has no archaeological data potential beyond what has already been documented. Further analysis of the artifacts at this site are unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4) and this site is not a potential historical resource under CEQA. Regardless of the location within the proposed project, the recordation of this archaeological site exhausts its information potential.
- A15. References** (Give full citations including the names and addresses of persons interviewed, if possible):
- A16. Photographs** (List subjects, direction of view, and accession numbers or attach a Photograph Record): See attached Photograph Record.
- *A17. Form Prepared by:** Nicholas Hearth M.A., RPA, and Tim Kennedy **Date:** 3/20/15
Affiliation and Address: Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

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Project Name: Tracy Hills Specific Plan

Year: 2015 :

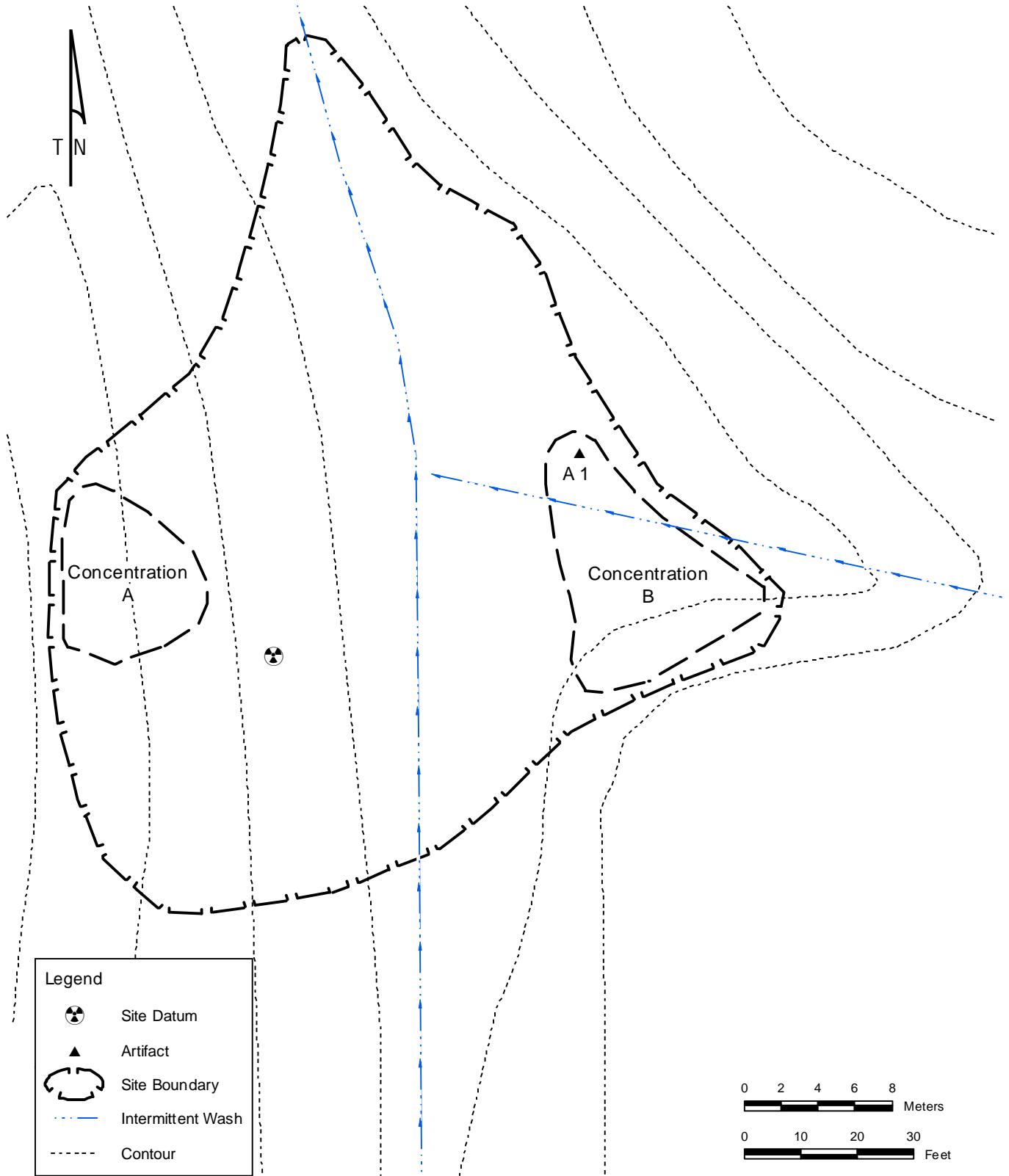
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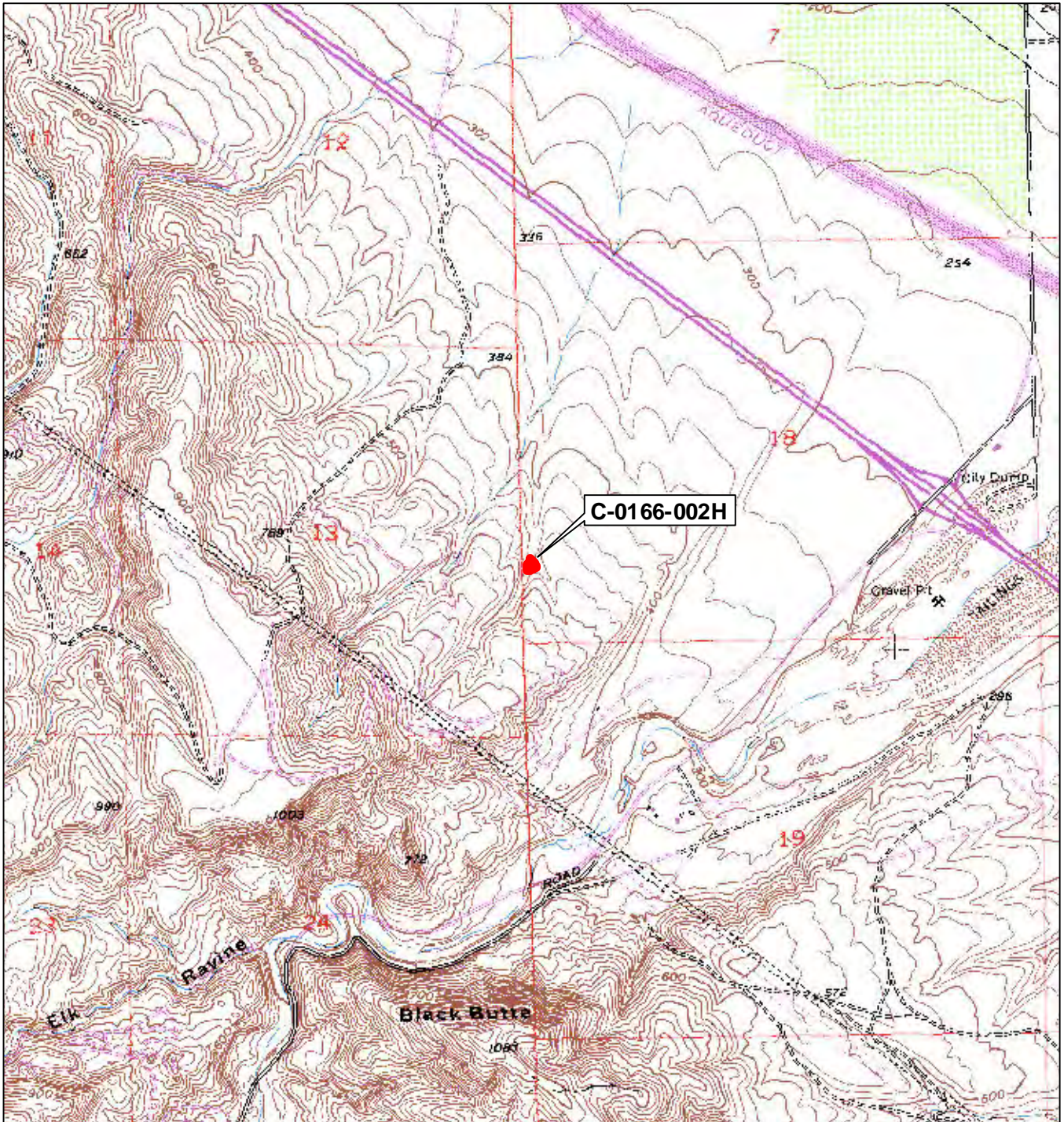
Lense Size: NA

Film Type and Speed: Digital

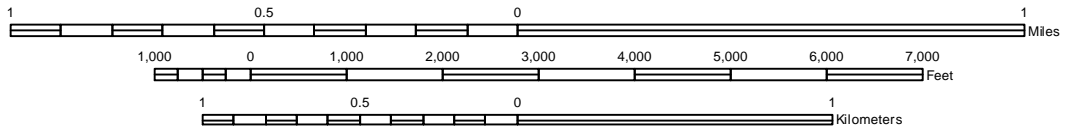
Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
3	20	14:28	DSCF0159	C-0166-2H Site overview from west boundary	SE
3	20	14:30	DSCF0160	C-0166-2H Site overview from southwest boundary	NNE
3	20	14:31	DSCF0161	C-0166-2H Site overview from east boundary	W
3	20	14:32	DSCF0162	C-0166-2H Site overview from NNW boundary	S
3	20	14:38	DSCF0163	C-0166-2H, Concentration A overview from Datum	W
3	20	14:38	DSCF0164	C-0166-2H, Concentration B overview from Datum	E
3	20	14:40	DSCF0165	C-0166-2H, site datum	D
3	20	14:43	DSCF0166	C-0166-2H, Concentration A sample artifacts	D
3	20	14:43	DSCF0167	C-0166-2H, Concentration A sample artifacts	D
3	20	14:44	DSCF0168	C-0166-2H, Concentration A sample artifacts	D
3	20	14:45	DSCF0169	C-0166-2H, Concentration A sample artifacts	D
3	20	14:49	DSCF0170	C-0166-2H, Concentration B sample artifacts	D
3	20	14:49	DSCF0171	C-0166-2H, Concentration B sample artifacts	D
3	20	14:51	DSCF0172	C-0166-2H, Concentration B sample structural remains	D
3	20	14:51	DSCF0173	C-0166-2H, Concentration B sample structural remains	D
3	20	15:03	DSCF0175	C-0166-2H, Concentration A sample artifacts	D





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-3H

Page 1 of 7

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

***a. County** Tracy

***b. USGS 7.5' Quad** Tracy, CA **Date** 1954 (Photorevised 1981) **T** 3S; **R** 5E; SE ¼ of NE¼ of **Sec** 18 and N-S line between Sections 17 and 18; **M.D.B.M.**

c. Address: None **City** Tracy **Zip**

d. Zone 4171089 **mE/** 636445 **mN** NAD 83, Datum is eastern post of gate at north end of site

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Interstate 580 and Corral Hollow Road, travel NE on Corral Hollow Rd. for a distance of approximately .4 miles and take a right (East) to a metal gate nearly at the end of the first left curve on Corral Hollow Rd. The post on the east side of the gate is the site datum at the UTM coordinates provided above. Site C-0166-3H is located within APNs 25303015 and 25303004.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): C-0166-3H consists of two abandoned segments of the historic in age alignment of Corral Hollow Rd. Segment 1 is gravel, oriented north to south and appears to be in use possibly as early as 1850 as recorded on GLO maps which date to this period. Segment 2 is a younger alignment of Corral Hollow Rd dates to around 1955 as documented in historic aerial photographs (NETR 2015) and is finished with asphalt. The 1950's era realignment left the older Segment 1 for use as an access road to the city dump during the mid 20th. Segment 1 is in poor condition, with no apparent maintenance of the roadbed and Segment 2 is also in poor condition with numerous cracks and missing segments of asphalt/concrete and is mostly obscured by ruderal grasses. Surface visibility averaged 30% within the site.

***P3b. Resource Attributes** (List all attributes and codes): AH 7. Roads/trails/railroad grades

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



CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

***P4. Resources Present:**

- Building Structure
 Object Site District
 Element of District Other:

P5b. Description of Photo: (view, date, accession #) IMG_240, 3/20/15, C-0166-3H Datum Overview, view SE

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

***P7. Owner and Address:** Owner unknown.

***P8. Recorded by (Name, affiliation, address):**
Nicholas Hearth M.A., RPA,
Mark Kile, Sam Suarez, Tim Kennedy, Chris Simon, Duke

Other Listings
Review Code

Reviewer

Date

***Resource Name or #:** (Assigned by recorder) C-0166-4H

Page 2 of 7

***P9. Date Recorded:** 3/16/15, 3/20/15 and 4/6/15

***P10. Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian survey at 30 m transects.

***P11. Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

***Attachments:** None Location Map Site 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:

L1. Historic and/or Common Name: Corral Hollow Road

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

- b. Location of point or segment** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map): The northern end of Segment 1 is located at UTM 636445mE/4171089mN, while the southern end is located at UTM 636458mE/4170541mN, at the current project boundary and likely continues past the project boundary. Evidence supporting this conjecture is a series of utility poles which may have been placed along the edge of the road outside the current project boundaries. A series of utility poles is indicated along Corral Hollow Rd on the 1942 topographic map for the site location (NETR 2015). The north-south aligned portion of this segment of Corral Hollow road follows the dividing line between Sections 17 and 18, T 3S; R 5E.

The western end of Segment 2, a later alignment of the road is at UTM 636302mE/4170805mN and this joins the original alignment of Corral Hollow Rd at UTM 636448mE/4170970mN.

- L3. Description** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate): C-0166-3H records two different, connected segments of Corral Hollow Rd. The oldest segment, Segment 1, is plotted on the 1855 GLO Plat map of the area and the 1916 Tracy, CA, USGS 7.5" Quadrangle maps and is oriented N-S. It was constructed of likely locally-sourced gravel and was used as a transportation corridor between Corral Hollow Canyon and the City of Tracy. As late as 1949 Segment 2, described below, is constructed and Segment 1 changes in use from a transportation thoroughfare to a likely driveway to the city dump (NETR 2015), recorded as C-0166-4H. Currently, Segment 1 used as a field access and illegal dumping.

The SW-NE oriented length of Corral Hollow Rd first appears as early as 1949, as indicated on historic aerial photographs of the road and was used until some time between 1954 and 1969 as seen on the USGS *Tracy* 1954 (Photorevised 1969) 7.5" Quadrangle map when Corral Hollow Rd. was again realigned to its current angle and grade. The SW-NE oriented length of C-0166-3H poor condition and nearly entirely overgrown with ruderal grasses though it does have an asphalt surface beneath the poorly developed soil supporting those grasses.

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

Segment 1:

- a. **Top width** ~13'
- b. **Bottom width** ~16'
- c. **Height or Depth** ~1'
- d. **Length of Segment** 1,825'

Segment 2:

- e. **Top width** ~18'
- f. **Bottom width** ~20'
- g. **Height or Depth** 0~4'
- h. **Length of Segment** 700'

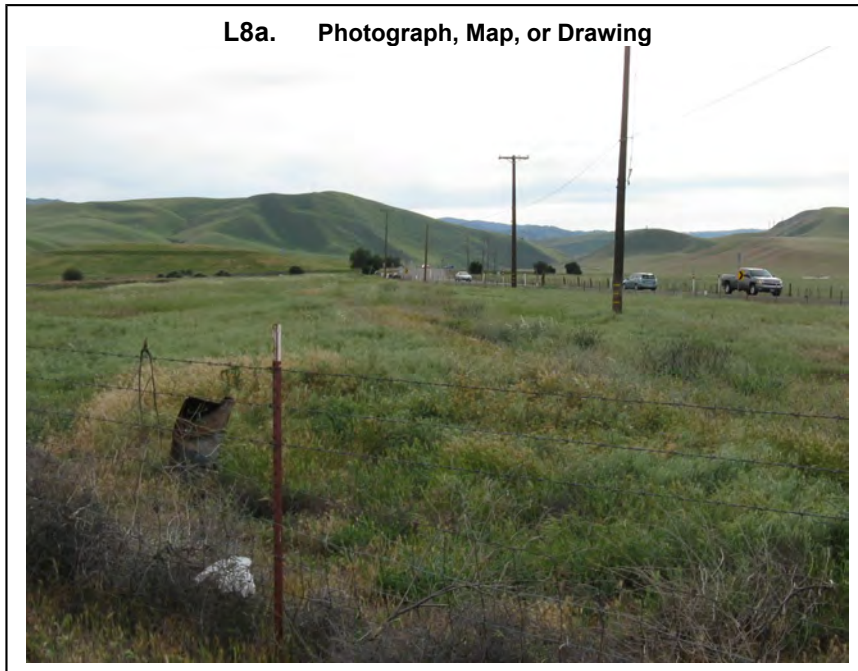
- L5. Associated Resources:** C-0166-4H

L4e. Sketch of Cross-Section (Section 1 overview)



- L6. Setting** (Describe natural features, landscape characteristics, slope, etc., as appropriate): C-0166-3H is located upon a Pleistocene non-marine soils NE of the Diablo Mountain Range. The foothills of the range are approximately one mile to the SW and located within the current survey area. The site location over looks the Corral Hollow drainage to the south. The vegetation is categorized as an upper Sonoran Grassland environment with Ruderal grasses, fiddle neck and, foxtails. The landscape has been heavily modified by the construction of the California Aqueduct, Delta-Mendota Aqueduct, Interstate 580 and the creation, use and eventual cleaning of the city

- L6. Setting** (continued): dump (C-0166-4H). The general location is rural, has slope which varies between 1° and 3° slope to the south and the drainage for Corral. Exposure is open. Surface visibility ranged from 0% to 100% within the site.



- L7. Integrity Considerations:**
See L9 below.
- L8b. Description of Photo, Map, or Drawing** (View, scale, etc.): IMG_240, Overview of C-0166-3H, view SW.
- L9. Remarks:** Corral Hollow Road and the canyon system in Corral Hollow has been used as a transportation corridor throughout the historic and likely back into the prehistoric period. The prehistoric name or names are not currently known, but during the historic period they included El Camino Viejo, Arroyo de los Buenos Ayres, and Corral Hollow Road. The exact location of the these

routes has not been able to be determined in the current study, but these can be reasonably argued to generally follow the bottom of the canyon system of Corral Hollow.

The rich history of transportation along Corral Hollow Road suggests that the segment of C-0166-003H could be potentially directly associated with a prominent historical event like the development of the historic alignment of Corral Hollow Road (CRHR Criteria 1). To convey significance under CRHR Criteria 3, road segments like C-0166-003H should demonstrate the evolution of Corral Hollow Road in the area of Engineering. Under CEQA, roads or road segments like C-0166-003H no specific length has been defined for a road segment to retain its integrity, but at a minimum the length should convey the sense of a continuous road experience an unobstructed view from the road segment to the horizon with only a view of a built environment dating to the period of significance should be seen. For Criterion 1 and 3, C-0166-0003H does not meet the length requirements of a continuous road and travel experience through Corral Hollow Canyon nor does it retain any the road related associated features. Impairment of these required essential physical features of a roadbed results in a loss of integrity of C-0166-003H under Criterion 1 and 3. No evidence has been found to suggest that the segment of the Corral Hollow Road recorded on C-0166-003H is directly associated with a prominent historical figure (CRHR Criteria 2) or does it the road alignment is unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criteria 4).

- L10. Form Prepared by** (Name, affiliation, and address): Nicholas F. Hearth, Mark Kile, Sam Suarez, Tim Kennedy and Chris Simon, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630
- L11. Date:** 3/16/15, 3/20/15 and 4/6/15

Page 5 of 7

Project Name: Tracy Hills Specific Plan

Year: 2015 :

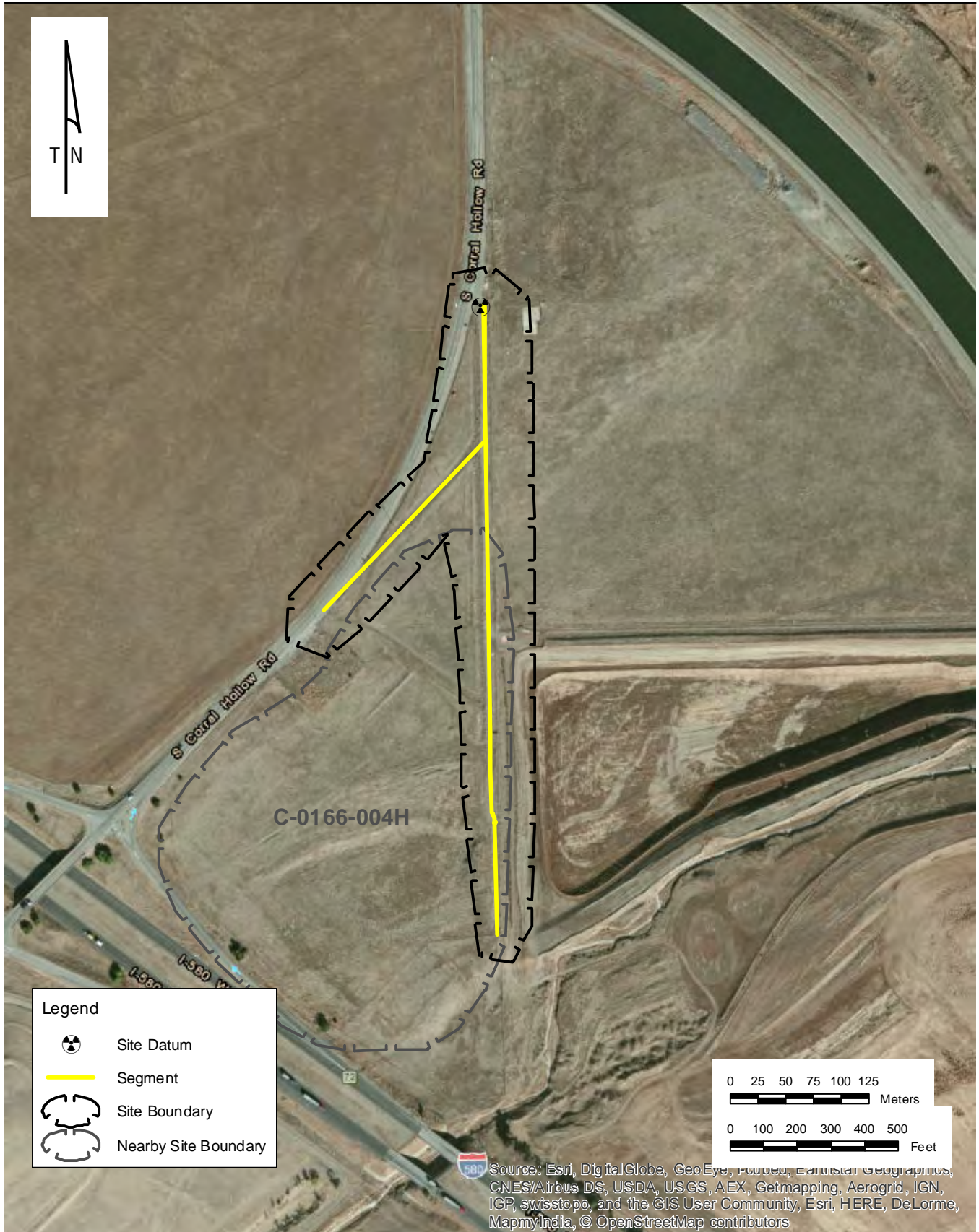
Camera Format: Canon SureShot A220

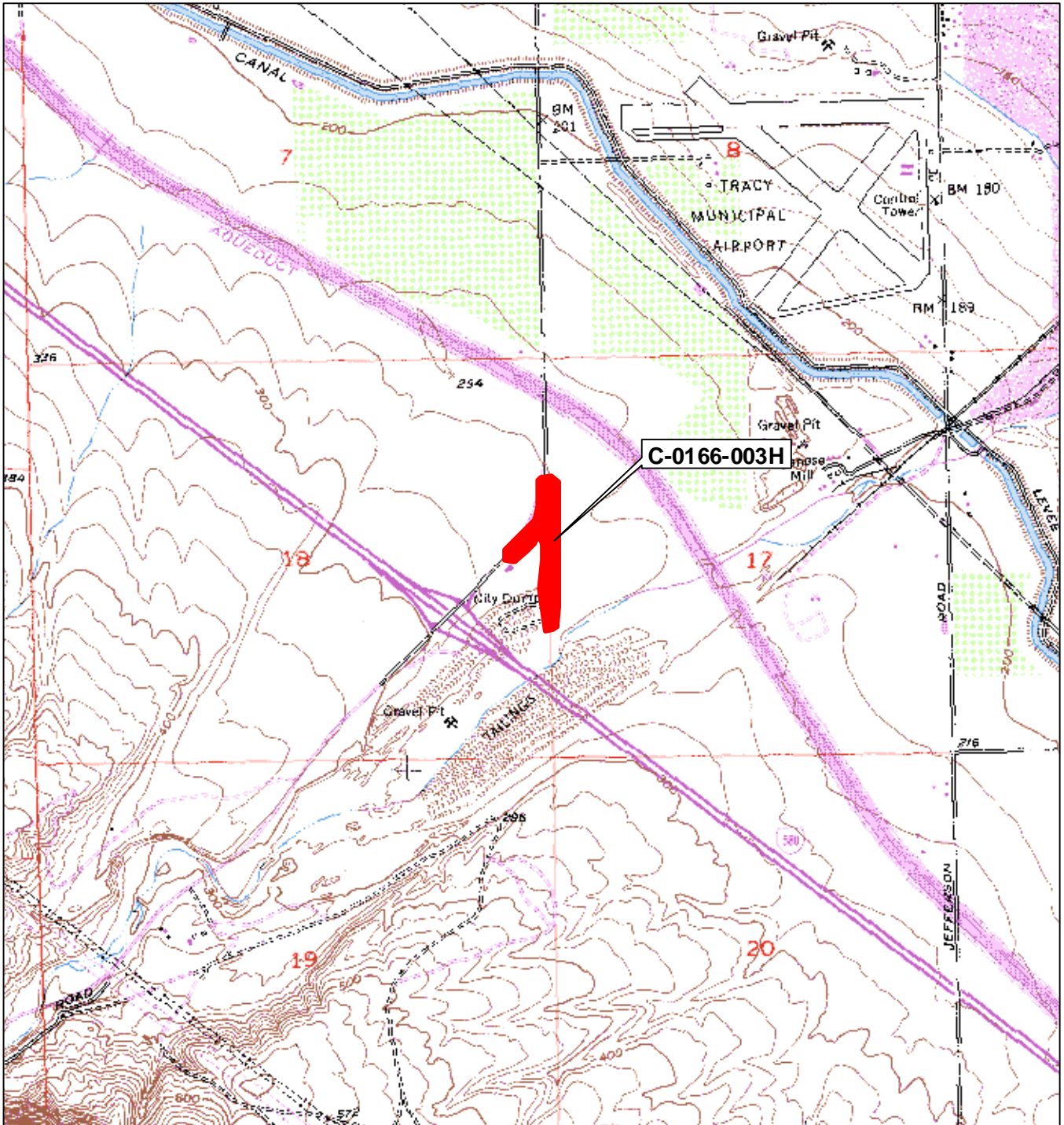
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Film Type and Speed: Digital

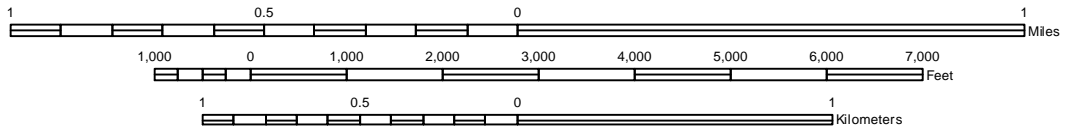
Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
3	20	15:27	IMG_239	C-0166-3H, Segment 2 Overview	N
3	20	15:28	IMG_240	C-0166-3H, Segment 1 Overview	SW
4	6	7:11	IMG_308	C-0166-3H, Segment 1 Overview	S
4	6	NR*	IMG_313	C-0166-3H, Datum Overview	SE





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-4H

Page 1 of 7

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

***a. County** Tracy

***b. USGS 7.5' Quad** Tracy, CA **Date** 1954 (Photorevised 1981) **T** 3S; **R** 5E; **E** 1/2 of SE¼ of **Sec** 18; **M.D.B.M.**

c. Address: None **City** Tracy **Zip**

d. Zone 636441 **mE/** 4170591 **mN** NAD 83, Datum at the NW corner of Feature 2

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the interstecion of Interstate 580 and Corral Hollow Road, travel NE on Corral Hollow Rd. for a distance of approximately .4 miles and take a hard right (East) to a metal gate nearly at the end of the first curve to the left on Corral Hollow Rd. Pass through the gate, travel due south along C-0166-3H, the historic alignment of Corral Hollow Rd., for a distance of 1,635'. At this point face west and travel a distance of 5' to the NW corner of Feature(F) 3, a concrete foundation, which serves as the site datum. Site C-0166-4H is located within APNs 25303015 and 253030004.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): C-0166-4H consists of a location that has seen intensive activities during the 20th century upon it. Currently the area within the boundary of C-0166-4H appears to be a largely rehabilitated landscape from a former city dump. Before this location was a city dump it likely was a gravel quarry, potentially part of P-39-000362 and see P-39-000362 (Update). Currently the site has three features and one concentration. Feature (F1) is a the mechanically leveled and compacted, level area which forms the southern boundary of the site. F2 is a second mechanically leveled and compacted area which forms the northern portion of the site. A concrete foundation (F3) is located on the eastern side of the site. A discrete, mid 20th century refuse scatter (Concentrations 1) is located within the boundaries of F1. C-0166-4H is bounded on the north by open fields, to the east by the historic alignment of Corral Hollow Rd. (C-0166-003H), to the south by open fields out of the current project area which may contain more mid 20th century gravel mining features (likely an unrecorded portion of P-39-000362 Update), to the SW by I-580 and to the west by the modern alignment of Corral Hollow Rd. Overall C-0166-4H measures approximately ~1,600' (N-S) x ~900' (E-W). The condition of the site is poor overall with minimal disturbances apparently have occurred. Presently C-0166-4H is covered with stunted, secondary growth and it is located within the rural landscape surrounding the city of Tracy. C-0166-4H is west of a modern gravel quarry active as recently as June of 2004 that has since been rehabilitated to flat land.

C-0166-4H is located upon what once was an unrecorded portion of P-39-000362 as revealed by comparison of the 1949 and 1967 aerial photographs of the this location (NETR 2015). The difference of the ages, the purposes of the quarried materials, the destruction of P-39-000362 at this location, and now the modern alignment of I-580 which separates the two sites have all determined that of C-0166-4H and P-39-000362 are separate sites. C-0166-4H was likely used as a gravel quarry site for construction of major earthworks like I-580 or the California Aquaduct which both occurred between 1949 and 1967 also revealed by historic image analysis (NETR 2015).

The refuse deposits (Concentration 1), located within the boundary of F1, reveal that quarrying occurred before 1950 as medicine bottles with a 1950 and 1955 date makers mark are present in the bottom of the West Quarry. Other associated artifacts included a fork.

***P3b. Resource Attributes** (List all attributes and codes): AH9. Mines/quarries/tailings; AH2. Foundations/structure pads; AH4. Privies/dumps/trash scatters

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

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-4H

Page 2 of 7

P5b. Description of Photo: (view, date, accession #) DSCF0148, C-0166-4H, Feature 1, overview, 3-16-15, view WSW

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



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

*P7. **Owner and Address:** Owner unknown.

*P8. **Recorded by (Name, affiliation, address):**
Nicholas Hearth M.A., RPA,
Mark Kile, Sam Suarez, Tim
Kennedy, Chris Simon Duke
CRM, 20371 Lake Forrest Dr,
Ste. A-2, Lake Forrest, CA
92630

*P9. **Date Recorded:** 3/16/15,
3/20/15 and 4/6/15

*P10. **Type of Survey:** Intensive
 Reconnaissance Other
Describe: Pedestrian survey at
30 m transects.

*P11. **Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

*Attachments: None Location Map Site 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:

ARCHAEOLOGICAL SITE RECORD

Page 3 of 7

*Resource Name or # (Assigned by recorder) C-0166-4H

- *A1. Dimensions:** a. Length: ~1,600 (N-S) x b. Width: ~900 (E-W)
Method of Measurement: Paced Taped Visual estimate Other Trimble
Geo XH with submeter accuracy.
Method of Determination (Check any that apply): Artifacts Features Soil Vegetation
 Topography Cut bank Animal burrow Excavation Property boundary Other (explain):
Reliability of Determination: High Medium Low Explain:
Limitations (Check any that apply): Restricted access Paved/built over Disturbances
 Site limits incompletely defined Other (Explain):
- A2. Depth:** None Unknown Method of Determination: Depth unlikely as likely all the soils excavated at the site have been removed .
- *A3. Human Remains:** Present Absent Possible Unknown (Explain):
- *A4. Features** (Number, briefly describe, indicate size, list associated cultural constituents, and show location of each feature on sketch map): C-0166-4H is composed of two areas where the ground has been mechanically leveled, Features (F) 1 and F2, a concrete foundation, F3, and discrete refuse scatters, Concentration (C) 1. F1 measures ~500'(N-S) x ~750' (E-W) and is approximately 10' deep at the northern edge. F1 has a flat, hard-packed bottom as if it was excavated with a belly scraper. The southern, western and eastern edges of F1 gently taper to an even elevation with the original ground surface. The southern sloped edge of F2 forms the northern edge of F1.
- F2 is a second area of leveled earth. Its southern edge is a steeply banked ramp which leads down, south, to F1. The Northwestern edge of F2 is the ROW of the modern alignment of Corral Hollow Rd. The southwestern edge of F2 is the off-ramp of I-580 while the northeaster edge of F2 is site C-0166-003H. F2 measures approximately 630' (NW-SE) x 1,240' (SW-NE).
- F3 is a poured-in-place concrete foundation that measures 20'(N-S) x 32' (E-W) and 12" tall. The concrete itself is medium grained with manufactured gravel.
- Immediately adjacent to F1, C1 is composed of approximately ~200 medicine bottles with Owen Illinois makers mark and 1950 and 1955 date stamps within an area of ~20'(N-S) x ~20' (E-W).
- *A5. Cultural Constituents** (Describe and quantify artifacts, ecofacts, cultural residues, etc., not associated with feature): A single fork was found within the site boundary.
- *A6. Were Specimens Collected?** No Yes (If yes, attach Artifact Record or catalog and identify where specimens are curated.)
- *A7. Site Condition:** Good Fair Poor (Describe disturbances): C-0166-004H records a series of disturbances consisting of possible gravel mining, a city dump and rehabilitation of the dump.
- *A8. Nearest Water** (Type, distance, and direction): The California Aqueduct is approximately 2,230' due east.
- *A9. Elevation:** 260' amsl.
- A10. Environmental Setting** (Describe vegetation, fauna, soils, geology, landform, slope, aspect, exposure, etc., as appropriate): C-0166-4H is located upon a Pleistocene age quaternary non-marine terrace deposits which extends NE from Corral Hollow Canyon out of the Diablo Mountain Range. The site location is categorized as an upper Sonoran Grassland environment that has been heavily modified the earth removal at the site. Ruderal grasses such as fiddle neck and, foxtails are also present. The general location is rural, and site location in generally very flat with approximately 0° slope. Exposure is open.

A11. Historical Information (Note sources and provide full citations in Field A15 below):

***A12. Age:** Prehistoric Pre-Colonial (1500–1769) Spanish/Mexican (1769–1848) Early American (1848–1880) Turn of century (1880–1914) Early 20th century (1914–1945)
 Post WWII (1945+) Undetermined Factual or estimated dates of occupation (explain): Analysis of aerial photographs of the site location and refuse found within the site indicate that the site was used between 1950 and 1955.

A13. Interpretations (Discuss scientific, interpretive, ethnic, and other values of site, if known): C-0166-4H consists of a location that has seen intensive activities during the 20th century upon it, see Figure 12. Currently the area within the boundary of C-0166-4H appears to be a largely rehabilitated landscape from a former city dump. Before this location was a city dump it likely was a gravel quarry, potentially part of P-39-000362 and see P-39-000362 (Update). Currently the site has three features and one concentration. Feature (F1) is a the mechanically leveled and compacted, level area which forms the southern boundary of the site. F2 is a second mechanically leveled and compacted area which forms the northern portion of the site. A concrete foundation (F3) is located on the eastern side of the site. A discrete, mid 20th century refuse scatter (Concentrations 1) is located within the boundaries of F1. C-0166-4H is bounded on the north by open fields, to the east by the historic alignment of Corral Hollow Rd., to the south by open fields out of the current project area, to the SW by I-580 and to the west by the modern alignment of Corral Hollow Rd. The condition of the site is poor overall with minimal disturbances apparently have occurred. Presently C-0166-4H is covered with stunted, secondary growth of and it is located within the rural landscape surrounding the city of Tracy. C-0166-4H is west of a modern gravel quarry active as recently as June of 2004 that has since been rehabilitated to flat land.

A14. Remarks: Nothing suggests this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the site IS directly associated with a prominent historical figure (CRHR Criterion 2). The refuse or features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, C-0166-003H has no archaeological data potential beyond what has already been documented. Further analysis of the artifacts or features at this site are unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4) and the site is not a potential historical resource under CEQA. Regardless of their locations within the proposed project, the recordation of this archaeological site exhausts it's information potential.

A15. References (Give full citations including the names and addresses of persons interviewed, if possible):

A16. Photographs (List subjects, direction of view, and accession numbers or attach a Photograph Record): See attached Photograph Record.

***A17. Form Prepared by:** Nicholas Hearth M.A., RPA, Mark Kile, Sam Suarez, Tim Kennedy, Chris Simon
Date: 3/16/15, 3/20/15 and 4/6/15 **Affiliation and Address:** Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

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Project Name: Tracy Hills Specific Plan

Year: 2015 :

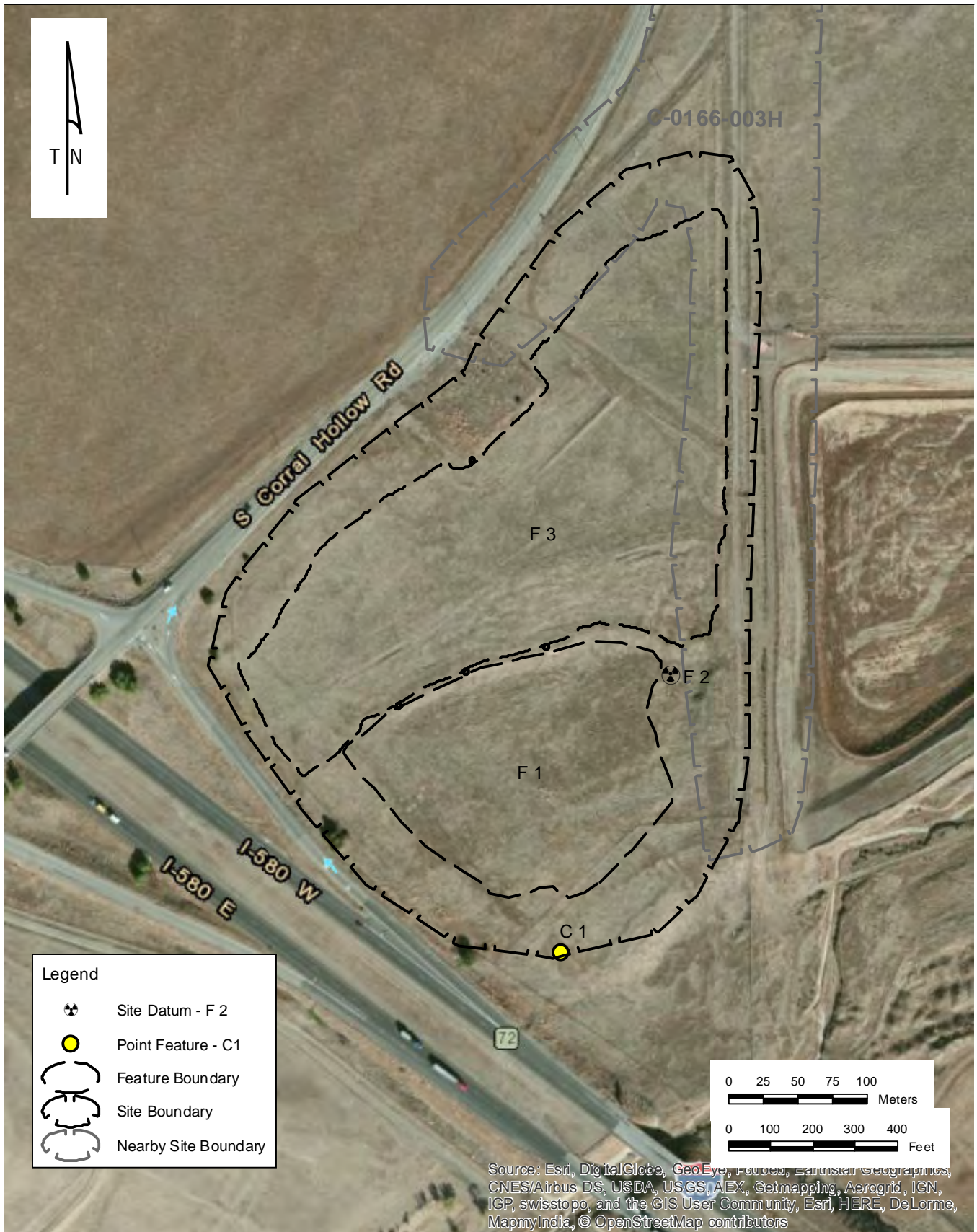
Camera Format: Canon SureShot A220, Fuji XP70

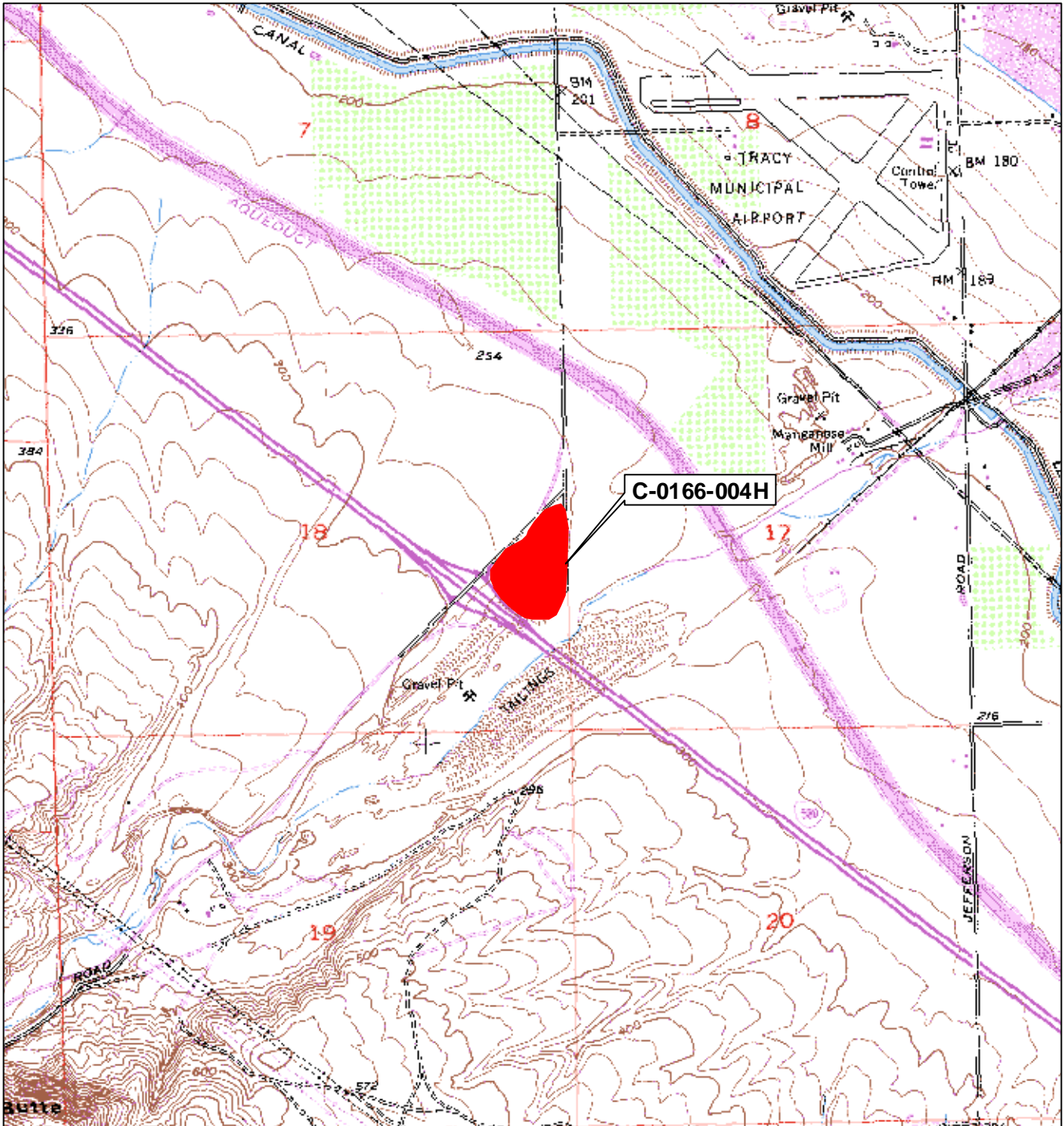
Lens Size: NA

Film Type and Speed: Digital

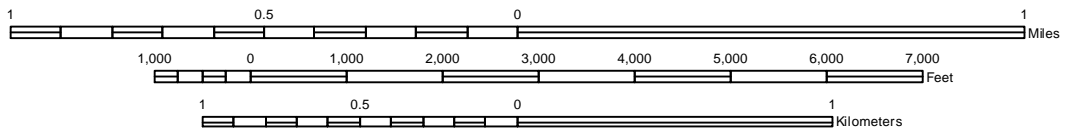
Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
3	16	7:55	DSCF148	C-0166-4H F1 Overview	WSW
3	16	7:55	DSCF149	C-0166-4H F1 Overview	S
3	16	7:55	DSCF150	C-0166-4H F1 Overview	SSE
3	20	14:01	IMG_0235	C-0166-4H Concentration 1 medicine bottle dump close-up	D
3	20	15:10	IMG_0237	Artifact (fork) scatter example	D
3	20	15:10	IMG_0238	Artifact (fork) scatter example	D





SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-5H

Page 1 of 4

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

***a. County** San Joaquin

***b. USGS 7.5' Quad** Tracy **Date** 1954 (Photorevised 1981) **T** 3S; **R** 5E; **W** ½ of SE ¼ of Sec 18; **M.D.B.M.**

c. Address: None **City** Tracy **Zip**

d. Zone 10S 635663 **mE/** 4170232 **mN** South End

635647 **mE/** 4170795 **mN** North End

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Corral Hollow Rd. and I-580 in Tracy, CA, travel south for .3 miles to the first gate on the west side of Corral Hollow Road. Pass through the gate to the UTM coordinates above for the south end of C-0166-5H.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This is a barbed wire fence alignment which spans across open, grass-covered land between Corral Hollow Rd. and I-580 in a north-south alignment. The fence has Allis Buckthorn (1881 Patent) and Gladdis (1878 Patent) and modern barbed wire and sheep fencing. Posts within the fence line include historic-in-age, heavily weathered hand-split redwood posts and modern T-Bar posts. The barbed wire is attached to the Redwood posts with wire U-nails. The fence line is 1,883' long. A dirt two-track road is located immediately adjacent of the fence to the west. Three large heavy equipment tires, a pile of modern posts and a spool of new barbed wear are near the south end of the site. From the north end of the recorded alignment, the fence line only has modern barbed wire in it and the fence line continues for a distance of 83' before it connects to the fence which demarcates the ROW for I-580. Surface visibility averaged 50% in the site. C-0166-5H is forms the property line between APNs 253003017 and 2530030012.

Nothing suggests this site is directly associated with a prominent historical event (CRHR Criterion 1). No evidence has been found to suggest that the site is directly associated with a prominent historical figure (CRHR Criterion 2). The features do not embody distinctive characteristics of a type, period, or method of construction, nor does it exhibit any architectural or engineering merits (CRHR Criterion 3). With no known historical associations and no important information value, C-0166-003H has no archaeological data potential beyond what has already been documented. Further analysis of the features at this site are unlikely to yield any information that would be considered important to the study of local, regional, state, or national history (CRHR Criterion 4) and the site is not a potential historical resource under CEQA. Regardless of their locations within the proposed project, the recordation of this archaeological site exhausts it's information potential.

***P3b. Resource Attributes** (List all attributes and codes): AH 11. Walls/fences

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

P5b. Description of Photo: (view, date, ascesion #) IMG_304, C-0166-5H overview, view north.

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

***P7. Owner and Address:** Unknown owner

***P8. Recorded by** (Name, affiliation, address): Sam Suarez and Mark Kile, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

***P9. Date Recorded:** 4/5/15

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-5H

Page 2 of 4

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



*P10. **Type of Survey:** Intensive
 Reconnaissance Other
Describe: Pedestrian survey at 30m transects.

*P11. **Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

*Attachments: None Location Map Site 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:

Page 3 of 4

Project Name: Tracy Hills Specific Plan

Year: 2015 :

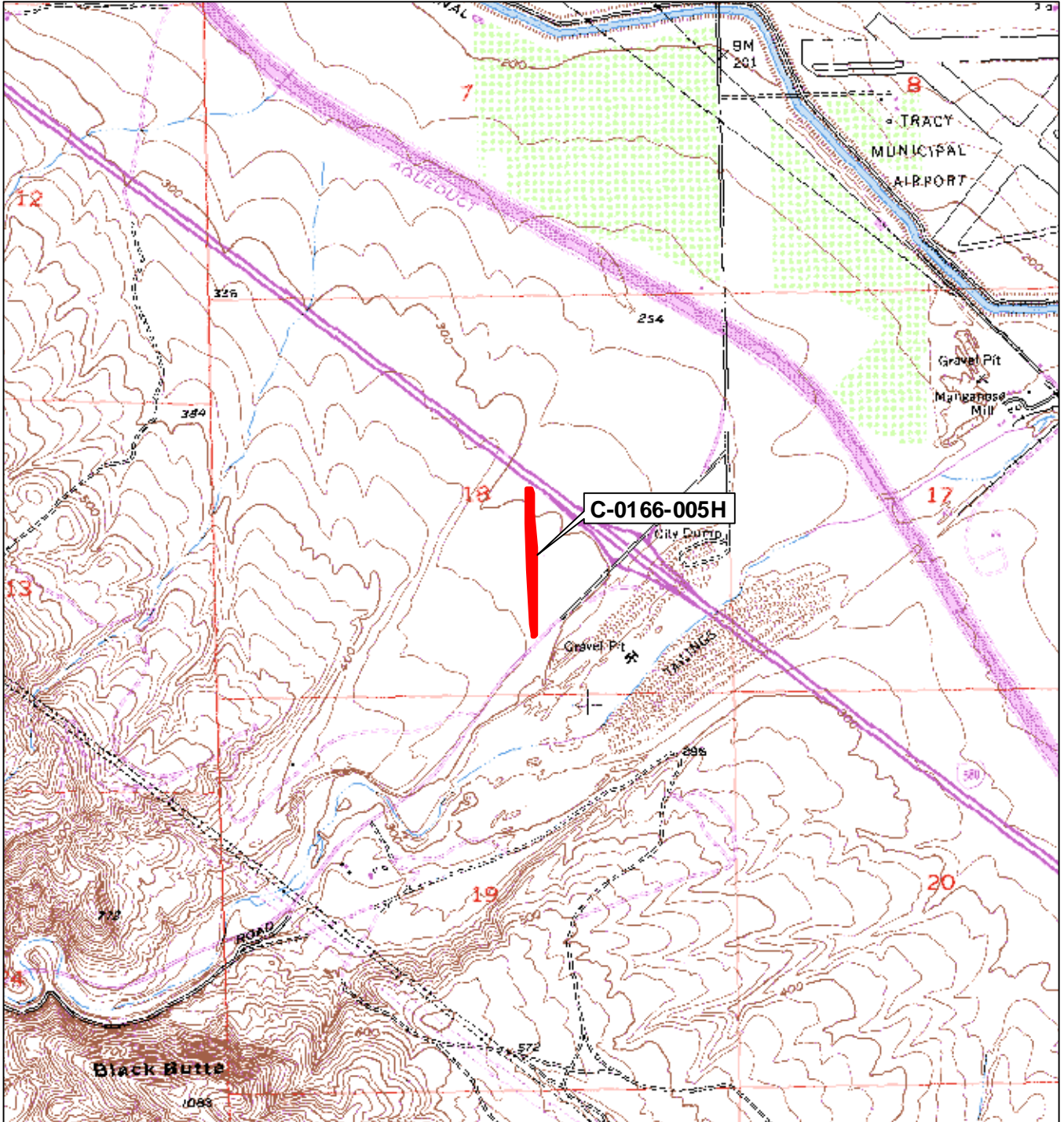
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Lens Size: NA

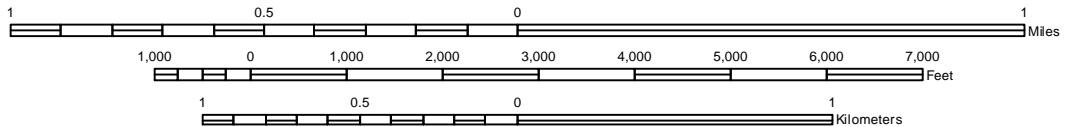
Film Type and Speed: Digital

Negatives kept at: NA

Mo.	Day	Time	Exp./ Frame	Subject/Description	Facing
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4	5	14:20	IMG_305	C-166-5H Overview	S
4	5	14:21	IMG_306	C-166-5H Detail of Wire and historic-in-age post	NE/D
4	5	14:22	IMG_307	C-166-5H Detail of Wire and historic-in-age post	NE/D



SCALE 1:24,000



TRUE NORTH

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) C-0166-ISO-1

Page 1 of 3

P1. Other Identifier:

***P2. Location:** Not for Publication Unrestricted

*a. County Tracy

*b. USGS 7.5' Quad Tracy, CA Date 1954 (Photorevised 1981) T 3S; R 5E; SW ¼ of SW ¼ of Sec 7; M.D.B.M.

c. Address: None City Tracy Zip

d. Zone 10S 634744mE/ 4171737mN NAD 83

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): From the intersection of Valpico Road (Rd.) and South Lammers Rd. in Tracy, CA, travel south on South Lammers Rd. 1.0 miles to the intersection of South Lammers Rd. and the Western Pacific Railroad (WPRR). Approximately 20' south of this intersection, take a slight right to proceed south in a field access road immediately adjacent to a private driveway. Follow this same field access road for .3 miles through a series of gates, passing over the California Aqueduct. Approximately 460' from the mid-line of the California Aqueduct, the field road splits south and to the west. Follow the southern field road approximately .2 miles to the first gate on the left (east). Pass through this gate and travel across the field for a distance of 1,061 yards at 141° to the UTM coordinates above.

***P3a. Description** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): C-0166-ISO-1 is an isolated, prehistoric in age, hand-stone roughly in the shape of an exhausted pestle. It measures 13.5cm long x 8.0 cm x 8.7cm. It is made of granite, has three ground faces and both ends are heavily battered. It was found in a chisel-plowed field and the immediate ~75m vicinity had 100% surface visibility. The isolated artifact had no "find" damage from the chisel plow in the form of recent impact damage or rust marks. Following its discovery, a 30m diameter circle centered on the isolated find was intensively surveyed at 2m intervals by all team members. No other artifacts were found.

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

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

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



P5b. Description of Photo: (view, date, ascension #) IMG_0225, C-0166-ISO-1, view down.

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

***P7. Owner and Address:** Owner unknown.

***P8. Recorded by (Name, affiliation, address):** Nicholas Hearth M.A., RPA, Mark Kile and Tim Kennedy, Duke CRM, 20371 Lake Forrest Dr, Ste. A-2, Lake Forrest, CA 92630

***P9. Date Recorded:** 3/19/15

***P10. Type of Survey:** Intensive Reconnaissance Other
Describe: Pedestrian survey at 30 m transects.

Other Listings
Review Code

Reviewer

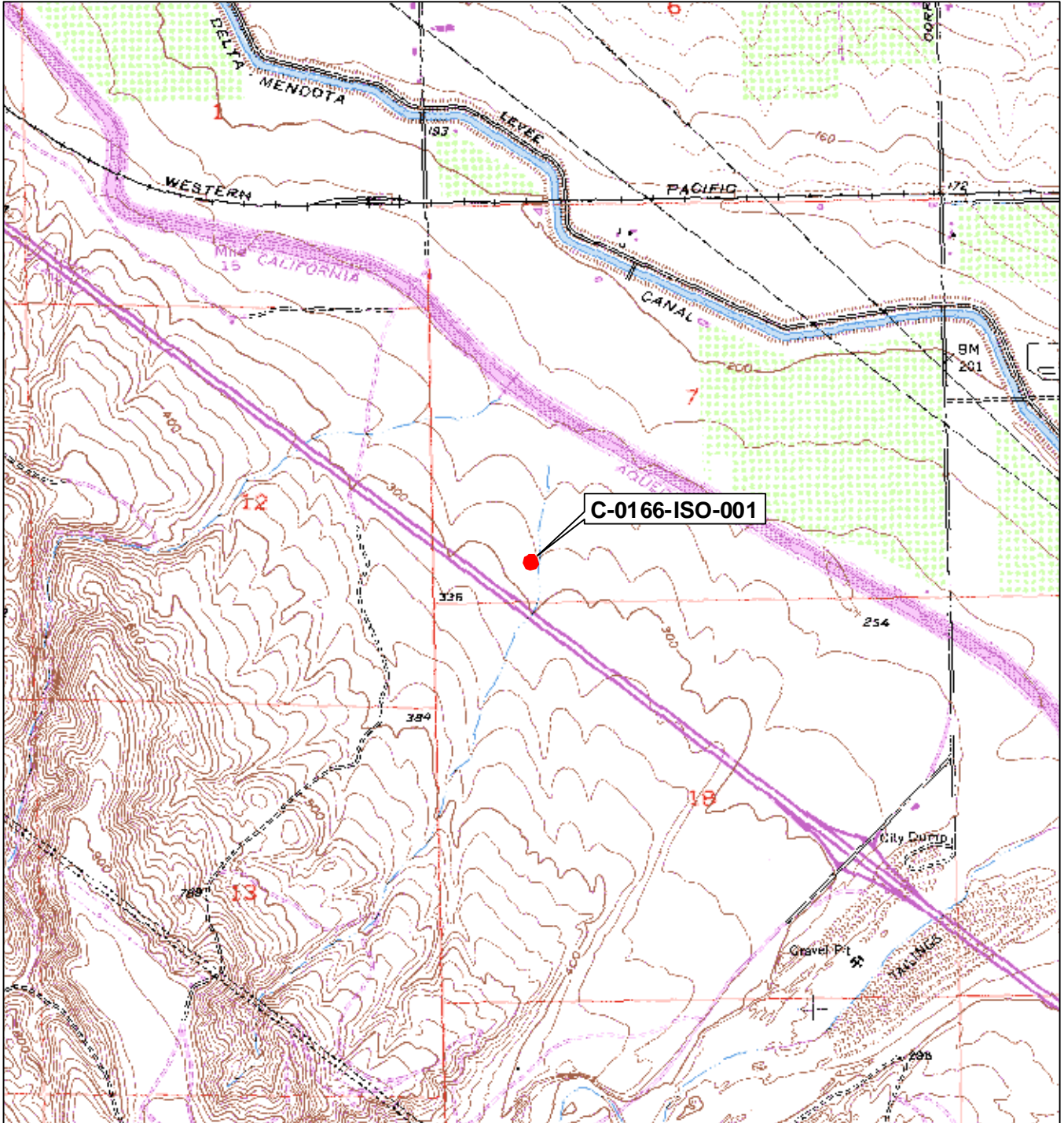
Date

***Resource Name or #:** (Assigned by recorder) C-0166-ISO-1

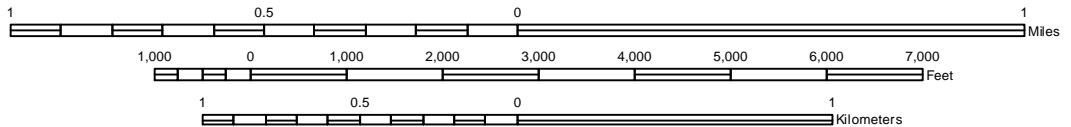
Page 2 of 3

***P11. Report Citation** (Provide full citation or enter "none"): Duke, Curt et al., 2015, *Phase I Cultural and Paleontological Resources Assessment Tracy Hills Specific Plan Project*, Duke CRM. Submitted to City of Tracy, Development and Engineering Services. Copies available from Central Coast Information Center.

***Attachments:** None Location Map Site 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:



SCALE 1:24,000



TRUE NORTH