

CULTURAL RESOURCES INVENTORY REPORT
LANDS OF MORGAN PROJECT
SOLANO COUNTY, CALIFORNIA



Prepared for:

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USGS 7.5' Allendale and Mt. Vaca Quadrangles, California
Project Area covers 303.43 acres, T 6-7 N, R 1 W

CONFIDENTIAL

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1.0 INTRODUCTION

This report documents the results of a cultural resources study for the Lands of Morgan Project (Project), Solano County, California (Figures 1-3). Solano Archaeological Services (SAS) was contracted by private landowner William Morgan to conduct an archaeological inventory of lands totaling 303.43 acres proposed for subdivision.

1.1 PROJECT BACKGROUND AND DESCRIPTION

Mr. Morgan proposes to subdivide property assessed as two legal parcels with seven parcel numbers. The combined acreage for the project site is approximately 303.43 acres. According to the assessor, the following six parcels are legal in combination: 0105-110-070 (0.93 acres), 0105-110-100 (3.88 acres), 0105-110-440 – (18.33 acres), 0105-110-450 (1.97 acres), 0105-160-130 (18.96 acres), and 0105-170-150 (255.98 acres). APN 0105-170-010 (3.38 acres) is listed as a second legal parcel with the project including a request to zone this parcel Rural Residential 2.5 Acre Minimum Lot Size for zoning consideration. The remaining portion of the property is proposed for subdivision to create fifteen new parcels, each approximately 20 acres in size (Bell 2018). There are currently no plans involving ground disturbance for any of these parcels.

The purpose of this study is to determine if any cultural resources are located in the 303.43-acre project area, and to assess discovered resources for California Register of Historical Resources (CRHR) eligibility.

1.2 PROJECT LOCATION AND PROJECT AREA

The project area (Figure 1) is located on non-incorporated land in Solano County, California, just north of the City of Vacaville. The property is bounded by Gibson Canyon Road to the east, Cantelow Road along the north, and Steiger Hill along the west. The project area is also situated on the Allendale and Mt. Vaca, California USGS topographic 7.5 minute quadrangles, Sections 29 and 30, Township 7 North, Range 1 West, and on unsectioned land in the *Los Putos* land grant (approximately Township 6 North, Range 1 West).

1.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

CEQA requires that public agencies having authority to finance or approve public or private projects assess the effects of the projects on cultural resources. Cultural resources include buildings, sites, structures, objects, or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance. CEQA states that if a proposed project would result in an effect that may cause a substantial adverse change in the significance of a significant cultural resource (termed a “historical resource”), alternative plans or mitigation measures must be considered. Because only significant cultural resources need to be addressed, the significance of cultural resources must be determined before mitigation measures are developed.

CEQA §5024.1 (Public Resources Code §5024.1) and §15064.5 of the State CEQA Guidelines (14 California Code of Regulations [CCR] §15064.5) define a historical resource as “a resource listed or eligible for listing on the California Register of Historical Resources.” A historical resource may be eligible for inclusion in the CRHR if it:

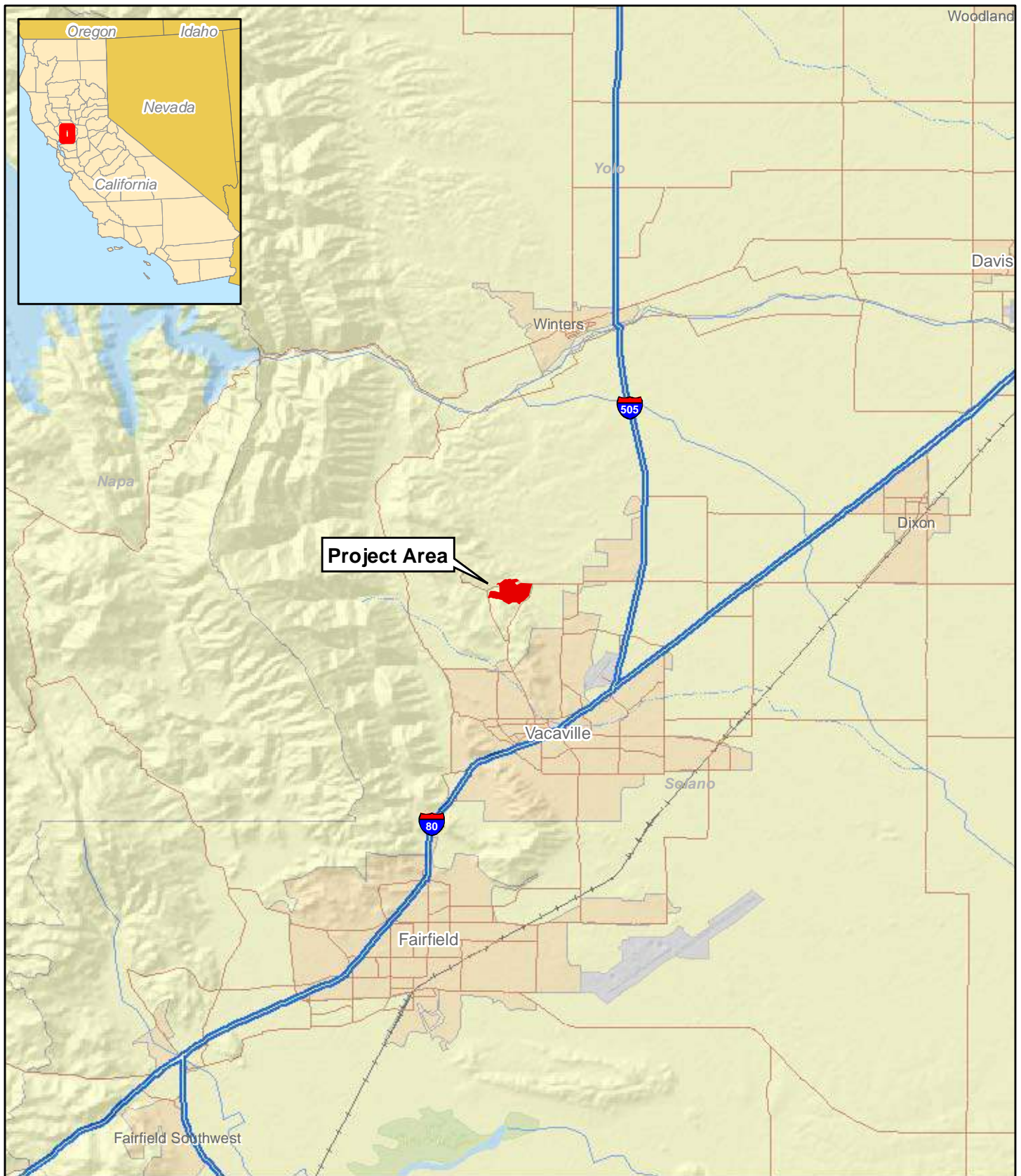


Figure1. Project Vicinity Map.

■ Lands of Morgan Project Area

Sources: *USA Base Map* [layer], *Data and Maps* [CD]. ESRI, 2006.

1:250,000

0 3 Miles

0 6 Kilometers



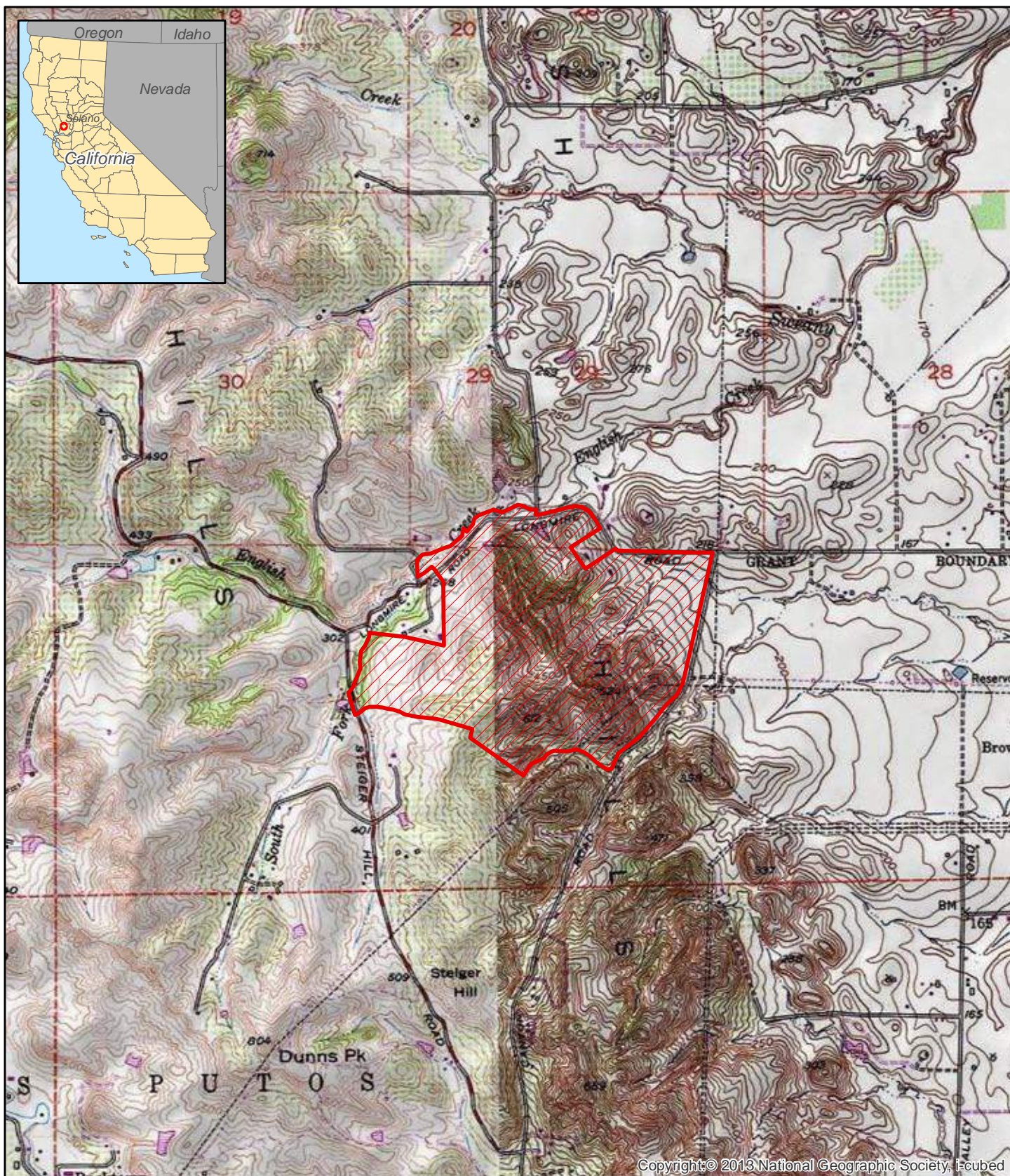


Figure 2. Project Location Map

 Lands of Morgan Project Area

T 07N, R 01W: Section 29; Los Putos land Grant, Presumed Secs 31,32
Allendale (1975, pr 1978) and Mount Vaca (1969, pr 1978) 7.5' Series. USGS.

1:24,000

2,000

1,000

Feet

Meters





Figure 3. Project Area Map.

1:12,000

 Lands of Morgan Project Area

0 1,000 Feet

Imagery: https://gis.apfo.usda.gov/arcgis/services/NAIP/California_2016_60cm/ImageServer

0 500 Meters



- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B. Is associated with the lives of persons important to our past;
- C. 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; or
- D. Has yielded, or may be likely to yield, information important to prehistory or history.

In addition, CEQA also distinguishes between two classes of archaeological resources: archaeological sites that meet the definition of a historical resource, and "unique archaeological resources." An archaeological resource is considered "unique" if it:

- Is associated with an event or person of recognized significance in California or American history or of recognized scientific importance in prehistory;
- Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
- Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
- Is at least 100 years old and possesses substantial stratigraphic integrity; or
- Involves important research questions that historical research has shown can be answered only with archaeological methods (Public Resources Code §21083.2).

According to the State CEQA Guidelines, a project with an effect that may cause a substantial adverse change in the significance of a historical resource or a unique archaeological resource is a project that may have a significant effect on the environment (14 CCR §15064.5[b]). CEQA further states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.

The State CEQA Guidelines (14 CCR §15064.5[e]) also require that excavation activities be stopped whenever human remains are uncovered, and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of a Native American, the Native American Heritage Commission must be contacted within 24 hours, and the provisions for treating or disposing of the remains and any associated grave goods as described in CCR §15064.5 must be followed.

2.0 NATURAL AND CULTURAL SETTING

2.1 EXISTING ENVIRONMENT

The landscape and natural resources surrounding the site are rich and diverse. These conditions are also reflected in the larger Solano region through numerous geological, ecological, and biological resource zones. Thus, the climate and natural environment would have provided an excellent setting for prehistoric settlement and subsistence. The modern climate of the Solano area is mild most of the year with an annual average temperature of 60.3°F. Cool temperatures average between 47–51°F during the winter months (December through February) and average hot temperatures range between 84.9–89.0°F during the summer months (June through August). The annual average amount of precipitation is 27.6 inches, most falling during the winter months. The summer months average 0.05 inches of precipitation between June and August. The region experiences above-average annual wind speeds (16.8 mph) relative to the annual average for the state (13.5 mph) and this is a reflection of its geography (Books 2011;

Gilliam 2002; Hundley 2001). The site is located along the eastern geographical edge of the interior coast range in the English Hills of Solano County.

The project area is now dominated by pasture fields, non-native grasses, and many other historically introduced exotic plant species, but geographical islands of indigenous plant communities indicate what the vegetational mosaic looked like prior to European contact and settlement. The natural canopy and scrub vegetation in the site vicinity includes variations of Oak Woodland, Oak Savanna, Northern Mixed Chaparral, Northern Coastal Scrub, Valley Floor Grassland, Vernal Pools, Fresh Water Marshes, Riparian Woodland, and Riparian Scrub plant communities, the association, occurrence, and frequency of which are largely dependent on elevation, slope, aspect, soil type, and precipitation (for plant species, see Bakker 1984; Balls 1962; Barbour and Major 1977; Barbour et al. 1993; Clarke 1977; Dallman 1998; Eliot 1938; Hickman 1993; Holland 1986; Jepson 1975; Johnston 1994; Pavlik et al. 1991; Wiltens 1999). These diverse plant communities coupled with water resources provided by seasonal and year-round creeks, sloughs, ponds, marshes, bays, and vernal pools provided habitat for a broad spectrum of animal species.

English Creek and the English Creek South Fork, along with multiple distributaries, surround and flow through the Lands of Morgan project area. Several unnamed seasonal creeks were also present historically in the project area. In addition to creating a riparian habitat for common species of birds, the creek and other surrounding water sources would have also provided important habitat for fish species on either a seasonal or a year-round basis (for bird and fish species, see: Cogswell 1977; Eschmeyer and Herald 1983; Lightfoot and Parrish 2009; Lukas 2000; McGinnis 1984; Peeters and Peeters 2005; Peterson 1990; Uvardy 1986).

This riparian habitat would have also been attractive to other common terrestrial and aquatic habitat species (see: Brown 1997; Brown 1999; Lightfoot and Parrish 2009; Stebbins 1966; Stienstra 2000). Terrestrial mammals would also have provided dietary protein and fat as well as necessary raw materials for the manufacture of clothing and tools (for other faunal species, see: Anderson 2005; Bakker 1984; Brown 1999; Lightfoot and Parrish 2009; Stienstra 2000; Storer and Tevis 1996; Whitaker 1988).

The prehistoric inhabitants of the region would also have had access to the coastal marsh and bay environments south of the project area at Grizzly Bay, Suisun Marsh, Suisun Bay, Honker Bay, and San Pablo Bay. These fresh water and brackish marsh environments are host to literally hundreds of plant and animal species (e.g. migratory waterfowl, fish, and marine mammals) that could not be otherwise obtained from the riparian habitat closest to the site, but would have provided additional resources for shelter, subsistence, and personal adornment nearby and fully within the ethnographic territory of the Patwin (e.g. Anderson 2005; Eschmeyer and Herald 1983; Holland 1986; Lightfoot and Parrish 2009).

2.2 PREHISTORIC CONTEXT

Over the last century a host of researchers have pursued an understanding of the cultural changes observed in the archaeological record of the central regions of California. These regions include the San Francisco Bay Area, parts of the coastal ranges, and most of the great Central Valley. The quest was to understand these changes within a temporal and geographical framework, so that future researchers could add to the knowledge base through intensive fieldwork and typological studies.

Early Defined Sequences

During the early twentieth century researchers (P. M. Jones 1899; N. C. Nelson 1909; and C. H. Merriam 1905) began looking critically at burial orientations and associated mortuary artifacts as an initial step to

developing cultural sequences over time. In 1926, after careful documentation of private collections and excavation of nine sites in the Kern and Tulare Lake regions of the San Joaquin Valley, E. W. Gifford and W. E. Schenck produced a manuscript elaborating on a late prehistoric complex of the ancestral Yokuts (Moratto 1984:177). According to their studies, the complex contained flexed burials that were associated with Brown Ware pottery, obsidian projectile points, millingstones, mortars, and various steatite artifacts. The resulting cultural sequence, however, did not represent a great length of time, and it was later found that some of the artifacts in their sequence were of a greater antiquity than previously thought.

From 1893 through the 1930s, archaeologists J. A. Barr and E. J. Dawson excavated a copious amount of sites in the Stockton area, resulting in large collections of artifacts and a substantial database. Their work provided the impetus for Dawson's later creation of a three-phased chronological system for the Delta region, namely the "Early," "Middle," and "Late" sequences defined by artifact typological comparisons (Ragir 1972; Moratto 1984). J. Lillard and W. K. Purves of Sacramento Junior College derived a similar three-phased system during the 1930s. During excavations conducted in the Sacramento Delta region, it was discovered that some sites exhibited strata that showed a clear separation of temporal components. These components were distinguished by burial orientation, artifact types, and the condition of human remains (Lillard and Purves 1936; Moratto 1984). They classified these distinct components as the "Early," "Intermediate," and "Recent" cultural layers, validating much of the earlier work by Dawson.

Development of the Central California Taxonomic System (CCTS)

In 1954 Richard Beardsley refined the Sacramento Delta region sequence by expanding it to include the San Francisco Bay region. Beardsley's momentous work, which elaborated on a continuous cultural succession as defined through years of excavation and typological analysis, gave rise to the Central California Taxonomic System (CCTS). During the advent of radiocarbon dating in the 1950s, absolute dates were correlated with the earlier developed, relative tripartite sequences (Fredrickson 1973, 1974; Moratto 1984; Ragir 1972). Before this point many researchers hesitated at ascribing date ranges for their sequences due to the lack of scientific tools of the day. The correlations made by radiocarbon dating strengthened the CCTS by dividing the system into periods associated with regionally based patterns. "Horizons" represented broad cultural traits in specific temporal sequences. Over the last several decades, attempts have been made to further refine the CCTS by investigating factors such as settlement and subsistence strategies, exchange, population movement and demographic studies, linguistic analysis, and changes to the eco-systems.

Over the years local exceptions to the CCTS schemes and patterns were discovered. This coupled with the advent of radiocarbon dating in the 1950s and obsidian hydration dating in the 1970s increased the accuracy of dating sites, and ultimately led to many localized versions of the CCTS throughout the Central California. Given California's diverse range of ecological habitats and the complexity of cultural change with prehistoric populations, providing an overall cultural chronology for central California seemed limiting and problematic. R. Hughes discussed these limitations in his 1994 work, and his co-written contribution with J. Bennyhoff (1987), *Shell Bead and Ornament Exchange Networks Between California and the Western Great Basin*, provided a regionalized chronology based on bead and trade network analysis. The end result was a development of a series of temporally based periods, namely the *Early-Middle-Late Period* nomenclature which is still used today by South Bay archaeologists and some Central Bay archaeologists (Jones and Klar 2007).

The Central California chronological sequence was divided into the Early (2500 B.C. to 500 B.C.), Middle (500 B.C. to A.D. 300), and Late (A.D. 300 to 1840) Horizons, and looked closely at burial orientation and absence/presence of differing types of funerary goods. The Early Horizon was characterized by extended burials with a high frequency of grave associated artifacts including quartz

crystals and occasionally red ochre, *Olivella* and *Haliotis* beads, charmstones, large leaf-shaped and large stemmed projectile points, a variety of bone artifacts, and infrequent milling instruments (Moratto 1984). Middle Horizon burials were more varied in practice, being both tightly flexed and occasionally cremated. They typically contained fewer associated artifacts than the Early Horizon, but did include such items as mortars made of stone and wood, an extensive array of bone implements, heavy concave-base projectile points, and a variety of baked clay items. The Late Horizon is characterized by varied burial practices including cremations, burned burial related artifacts, small and articulate arrow-sized projectile points made typically from obsidian, high frequencies of baked clay artifacts, stone pipes, and flat-bottomed mortars (Moratto 1984).

A More Generalized Model

D. Fredrickson's study of the central districts of the North Coast Ranges in the early 1970s led him to build a sequence of cultural patterns that could be placed within a framework of distinct cultural periods. These periods, he proposed, were applicable to California as a whole. The cultural patterns developed by Fredrickson were distinctively different from the concepts of previous researchers (Beardsley 1954) who tended to emphasize assemblages of material goods as the basis for their classifications. Fredrickson, taking a much broader view of recovered archaeological materials, defined the term *pattern* as "...an adaptive mode shared in general outline by a number of analytically separable cultures over an appreciable period of time within an appreciable geographic space." (Fredrickson 1973).

Fredrickson recognized that the economic/cultural component of each pattern could be manifested in neighboring geographic regions according to the presence of stylistically different artifact assemblages. He introduced the term *Aspect* as a cultural subset of the pattern, defining it as a set of historically related technological and stylistic cultural assemblages. The following is a summary of these temporal periods, now known as the *Archaic-Emergent* structure. This nomenclature is widely used by North Bay archaeologists and some Central Bay archaeologists. The listed temporal periods below describe the associated cultural patterns that have been identified for northern Solano County and the adjoining regions, and incorporates recent taxonomic and interpretative revisions that are summarized from the work of White and Frederickson (1992).

Paleo-Indian Period (10,000 B.C. to 6000 B.C.)

This period saw the first demonstrated entry and spread of humans into California with most known sites being situated along lakeshores. A developed milling tool technology may be present at this time depth although evidence regarding this technology is scarce. The social units were not heavily dependent upon the exchange of resources with trading activities having occurring on an ad hoc, individual basis.

The Post Pattern represents the earliest known occupation of the North Coast Ranges. This Pattern is documented only at the Borax Lake site, and perhaps at the Mostin site (Moratto, 1984:497). Characteristic artifacts noted in the lithic assemblages include fluted projectile points and flaked crescents. Though the artifacts representative of this Pattern have never been found in a single site context in the Solano County region, numerous occurrences of its distinctive artifacts are reported and can be affiliated with better-documented assemblages in California and throughout North America.

Lower Archaic Period (6000 B.C. to 3000 B.C.)

The beginning of this period coincides with that of the middle Holocene climatic shift to more arid conditions that brought about the drying up of the pluvial lakes. Subsistence appears to have been focused more on plant foods although hunting clearly still provided for important food and raw material sources.

Settlement was semi-sedentary with little emphasis on material wealth. Most tools were manufactured of local materials, and exchange remained on an ad hoc basis. Distinctive artifact types are large projectile points and the milling slab and hand stone. The Lower Archaic Borax Lake Pattern has been identified in the North Coast Ranges during this period. The Borax Lake Aspect identified in the Clear Lake Basin is the southernmost, and closest to the site of the APE, of three identified cultural divisions to this pattern. The most distinctive typological feature associated with the Borax Lake Aspect is wide-stemmed projectile points.

Middle Archaic Period (3000 B.C. to 1000 B.C.)

This period begins at the end of mid-Holocene climatic conditions when weather patterns became similar to present-day conditions. Discernable cultural change was likely brought about in response to these changes in climate and accompanying variation in available floral and faunal resources. Economic systems were more diversified and likely included the introduction of acorn processing technology. Hunting remained an important source of food and raw materials although reliance on plant foods appears to have predominated the subsistence system. Sedentism appears to have been fully developed and there was an overall growth in population and a general expansion in land use. Little evidence is present for development of regularized exchange relations. Typologically and technologically important artifacts characteristic of this period include the bowl mortar and pestle and the continued use of large projectile points.

The Middle Archaic Mendocino Pattern assemblages originate in this period and are known to persist through the Upper Archaic and possibly into the Emergent Period. The Hultman Aspect identified in the Clear Lake Basin is the southern-most of two identified cultural divisions while the Windmill Pattern (see below) is present to the south. The two share such basic material traits as basalt core tools, shaped unifaces, heavily worked bifaces, and thin, finely flaked obsidian knives. The Hultman Aspect is distinguished by the presence of ovate scrapers, numerous simple tools, incised or drilled, steatite plummets (charmstones), and the use of local and non-local obsidian for the manufacture of projectile points.

The Windmill Pattern is the earliest identified cultural pattern in the Central Valley. It has been identified at several sites along the Cosumnes and Mokelumne rivers in the Delta region. *Windmill* sites are typified by their location in riverine, marsh, and valley floor environments. Some are also situated on the top of small knolls overlooking seasonal flood plains. *Windmill* sites are thought to have been occupied by a group of people who migrated into California from either the Columbia Plateau or western Great Basin, bringing with them an adaptation to river-wetland settings (Moratto 1984:207). Most *Windmill* sites exhibit burials that are ventrally extended, oriented to the west, and include a high frequency of mortuary material such as fishing paraphernalia (e.g., net weights, bone hooks) and large projectile points.

Also associated with this period is the *Berkeley Pattern* that appears to have originated in the San Francisco Bay region during the Lower Archaic Period. Fredrickson in 1974 suggested that the *Berkeley Pattern*, taking the place of the Middle Horizon, helped explain riverine dominated sites in the San Francisco Bay region (and later into coastal and interior areas of Central California). *Berkeley Pattern* sites typically have very deep midden deposits stemming from years of occupation, and contain higher frequencies of milling and groundstone products for processing flora in the area, particularly acorn. Artifacts unique to the *Berkeley Pattern* include slate pendants, steatite beads, stone tubes, and ear ornaments. Although *Berkeley Pattern* sites share commonalities with *Windmill* sites, the *Berkeley Pattern* burials are distinct in their flexed posture and changeable directional orientation. *Berkeley Pattern* graves also contain far fewer mortuary artifacts (Moratto 1984). Recovered projectile points were smaller and more articulate, some of which found in shallower deposits were likely used for arrows during the

late prehistoric period.

Upper Archaic Period (1000 B.C. to A.D. 500)

A marked expansion of sociopolitical complexity marks this period with the development of status distinctions based upon material wealth being well documented. Group-oriented religions emerge and may be the origins of the Kuksu religious system that arises at the end of the period. There was a greater complexity of trade systems with evidence for regular, sustained exchanges between groups. Shell beads gained in significance as possible indicators of personal status and as important trade items. This period retained the large projectile points in different forms, but the milling slab and hand stone were replaced throughout most of California by the bowl mortar and pestle. During this period, the Mendocino Pattern is present in the central and northern portions of the North Coast Ranges and the Berkeley Pattern persisted in the Central Valley, Bay and southern portion of the North Coast Ranges.

Emergent Period (A.D. 500 to 1800)

This period is distinguished by the advent of several technological and social changes. The bow and arrow were introduced, ultimately replacing the atlatl. Territorial boundaries between groups became well established and were well documented in early historic accounts. It became increasingly common for distinctions in an individual's social status to have been linked to acquired wealth. The exchange of goods between groups became more regularized with more raw materials, along with finished products, entering into the exchange networks. In the latter portion of this period (1500 A.D. to 1800 A.D.), exchange relations became highly regularized and sophisticated. The clam disk bead became a monetary unit of exchange and increasing quantities of goods are transported over greater distances. Specialists arose to govern various aspects of production and exchange.

During this period, the Augustine Pattern becomes the predominant economic/cultural manifestation in the Central Valley, Bay and southern North Coast Ranges with numerous regional aspects having been identified in the archaeological record. Cultural traits that distinguish this pattern include pre-interment grave-pit burning, tightly flexed burials and cremation. Artifact assemblages include clam and Olivella shell disk beads, magnesite cylinders, and banjo type Haliotis ornaments, as well as bird bone whistles and tubes and flanged steatite pipes. The mortar and pestle are the predominant milling implements and small arrow points replaced the larger projectile point forms more commonly associated with atlatls (spear throwers). Also found in the tool assemblages were implements such as harpoons, bone fish hooks and gorge hooks.

2.3 ETHNOGRAPHIC SETTING

The project area is situated in the ethnographic territory of the Patwin. The Patwin, which means "people" in their own language, are also known as the *Copeh* or *Southern Wintun*. At the time of initial contact between European explorers and Native Americans, they existed mainly in what are now known as Solano, Yolo, and Colusa counties, and shared territorial boundaries with many different Native American groups. The Nomlaki to the north referred to the Patwin as *noymok*, or "south people", while the Yuki to the northwest referred to them as the "Little Stony Creek Patwin" who had contact with *Ku'mnom*, or "salt people" (Johnson 1978: 358-359).

The Patwin territory took an approximate geographic expanse of 90 miles north-south by 40 miles east-west. They were known to have existed on the east side of the Coastal Range, along the foothills east of Clear Lake. Suisun Bay acted as their southern boundary, providing a Delta tule marsh habitat full of biota to exploit. From Suisun Bay to the confluence of Feather River and the lower Sacramento River,

the Patwin eastern boundary existed near the west banks of the Sacramento River. From this point to several miles north of the modern day City of Princeton, the Patwin existed on the banks of both sides of the Sacramento River, but west of the Sutter Buttes (Johnson 1978:350-351). North of Princeton early peoples were differentiated culturally and linguistically as being Nomlaki.

The Patwin belong to the Penutian linguistic stock, which has been divided into five languages. The Wintun language group, residing on the west side of the Sacramento Valley, is further divided into three distinct dialects, namely the Wintu to the north, the Central Wintun (Nomlaki), and the Southern Wintun (Patwin) (Heizer and Elsasser 1980:14). Due to the three groups sharing linguistic and cultural traits, they were all originally considered to be Wintun. As ethnographic research continued, however, early ethnologist Stephen Powers in 1877 discovered during fieldwork that the Nomlaki and the Patwin were culturally distinguishable (Johnson 1978:350). As their own cultural group, the Patwin were further divided into the Hill Patwin and the River Patwin. The Hill Patwin settled in areas along the Coastal Range foothills to the west. The River Patwin settled along the Sacramento River and various valley creek drainages (and Suisun Bay). Owing much to the fishing grounds, the highest populated areas were in villages around the Sacramento River and local stream courses. According to some of the early works by Alfred Kroeber in 1932, the total population estimate for the Patwin, Nomlaki, and Wintu before historic contact was around 12,500 (Johnson 1978:352).

The main political unit for the Patwin was the tribelet, which consisted of a primary village and several satellite villages settled around drainages. The Patwin typically lived in semi-subterranean, earth-covered structures that were oval in shape (Johnson 1978:357-358). Near riparian zones tule was also utilized to create various dwellings. Being autonomous, the tribelet held a specific territory and was led by a Chief who directed most of the economic and ceremonial activities. The status of Chief was typically inherited from father to son (Johnson 1978:354).

One of the most unique aspects of Patwin culture was the Kuksu cult. The Kuksu cult, though found throughout California, seems to have originated with the Patwin. Kroeber in 1925 wrote that the Kuksu cult was far more evident with the Patwin and took greater elaboration than other tribes in California (Kroeber 1976: 364-365; Johnson 1978:353). The Kuksu, or “big-head”, consisted of the manifestation of one or more secret societies, each of which had a series of rituals and dances. Kroeber (1976) characterizes the Kuksu as a secret event designed specifically for initiation of boys between the ages of 8 and 16 years. The Patwin boys were ritually captured, brought into a dance house, and taught the ways of the cult. As a way to stress initiation, the boys would learn dances and how to employ secret medicine and ritualistic curing acts. Women and small children were not allowed to be members.

According to Powers in 1877, the typical California Native American diet consisted mainly of acorn, fish, and small seeds (Heizer and Elsasser 1980:83). Nearly 500 plant and animal species were utilized. The Patwin were foragers who exploited three main physiographic settings in which they settled (i.e., riparian, grassland, and Coastal Range foothills). The hunting of terrestrial game such as tule elk, deer, antelope, and bear, was considered important, but it was subsidiary to collected foods that could be stored year-round. The collection of acorn as a food staple consequently became central to Patwin way of life. They harvested acorn annually from valley oak and mountain oak trees within their tribelet territory (Johnson 1978:355). Acorn by itself is not edible due to the bitter tannins inside the nut, but like many other California Native American groups, the Patwin processed acorn by first grinding the nuts into flour using bedrock mortars and pestles, and other types of milling instruments. Then the acorn flour was water-processed to leach out the bitter tannins, making the flour usable for making mush or bread (Heizer and Elsasser 1980:91–93; Johnson 1978:355). As with the various seeds collected along the Central Valley grasslands (sunflower, clover, bunchgrass, and wild oats to name a few), acorn was stored in baskets to be used during other months of the year (Johnson 1978:355).

Using nets and weirs, the River Patwin caught a variety of fish from local rivers and tributaries, including salmon, sturgeon, pike, perch, chub, sucker, hardhead, trout, and possibly steelhead (Johnson 1978:355). Along the banks the River Patwin also dug for freshwater mussels and hunted a variety of waterfowl such as ducks, geese, and quail. Much like the Ohlone to the south, River Patwin utilized tule boats to better their riverine exploitation.

2.4 HISTORIC SETTING

After Mexico seceded from Spain in 1822, land in California was divided into many large land grants, or *ranchos*. Particularly in the Central Valley, *ranchos* were established to help create stability during a time of upheaval created by European contact. In 1842 Juan Felipe Peña and Manuel Cabeza Vaca settled in the area surrounding much of what is now known as Solano County, and by 1843 they received their first land grant for the *Rancho Rio De Los Putos* (“River of the Putahs, or Patwin Indians”). The land grant originally consisted of approximately 17,754 acres (Shumway 2007; Beck and Haase 1978), but in 1858 the U.S. Government patented a much larger region of 44,384 acres for the *Rancho Los Putos*. As mentioned previously, the Project is situated in the *Rancho Los Putos* land grant.

After the explosion of the Gold Rush and the consequent exploitation of the California Delta, settlers from around the world came to establish farms in and around California’s extensive drainage system. Some turned to agriculture after bad luck with the mines, others pursued it as a lucrative endeavor that others had overlooked. In 1848 two American settlers by the name of Albert Lyon and John Patton made the first sale of land from the *Rancho Rio De Los Putos*, and in the following year Vaca sold nine square acres of his rancho to William McDaniell. In 1851 McDaniell, as part of his agreement with Vaca, established *Villa de Vacaville* and was the second town to be surveyed in Solano County. By 1892 Vacaville became incorporated as an official city that became a central community in Solano County for settlers looking to establish farm plots and orchards. (www.ci.vacaville.ca.us)

3.0 NATIVE AMERICAN OUTREACH

On August 7, 2018 SAS emailed a letter and a map depicting the Lands of Morgan project area to the Native American Heritage Commission (NAHC). The letter requested a search of Sacred Lands File database within the project area, and a list of local Native Americans that should be contacted about the Project (see Appendix A for documentation). On August 10, 2018, Ms. Sharaya Souza, Staff Services Analyst for the NAHC, replied in an emailed letter that the “Sacred Lands File was completed for the area of potential effect (APE) . . . with negative results.” Ms. Souza also supplied a list of Native Americans to contact in regard to requesting official project recommendations and information on unrecorded cultural resources that may exist in the project area. On August 15, 2018, SAS mailed letters to the following Native Americans identified by the NAHC:

- Mr. Anthony Roberts – Chairperson, Yocha Dehe Wintun Nation
- Mr. Charlie Wright – Chairperson, Cortina Rancheria – Klestel Dehe Band of Wintun Indians
- Mr. Gene Whitehouse – Chairperson, United Auburn Indian Community of the Auburn Rancheria

To date no response has been received.

The Public Resources Code Sections 21080.1, 21080.3.1, and 21080.3.2 (AB 52) requires public agencies to consult with the appropriate California Native American tribes identified by the NAHC for the purpose of mitigating impacts to cultural resources.

4.0 RECORDS SEARCH AND LITERATURE REVIEW

4.1 INFORMATION CENTER RECORD SEARCH RESULTS

SAS conducted a records search (IC No. 18-0135) for the Project at the Northwest Information Center (NWIC) at Sonoma State University on July 19, 2018 (see Appendix B for documentation). The records of the California Historical Resources Information System were searched for any previously known or recorded cultural resources, studies, and isolates within a half mile radius of the APE. The record search included, but was not necessarily restricted to, a review of the following additional sources:

- The *National Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002);
- The *California Register of Historic Places* (Historic Properties Directory, California Office of Historic Preservation 2002);
- The *California Historical Landmarks* (California Office of Historic Preservation 1996);
- The *California Points of Historical Interest* (California Office of Historic Preservation 1992);
- The *California Inventory of Historic Resources* (California Department of Parks and Recreation 1976);

The record search results indicated that two previously recorded cultural resources are located in the proposed Lands of Morgan project area (see Appendix A and Figure 4). These resources are summarized in Table 1 below.

Table 1. *Previously Recorded Resources in the Project Area*

| P # | Author | Site Description | Date Originally Recorded |
|-------------|---------|---|--------------------------|
| P-48-000167 | White | Prehistoric habitation site/lithic scatter | 1987 |
| P-48-001604 | Coleman | Historic-era Vaca Dixon-Moraga 230 kV transmission line segment | 2016 |

P-48-000167 (CA-SOL-334) was originally recorded in 1987 by G. White. The 80 meters (m) by 50 m site contained dark soil (potential midden) yielding basalt, obsidian, and chert flaked stone tools and debitage at a density of one flake per 5 m squared. Fire-affected stone was also observed along the PG&E access road gate. As estimated from a road cut, the depth of the site was approximately 0.5 m. In 2008 the site was relocated and updated by A. Ruby, who conducted minor archaeological testing along the eastern portion of the site and found a total of 47 artifacts in prehistoric midden. Mostly lithic material, the artifacts also included faunal remains. Ruby concluded that the test unit excavations likely represented the eastern edge of the site. In 2010 E. Wohlgemuth and A. Ruby updated the site again, and excavated an additional four shovel test units and a 1 m x 2 m hand excavation unit to a maximum depth of 60 centimeters (cm). Evidence for a semi-intact deposit was noted in the larger hand excavation unit. In sum, 123 prehistoric artifacts were recovered, consisting mostly of obsidian chert flakes and tools, and an unmodified quartz crystal. The excavation units were placed along the middle and eastern portions of the site due to private property boundary limitation, which leaves the western portion of the site completely untested. No California Register of Historical Resources (CRHR) or National Register of Historic Places eligibility recommendations were provided in the records.

P-48-001604 was first recorded in 2011 by J. Adams of Cardno Entrix as the Tulucay-Vaca 230kV PG&E transmission line. No accompanying location map, however, was produced in which to compare the line with the Vaca Dixon-Moraga 230 kV PG&E transmission line segment recorded by J. Coleman in 2016. Coleman recorded the 3,636-foot long segment from its western terminus at the Putah South Canal to its

eastern terminus at Highway 505. According to historic USGS topographic quadrangles, the line was constructed prior to 1942. Both Adams and Coleman recommended the resource ineligible for California Register of Historical Resources listing.

According to the records search, 21 previously recorded cultural resources lie within a half mile radius of the project area, and most lie within 350 feet. The sites consist of three prehistoric habitation sites and 18 historic-era water conveyance systems, bridges, culverts, automobiles, machinery parts, structure pads, structures, and debris scatters. These resources are summarized in Table 2 below.

Table 2. *Previously Recorded Resources Within a Half Mile Radius of the Project Area*

| P # | Author | Site Description | Date Originally Recorded |
|------|--------------------------|--|--------------------------|
| 0122 | Missioni et al. | Prehistoric lithic scatter and milling station | 1981 |
| 0424 | O'Brien and Scott | Prehistoric habitation site with midden | 1998 |
| 0425 | O'Brien and Scott | Prehistoric habitation site | 1998 |
| 0430 | O'Brien and Scott | Historic-era structures, bridge, and culvert | 1998 |
| 0431 | O'Brien and Scott | Historic-era water conveyance, bridge, and culvert | 1998 |
| 0432 | Norton and Syda | Historic-era water conveyance system and bridge | 1998 |
| 0837 | Pappas | Historic-era debris scatter | 2008 |
| 0840 | Pappas | Historic-era barn | 2008 |
| 0841 | Pappas | Historic-era automobiles | 2008 |
| 0842 | Pappas | Historic-era residence foundation pads | 2008 |
| 0843 | Pappas | Historic-era machinery | 2008 |
| 0844 | Pappas | Historic-era structure foundation | 2008 |
| 0845 | Pappas | Historic-era debris scatter | 2008 |
| 0846 | Pappas | Historic-era structure | 2008 |
| 0847 | Pappas | Historic-era machinery | 2008 |
| 0848 | Pappas | Historic-era machinery | 2008 |
| 0849 | Pappas | Isolated historic-era wire bale | 2008 |
| 0850 | Pappas | Historic-era machinery | 2008 |
| 0851 | Pappas | Historic-era machinery | 2008 |
| 0852 | Pappas | Isolated historic-era water pump | 2008 |
| 0853 | Pappas | Isolated historic-era truck | 2008 |

According to the records search four archaeological studies were previously conducted in the project area and are summarized in Table 3 below. In sum, the studies comprise approximately 5% of the total project area.

Table 3. *Previously Conducted Studies in the Project Area*

| Report # | Author | Title | Date |
|----------|------------------|--|------|
| 09124 | Holson and Hager | Cultural Resources Study for the Vaca Dixon-Moraga 230 kV Transmission Line Reconductoring Project | 1987 |
| 20960 | Jones & Stokes | Archaeological Survey Report for the Rural North Vacaville Water District Water System | 1998 |

| | | | |
|-------|-------------------|--|------|
| 35709 | Pappas & Westwood | Cultural Resources Inventory: Burton Property, Solano County | 2009 |
| 47936 | Adams | Vaca Dixon-Lakeville 230kV Reconductoring Project, 2012 Sonoma, Napa, and Solano Counties, Historical and Architectural Investigations for the Transmission Lines and Lakeville Substation | |

The records search results also indicated that five archaeological studies were previously conducted within a half mile radius of the project area. These studies are summarized in Table 4 below.

Table 4. *Previously Conducted Studies Within a Half Mile Radius of the Project Area*

| Report # | Author | Title | Date |
|----------|----------|--|------|
| 05138 | Soule | Cultural Resources Field Report, Application 25319, 1979 Bergener and Carty Property, Vacaville | |
| 05152 | Missioni | Archeological Survey of the Rodger Miller Property | 1981 |
| 27305 | Baker | Cultural Resources Survey of the Pecotte Property, 7110 Gibson Canyon Road, Vacaville | 2003 |
| 27449 | Jensen | Archaeological Inventory Survey Rice/McMurtry Annexation and Residential Development Project | 2003 |
| 32883 | Roark | Cultural Resources Inventory of the Terra del Sol Subdivision and Adjacent Lots, Rural North Vacaville | 2006 |

4.2 ADDITIONAL ARCHIVAL AND LAND-USE RESEARCH

As part of SAS's in-house literature review, historical (Beck and Haase 1978; Kyle 1990), ethnographic (e.g., Golla 2011; Heizer 1978; Kroeber 1976), geological, and soil (USDA 2015) resources were examined to help formulate expectations about the location, historic land use, and type of cultural resources that may be discovered within the project area.

SAS reviewed a series of historic USGS topographic maps and historic aerial photographs to gather information on past land use and historic development in the Project area. According to the 1917 and 1954 *Allendale, California* USGS 7.5' topographic quadrangles, roads, transmission lines, and structures existed in the project area and may represent unrecorded resources. During survey the Vaca Dixon-Moraga 230 kV transmission line (P-48-001604) was relocated, and a single family house located at 4142 Cantelow Road (SAS-004) was identified as a cultural resource.

The General Land Office (GLO) plat map of 1858 Township 7 North, Range 1 West did not reveal any pertinent information. GLO land patents for Township 7 North, Range 1 West, however, show that a portion of the project area in the southwest corner of Section 29 was bought as a cash sale by Robert Simpson in 1865, and land in the southeast quarter of Section 30 was owned by James M. Pepper and George Newton in 1866.

5.0 FIELD METHODS

On May 13-14, and 19, 2018, SAS archaeologists Matt Rives, Susan Talcott, Ben Akey, and Anthony Boltz conducted an intensive pedestrian survey of the project area walking 25-meter transects. The SAS crew was led by Field Director Jason A. Coleman, M.A., who is a Registered Professional Archaeologist (#15338) and exceeds the Secretary of the Interior's Standards for Archaeology. Digital photographs were taken of the survey area (see Plates 1-6 below), and observations were thoroughly documented. All ground disturbance caused by bioturbation was thoroughly examined, and vegetation was periodically scraped away to inspect the ground surface. A sub-meter accurate Trimble GPS unit was utilized to verify project area location (NAD 83). All newly identified and relocated cultural resources were documented with State of California Department of Parks and Recreation records.

6.0 FINDINGS

Most of the property was covered in annual grasses that greatly hampered ground surface visibility. Overall visibility ranged from 0-5% at best. Most of the property showed signs of current cattle grazing as evident by shortened grass length, cow pies, and the occasional trough.

In sum, four new cultural resources (SAS-001 through 004) were identified in the project area, and two previously documented resources (P-48-000167 and P-48-001604) were relocated and updated (Figure 4). These resources are summarized in Table 5 below.

Table 5. *Cultural Resources Documented in the Project Area*

| Field Designation / P # | Association | Description | Recommended CRHR Eligibility |
|----------------------------|--------------|---|---------------------------------|
| SAS-001 | Historic-era | Water conveyance system - water catchment/spillway features | Ineligible |
| SAS-002 | Historic-era | Water conveyance system - headgate, cistern, and footings | Ineligible |
| SAS-003 | Historic-era | Water conveyance system - retaining wall with drain pipe | Ineligible |
| SAS-004 | Historic-era | 4142 Cantelow Road - single-family house built in 1964 | Unevaluated |
| P-48-000167 | Historic-era | Prehistoric lithic scatter and milling station | Potentially eligible |
| P-48-001604 | Historic-era | Vaca Dixon-Moraga 230 kV transmission line | Ineligible |

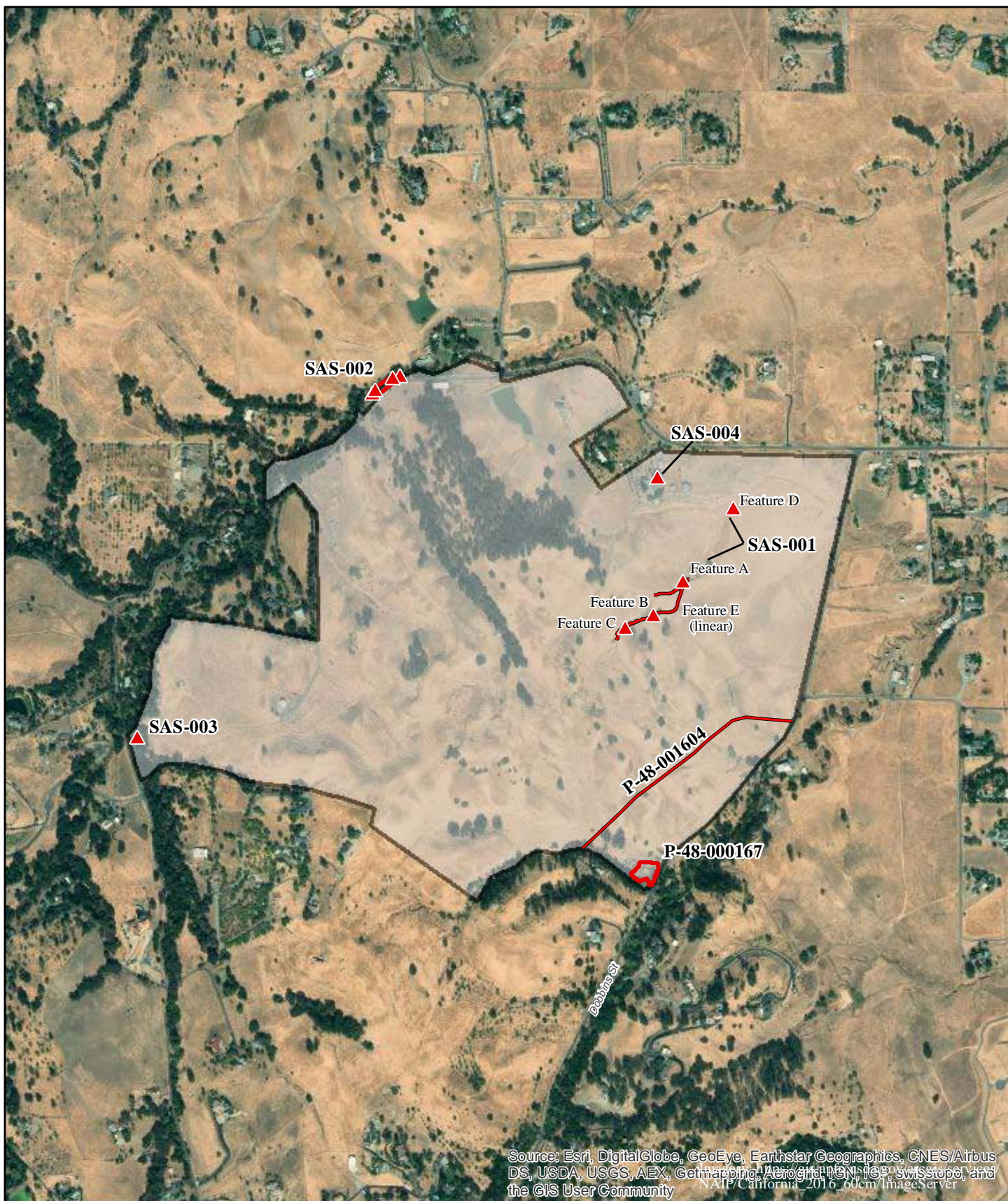
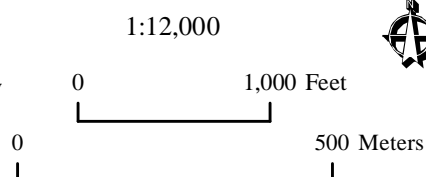


Figure 4. Cultural Resources Map.

- ▲ Cultural Resource
- Linear Resource
- ▭ Cultural Resource Boundary
- ▭ Project Area



6.1 NEWLY IDENTIFIED RESOURCES

SAS-001 - This site consists of a historic-era water conveyance system comprised of five features (A-E) located in the English Hills between Gibson Canyon Road and Steiger Hill Road north of Vacaville proper. The system was essentially built on a naturally created seasonal drainage emanating from hills with a northeast aspect. The features lie directly on top of the drainage from an elevation of 324-208 feet above sea level, and consist of four water catchment/spillways (Features A-D) and two conjoining segments of mechanically modified natural drainages (Feature E). Features A-D vary in size slightly but are all essentially the same design and constructed in the same manner. Each water catchment/spillway feature has two retaining walls built from stacked and mortared basalt cobbles built into the ground perpendicular to the flow of the drainage, and in the middle of the walls is a ramped spillway that sends flowing waters downward to the next tier. Each water catchment/spillway feature is located topographically where the sloped incline of a hill meets a plateau, indicating that the function of the features was to capture waters that might normally spread out over the plateau, and send them downward through the spillway. The basalt cobble utilized to build these structures were slightly “faced” or worked to provide a flatter surface on the walls, and old cement containing a high pea gravel content was utilized to mortar the cobbles into place. Around Features A, B, and D were isolated modified cobbles on the ground that appear to have once been utilized as part of features. The outside of the walls, particularly the tops, and the spillway were dressed with a coating of cement to provide a smooth finish. Feature E was comprised of two conjoining segments of drainages that appeared to be mechanically modified by a front loader, as the paths were rectilinear in shape and size. By style, type of cement, and decay represented by the features overall, site SAS-001 appears to date some time from the first half of the 20th Century.

SAS-002 - This site consists of a historic-era water conveyance system comprised of four features (A-D) located in the English Hills just north of Cantelow Road in Vacaville. The system was essentially built right on English Creek in the English Hills. Feature A consists of a circular brick-lined cistern, Feature B is a large cement headgate, and Features C and D are each comprised of a cement footing on opposite sides of the creek. No artifacts were observed in association with the features. Feature B consists of a large cement headgate that crosses English Creek. The two main water catchment walls are approximately 3-feet high, 2-feet deep, and 6-feet long, and were placed directly into the banks during construction. The spillway in the center is now missing its gate, which was likely metal to hold the amount of water pressure that could be caused by quickly flowing winter waters, but there are vertical grooves along the inside of the walls that the gate once slid into that can still be seen. Crumbling cement fragments now constitute remnants of the spillway. Downstream long, rounded and slightly vertical basalt outcrops located adjacent to the spillway were utilized as natural weirs to control the flow of moving waters. Based on overall style, headgate design, and decay of the resources, site SAS-002 appears to date some time from the first half of the 20th Century.

SAS-003 - This site consists of a historic-era retaining wall with pipe outlet located adjacent to the English Creek South Fork in the English Hills of Vacaville, California. The wall was built along the bottom of the creek’s east embankment, and functions to drain waters collected further up the hill to the southeast via the drain pipe. Built with a slight buttress toward the creek, the wall stands approximately 4-feet high and is slightly bowed in length for approximately 10-feet. The wall was constructed from modified basalt cobbles that were faced to provide a smoother finish. The cobbles were mortared into place with cement containing a high sand content. The pipe outlet, made from cement and measuring approximately 14-inches in diameter, exits from the retaining wall at the wall length midpoint about 3-feet high. Approximately 50 feet further northeast up the hill the pipe was observed in a small patch of indented ground. Based on overall design, including usage of localized materials and older cement, site SAS-003 appears to date some time from the first half of the 20th Century.

SAS-004 – This resource consists of a single family house structure built in 1964 (Solano County Assessors 2018). Located at 4142 Cantelow Road on APN# 0105-170-150, SAS-004 is a single story home with three bedrooms and two baths. This structure was not formally recorded.

6.2 RELOCATED IDENTIFIED RESOURCES

P-48-000167 – This site was relocated in the original area discovered by White in 1987 and was found to be in fair condition. The site area lie on a saddle landform sloping downward from the northwest. The site was also situated just north of an unnamed seasonal drainage meandering southeastward from the hills to the west. The framework of an old shed was observed at the top of the saddle, and clearly the top of the saddle had been scraped by mechanical activity. As the site slopes downward to the creek more scraping was evident and likely occurred during installation of adjacent power poles. Two obsidian interior flakes (<2 cm in length) and two basalt cores were found along the slope, and on the saddle top four pieces of basalt shatter, one chert flake, and one faunal remain were observed on the ground surface.

P-48-001604 - The Vaca Dixon-Moraga 230kV transmission line was easily relocated, and a new 2,780-foot segment on the Morgan property was recorded. Construction was consistent with previous recordation, and the line remains in good condition. There were no observable changes to the line on the new recorded segment.

6.3 RESOURCE EVALUATION

The CRHR is a catalog of districts, sites, buildings, structures, and objects of significance in American or California history, architecture, archaeology, engineering, and culture. Properties may be listed in the CRHR if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and meet the criteria enumerated in Section 1.3 above.

SAS-001: Recommended ineligible for CRHR listing.

CRHR Criterion 1: The water catchment/spillway features and modified drainage channels are an interesting adaptation to a localized environment, and as such they are unique in their function for controlling the flow and direction of seasonally running water. There are, however, many situations throughout California where local ranchers have modified waterways for control of water flow and direction, and most of these water conveyance systems are localized adaptations that were unique only within the context of their specific environment. SAS-001 remains a local adaptation that was a not a viable system that branched into California history as a repeated and reliable water conveyance system. As such SAS-001 does not make significant contributions to the history of California, nor change patterns in cultural heritage, and therefore does not satisfy CRHR Criterion 1.

CRHR Criterion 2: Preliminary research was unable to connect the creation and utilization of SAS-001 with any specific person from the past. Land on which SAS-001 is situated is in the *Los Putos* Land grant, which limited search parameters for GLO land patent research. As SAS-001 cannot be proved to be associated with important peoples from the past, SAS-001 does not satisfy CRHR Criterion 2.

CRHR Criterion 3: As discussed above, SAS-001 represents a localized adaptation to a seasonal drainage. The construction of Features A-D are consistent in regard to style but not dimension, which show variance likely due to adapting the feature to the slope of the hill, course of the water, and other environmental situations. The use of local cobbles and “facing” them for a stylized and smooth finish is creative but far from unique. Additionally, modifying existing waterways as seen with Feature E is commonplace and does not represent the design or work from an important creative individual. Given these parameters, SAS-001 does not satisfy CRHR Criterion 3.

CRHR Criterion 4: Although an interesting solution to controlling the flow of water, SAS-001 does not provide any data potential that would yield significant changes in the history of California, and as such does not satisfy CRHR Criterion 4.

SAS-002: Recommended ineligible for CRHR listing.

CRHR Criterion 1: The headgate, cistern, and footings associated with SAS-002 are the remnants of a water conveyance system house on English Creek. The exact function or reasoning for positioning a headgate at that locale is unknown, but it can be speculated that were possible needs for flood control, agriculture, or cattle grazing. The use and function of controlling water flow through the use of headgates and weirs is a common practice throughout California, particularly in the first half of the 20th Century. Cisterns are common, and the exact function of the two footings is unknown. As such SAS-002 does not make significant contributions to the history of California, nor change patterns in cultural heritage, and therefore does not satisfy CRHR Criterion 1.

CRHR Criterion 2: Research shows that land in the southeast quarter of Section 30 in Township 7 North Range 1 West was owned by two gentlemen named by James M. Pepper and George Newton in 1866. The antiquity of SAS-002, however, appears to be more consistent with remnants and styles from the early to mid-20th Century. No individuals were able to be concretely connected with the creation of SAS-002, and therefore SAS-002 does not meet CRHR Criterion 2.

CRHR Criterion 3: The headgate was built from cement to create two large, very non-stylized rectangular walls, and the gate that once slid down the middle of the walls is now gone. Although the use of natural basalt outcrops as weirs is interesting, it is only unique to the function of this particular water conveyance system. The construction of the headgate is not unique and is commonplace in California during the first half of the 20th Century. Additionally, the brick-lined cistern does not represent any unique style or design, and the function of the two footings if not known. As such, SAS-002 does not satisfy CRHR Criterion 3.

CRHR Criterion 4: Although the headgate and use of local basalt outcrops as weirs is interesting, the exact function of the system on English Creek is not known, and as a water conveyance system among many in California at that time SAS-002 does not provide any data potential that would yield significant changes in the history of California. SAS-002, therefore, does not satisfy CRHR Criterion 4.

SAS-003: Recommended ineligible for CRHR listing.

CRHR Criterion 1: The use of “faced” locally quarried basalt cobbles shows resourcefulness by the designer, and stylistic consistency with the mortared cobbles from SAS_001. Additionally, the installation of the cement buried pipe also displays a creative and effective way to drain meandering seasonal waters from the hills to the English Creek South Fork. Functioning as a retaining wall and water drainage system, however, SAS-003 is not unique and such erosion control and water drainage measures are commonplace in California during the first half of the 20th Century. Therefore SAS-003 does not satisfy CRHR Criterion 1.

CRHR Criterion 2: Preliminary research was unable to connect the creation and utilization of SAS-003 with any specific rancher from the past. Land on which SAS-003 is situated is in the *Los Putos* Land grant, which limited search parameters for GLO land patent research. As SAS-003 cannot be proved to be associated with important peoples from the past, SAS-003 does not satisfy CRHR Criterion 2.

CRHR Criterion 3: Facing locally quarried basalt cobble and mortaring them into place is stylistically interesting and resourceful but does not represent the work or design of a master. The design and utilization of the cement pipe also is not unique. SAS-003 as such does not satisfy CRHR Criterion 3.

CRHR Criterion 4: Although an interesting solution for directing hillside drainage into an existing natural drainage system, SAS-004 to not provide any data potential that would yield significant changes in the history of California, and as such does not satisfy CRHR Criterion 4.

SAS-004: Unevaluated

Due to the nature and complex character of the historic-era single-family home at 4142 Cantelow Road (APN# 0105-170-150), a researcher meeting the federal *Secretary of the Interior's Professional Qualifications Standards* in history/architectural history should conduct an CRHR evaluation of the structure.

P-48-000167: Recommended potentially eligible

CRHR Criteria 1-3: As a prehistoric site CRHR Criteria 1-3 are not particularly relevant to assessing the significance of P-48-00167. As such, P-48-00167 can be considered to not satisfy CRHR Criteria 1-3.

CRHR Criterion 4: The east half of P-48-00167 was archaeologically tested and revealed moderate quantities of flaked stone materials, tools, and archaeological midden soils. The west side of the site, which resides on the Morgan property, has never been tested for subsurface deposits and appears to lie at a more critical landform being on a saddle adjacent to a creek. White in 1987 found numerous obsidian, basalt, and chert flakes along the ground surface of this west half of the site. Prehistoric peoples commonly inhabited areas along creek and river banks to exploit the numerous natural resources that were abundant in such ecological zones. Unless future excavations of soils along the west half of P-48-000167 in the Morgan project area prove otherwise, the west half of the site should be considered to have the potential to yield significant prehistoric deposits, including possible prehistoric interments. As such, site P-48-00167 may be likely to yield significant knowledge and data potential that is important to prehistory, and satisfies CRHR Criterion 4.

P-48-001604: Recommended ineligible

This resource has been previously evaluated as ineligible for CRHR listing by previous investigators (see site record in Appendix B). SAS concurs with this evaluation.



Plate 1. SAS-001 Feature A, facing east.



Plate 2. SAS-002 Feature B, facing northeast.



Plate 3. SAS-003, facing north.



Plate 4. P-48-000167, facing southeast.



Plate 5. P-48-001604, facing west.



Plate 6. SAS-004, facing south.

7.0 RECOMMENDATIONS

The NAHC was negative for sacred lands in the Project vicinity, but the records search from the NWIC identified two sites previously documented (P-48-000167 and P-48-001604) in the project area along with 21 other sites within a half mile periphery. During survey both sites were relocated and updated, and P-48-000167, a prehistoric lithic scatter adjacent to an unnamed seasonal drainage, was recommended potentially eligible for CRHR listing. P-48-001604 was previously deemed ineligible, and SAS concurs with the recommendation. Four other cultural resources (SAS-001 through SAS-004) were identified during survey. SAS-001 through SAS-003 were historic-era water conveyance systems that did not meet CRHR criteria and hence were recommended ineligible. SAS-004, a historic-era single-family home, remains unevaluated.

In regard to the Project undertaking, the process of subdivision will not cause any substantial adverse change(s) to sites P-48-00167, P-48-001604, and SAS-001 through 004. SAS, therefore, recommends no further management in regard to this undertaking. However, should future development become planned that involves any type of ground disturbance within 50 feet of western portion of P-48-000167 (as previously identified on the Morgan property), SAS highly recommends that the archaeological testing and evaluation be conducted at the site area to properly assess the resource for CRHR eligibility criteria. Additionally, if any future development is proposed that may potentially cause substantial adverse changes to SAS-004 (4142 Cantelow Road / APN# 0105-170-150), SAS recommends that a researcher meeting the federal *Secretary of the Interior's Professional Qualifications Standards* in history/architectural history should conduct an CRHR evaluation of the structure.

In the event that presently undocumented buried archaeological deposits are encountered during any Project-associated construction activity, work must cease within a 50-foot radius of the discovery. A qualified archaeologist must be retained to document the discovery, assess its significance, and recommend treatment. If human remains or any associated funerary artifacts are discovered during construction, all work must cease within the immediate vicinity of the discovery. In accordance with the California Health and Safety Code (Section 7050.5), the Solano County Sheriff/Coroner must be contacted immediately. If the Coroner determines the remains to be Native American, the Coroner will notify the Native American Heritage Commission, which will in turn appoint a Most Likely Descendent (MLD) to act as a tribal representative. The MLD will work with the Applicant and a qualified archaeologist to determine the proper treatment of the human remains and any associated funerary objects. Construction activities will not resume until either the human remains are exhumed, or the remains are avoided via Project construction design change.

8.0 REFERENCES

Anderson, M. Kat

2005 *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*. University of California Press. Berkeley, California.

Bakker, E.

1984 *An Island Called California: An Ecological Introduction to its Natural Communities*. University of California Press. Berkeley, California.

Balls, E. K.

1962 *Early Uses of California Plants*. University of California Press. Berkeley, California.

Barbour, M. G. and J. Major (editors)

1977 *Terrestrial Vegetation of California*. Wiley and Sons, Inc. New York, New York.

Barbour, M., B. Pavlik, F. Drysdale, and S. Lindstrom

1993 *California's Changing Landscapes: Diversity and Conservation of California Vegetation*. California Native Plant Society. Sacramento, CA.

Bates, L.

1977 *Soil Survey of Solano County, California*. U.S. Department of Agriculture, Soil Conservation In Cooperation with University of California Agricultural Experiment Station.

< http://soils.usda.gov/survey/online_surveys/california/ >

Beardsley, R. K.

1954 Temporal and Areal Relationships in Central California Archaeology. In *University of California Archaeological Survey Reports* 24:1-62; 25:63-131.

Beck, W. and Y. D. Haase

1974 *Historical Atlas of California*. University of Oklahoma Press, Norman, Oklahoma.

Bell, J.

2018 S-18-02;Z-18-02;GP-18-01; MS-18-01 – Lands of Morgan Subdivision – Zoning and General Plan Amendment. Memorandum sent to Nedzlene Ferrarrio, Senior Project Planner, Solano County on March 9, 2018.

Bennyhoff, J.A.

1977 *Ethnogeography of the Plains Miwok*. Center for Archaeological Research at Davis, Publication Number 5.

Bennyhoff, J. A., and R. E. Hughes

1987 Shell Bead Ornament Exchange Networks Between California and the Western Great Basin. *Anthropological Papers of the American Museum of Natural History* 64(2):79–175. American Museum of Natural History, Washington, D.C.

Books, Hephaestus

2011 *Geography Of Solano County, California, including: Mare Island, Suisun Bay, Carquinez Strait, Hayward Fault Zone, Carquinez Bridge, Suisun Marsh, Sacramento Deep Water Ship Channel, North Bay Aqueduct, Sulfur Springs Mountain, and Cordelia Slough*. Hephaestus Books. Richardson, Texas.

Brown, A. G.

1997 *Alluvial Geoarchaeology: Floodplain Archaeology and Environmental Change*. Press Syndicate, University of Cambridge. Cambridge, England.

Brown, Vinson

1999 *The Californian Wildlife Region*. Naturegraph. Happy Camp, California.

Brown, V., D. Allan, and J. Stark

1987 *Rocks and Minerals of California*. Naturegraph. Happy Camp, CA.

California Department of Parks and Recreation

1976 *California Inventory of Historic Resources*. California Department of Parks and Recreation, Sacramento.

California Office of Historic Preservation

1992 *Points of Historical Interest*. California Department of Parks and Recreation, Sacramento.

1996 *California Historical Landmarks*. California Department of Parks and Recreation, Sacramento.

2002 *Directory of Properties in the Historic Property Data File, 08/05*. California Department of Parks and Recreation, Sacramento.

Clarke, C. B.

1977 *Edible and Useful Plants of California*. University of California Press. Berkeley, California.

Coleman, J., C. Gross and B. Ludwig

n.d. *Archaeological Investigations at CA-SOL-364: Final Report for the Tower Mart Store #99 Project, Solano County, California*. Unpublished manuscript.

Compton, R. R.

1985 *Geology in the Field*. Wiley and Sons. New York, New York.

Dupras, D. L.

1988 *Mineral Land Classification: Portland Cement Concrete Grade Aggregate in the Sacramento-Fairfield Production-Consumption Region, SR 156*.

Dallman, P. R.

1998 *Plant Life in the World's Mediterranean Climates: California, Chile, South Africa, Australia, and the Mediterranean Basin*. University of California Press. Berkeley, California.

Eliot, W. A.

1938 *Forest Trees of the Pacific Coast*. Putnam and Sons. New York.

Eschmeyer, William N. and Earl S. Herald

1983 *A Field Guide to Pacific Coast Fishes: North America*. Houghton Mifflin Company, New York.

Fredrickson, D. A.

1973 *Early Cultures of the North Coast Ranges, California*. Ph.D. dissertation, Department of Anthropology, University of California, Davis.

1994 Spatial and Cultural Units in Central California Archaeology. In *Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson*, edited by R.E. Hughes, pp. 25-48. Contributions of the University of California Archaeological Research Facility no. 52.

- Gilliam, Harold
2002 *Weather of the San Francisco Bay Region*. University of California Press. Berkeley, California.
- Harden, D. R.
1998 *California Geology*. Prentice Hall. Upper Saddle River, New Jersey.
- Heizer, R. F., editor
1978 *Handbook of North American Indians*, vol. 8. Smithsonian Institution, Washington.
- Heizer, R. F. and A. B. Elsasser
1980 *The Natural World of the California Indians*. University of California Press, Berkeley.
- Hickman, J. C. (editor)
1993 *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, California.
- Hinds, N. E. A.
1952 *Evolution of the California Landscape*. California Department of Natural Resources, Division of Mines, Bulletin 158. San Francisco, CA
- Holland, R.F.
1986 *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game. Sacramento, CA.
- Holliday, V. T. (editor)
1992 *Soils in Archaeology: Landscape Evolution and Human Occupation*. Smithsonian Institution Press. Washington, D.C.
- Howard, A.D.
1979 *Geologic History of Middle California*. University of California Press. Berkeley, California.
- Hughes, R., editor
1994 *Toward a New Taxonomic Framework for Central California Archaeology. Contributions of the University of California Archaeological Research Facility No. 52*, Berkeley, CA.
- Hundley, Norris
2001 *The Great Thirst: Californians and Water-A History*. University of California Press. Berkeley, California.
- Graymer, R. W., D. L. Jones, and E. E. Brabb
2002 *Geologic Map and Map Database of Northeastern San Francisco Bay Region, California*. Most of Solano County and Parts of Napa, Marin, Contra Costa, San Joaquin, Sacramento, Yolo, and Sonoma Counties. USGS. Arc Info coverages at 1:62,500 scale.
- Gross, C. and J. Coleman
2011 *Archaeological Inventory and Evaluation for the Wal-Mart Mitigation at the Old Lynch Canyon Homestead Project, Solano County, California*. Report prepared for the Solano Land Trust.
- Jepson, W. L.
1975 *A Manual of the Flowering Plants of California*. University of California Press. Berkeley, California.
- Johnson, P.
1978 *Patwin*. In *California*, edited by R.F. Heizer, pp. 350-360. *Handbook of North American Indians*, vol. 8. W.C. Sturtevant, general editor. Smithsonian Institution, Washington D.C.
- Johnston, V. R.
1994 *California Forests and Woodlands: A Natural History*. University of California Press. Berkeley, California.

- Jones, T.L. and K.A. Klar
2007 *California Prehistory: Colonization, Culture, and Complexity*. Alta Mira Press, Lanham, Maryland.
- Kroeber, A. L.
1976 *Handbook of the Indians of California*, reprint of 1925 Bulletin 78, Smithsonian Institution. Dover Publications, New York.
- Lightfoot, Kent G. and Otis Parrish
2009 *California Indians and Their Environment: An Introduction*. University of California Press. Berkeley, CA
- Lillard, J. B. and W. K. Purves
1936 The Archaeology of the Deer Creek—Cosumnes Area, Sacramento Co., California. In *Sacramento Junior College, Department of Anthropology Bulletin 1*, Sacramento, CA.
- Lukas, David
2000 *Wild Birds of California*. University of Nevada Press. Reno Nevada. Madgic, Bob
- Luthin, H.W.
2002 *Surviving Through The Days*. University of California Press, Berkeley, CA.
- Miller, Crane S. and Richard S. Hyslop
2000 *California: The Geography of Diversity*. Mayfield. Mountain View, California.
- McGinnis, Samuel M.
1984 *Freshwater Fishes of California*. University of California Press. Berkeley, California.
- Moratto, M. J.
1984 *California Archaeology*. Academic Press, Orlando, FL.
- Nelson, N. C.
1909 Site Survey, Russian River to Golden Gate Mounds. In *University of California Archaeological Survey Manuscripts 351*, Berkeley, CA.
- National Cooperative Soil Survey
2000 *Brentwood Series*. Natural Resources Conservation Service, USDA.
< <http://www2.ftw.nrcs.usda.gov/osd/dat/Y/YOLO.html>>
- Pavlik, B. M., P. C. Muick, S. G. Johnson, and M. Popper
1991 *Oaks of California*. Cuchuma Press. Los Olivos, CA.
- Peeters, Hans, and Pam Peeters
2005 *Raptors of California*. University of California Press. Berkeley, California.
- Peterson, Roger Tory
1990 *A Field Guide to Western Birds: A Completely New Guide to Field Marks of all Species Found in North America West of the 100th Meridian and North of Mexico*. Houghton Mifflin Company, Boston.
- Pilas-Treadway, D.
2014 Young Lateral Project, Solano County. Letter dated March 13, 2014, in response to a Sacred Lands database records search. The letter was faxed to Solano Archaeological Services.
- Ragir, S. R.
1972 The Early Horizon in Central California Prehistory. In *Contributions of the University of California Archaeological Research Facility 15*, Berkeley, CA.

- Rice, R. B., W. A. Bullough, and R. J. Orsi
1996 *The Elusive Eden, A new History of California*, 2nd ed.. The McGraw-Hill Companies, New York.
- Schenck, P. D. and E. J. Dawson
1929 Archaeology of the Northern San Joaquin Valley. In *University of California Publication in American Archaeology and Ethnology* 25:289-413.
- Shumway, Burgess McK.
1988 *California Ranchos: Patented Private Land Grants Listed by County*, edited by Michael Burgess and Mary Wickizer Burgess. The Borgo Press An Imprint of Wildside Press.
- Solano County
1877 *Map of Solano County, California*. On file, Northwest Information Center, Rohnert Park, CA.
- Stebbins, Robert C.
1966 *A Field Guide to Western Reptiles and Amphibians*. Houghton Mifflin Company, Boston.
- Stienstra, Tom
2000 *California Wildlife: A Practical Guide*. Avalon Travel Publishing. Emeryville, California.
- Storer, Tracey I. and Lloyd P. Tevis
1996 *California Grizzly*. University of California Press. Berkeley, California.
- Thomas Bros.
1946 *Map of Solano County, California*. Northwest Information Center, Rohnert Park, CA.
- United States Department of Agriculture (USDA)
2018 *Web Soil Survey, Solano County, California*. Natural Resources Conservation Service.
<<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>
- Udvardy, Miklos D. F.
1986 *The Audubon Society Field Guide to North American Birds: Western Region*. Alfred A. Knopf. New York
- Weber, C.F.
1914 C.F. Weber and Co. Unnamed Map of the Rockville area. On file, Northwest Information Center of the Historical Resources File System, Sonoma State University, Rohnert Park, CA.
- Whitaker, John
1988 *The Audubon Society Field Guide to North American Mammals*. Alfred A. Knopf. New York
- White, G., and D.A. Fredrickson.
1992 *Research Design for: The Anderson Flat Project, Archaeological Data Recovery Investigations at Sites CA-LAK-72, 509, 510, 536, 542, and 1375, Lake County, California*. On file, Northwest Information Center of the Historical Resources File System, Sonoma State University, Rohnert Park, CA.
- White, G. G. and D. Coleman, C. O'Brien, E. Dwyer, J. Peabody, E. Kallenbach, and L. Westwood
2002 Final Report of Testing and Mitigation at Four Sites on the Level (3) Long Haul Fiber Optic Alignment, Colusa County, California. In *California State University, Chico Archaeological Research Program Reports No. 42*.
- Wilson, N.L. and A.H. Towne
1982 The Niesenans: California Indian Peoples of Sacramento, Yuba, El Dorado, Placer and Nevada Counties. Unpublished manuscript.

Wiltens, J.

1999 *Edible and Poisonous Plants of Northern California*. Wilderness Press. Berkeley, CA.

APPENDIX A

Native American Outreach Documentation



August 7, 2018

Native American Heritage Commission
1550 Harbor Blvd, Suite 100
West Sacramento, CA 95691

To Whom It May Concern:

Private landowner William Morgan has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 300-acre property located in Vacaville, **Solano County**, for the proposed **Lands of Morgan Project** (Project). Mr. Morgan proposes to subdivide the property into multiple smaller parcels for future development. The undertaking is defined as the subdivision only as there are no current development plans in place.

The project site is located 2.3 miles north from downtown Vacaville, and is situated in the English Hills bordered by Cantelow Road, Steiger Hill Road, and Gibson Canyon Road. Lying in western Solano County, the Project is located in Sections 28-30, Township 7 North, Range 1 West, and in the *Los Putos* land grant (approximately Township 6 North, Range 1 West) as depicted on the *Allendale, California* USGS topographic quadrangle. Please find map attached for your review.

The cultural resources inventory will include a pedestrian survey of the project area. Before we commence fieldwork, however, we would like to request a review of the Sacred Lands File (SLF) for any known cultural resources in the project area. If you could please send us a list of Native American contacts, we would greatly appreciate it. We would like to request information from these individuals/entities about any possible unrecorded cultural resources that may exist in the project area, and gather any and all official Project recommendations. Please know that this request for a SLF search and list of local Native American groups is for informational purposes only, and is not part of official AB 52/ SB 18 consultation.

If you could please email back the SLF search results and Native American contact lists to jason@solanoarchaeology.com, I would greatly appreciate it.

If you have any questions, feel free to contact me at the numbers listed above. Thank you very much for your time.

Thanks,

A handwritten signature in blue ink, appearing to read "Jason Coleman", is written over a faint, larger signature.

Jason Coleman
Principal Investigator and Owner

Enc. USGS topographic map and aerial map

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710



August 10, 2018

Jason Coleman
Solano Archaeology

Sent by Email: jason@solanoarchaeology
Number of Pages: 2

RE: Lands of Morgan Project, Allendale, Solano County

Dear Mr. Coleman:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. **Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.**

I suggest you contact all of those listed, if they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. **By contacting all those on the list, your organization will be better able to respond to claims of failure to consult.** If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: Sharaya.Souza@nahc.ca.gov.

Sincerely,

for 

Sharaya Souza
Staff Services Analyst
(916) 573-0168

**Native American Heritage Commission
Native American Consultation List
8/10/2018**

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians

Charlie Wright, Chairperson

P.O. Box 1630

Wintun / Patwin

Williams, CA 95987

(530) 473-3274 Office

(530) 473-3301 Fax

United Auburn Indian Community of the Auburn Rancheria

Gene Whitehouse, Chairperson

10720 Indian Hill Road

Maidu

Auburn, CA 95603

Miwok

(530) 883-2390 Office

(530) 883-2380 Fax

Yocha Dehe Wintun Nation

Anthony Roberts, Chairperson

P.O. Box 18

Wintun (Patwin)

Brooks

, CA 95606

aroberts@yochadehe-nsn.gov

(530) 796-3400

(530) 796-2143 Fax

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native American Tribes for the proposed:

Lands of Morgan Project, Allendale, Solano County



August 15, 2018

Yocha Dehe Wintun Nation
Attn. Anthony Roberts, Chairperson
P.O. Box 18
Brooks, CA 95606

RE: Cultural Resources Inventory for the Lands of Morgan Project, Solano County, California

Dear Mr. Roberts:

Private landowner William Morgan has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 300-acre property located in Vacaville, Solano County, for the proposed Lands of Morgan Project (Project). Mr. Morgan proposes to subdivide the property into multiple smaller parcels for future development. The undertaking is defined as the subdivision only as there are no current development plans in place.

We are writing to introduce the Project to you, and gather any information on undocumented sites that may exist in the project area. Any help here would be greatly appreciated. Additionally, if you have any official recommendations you would like to make in regards to the Project and its undertaking, or have any questions about the Project, please feel free to contact us. Please know that this inquiry is for informational purposes, and is not part of official AB 52 or SB 18 consultation that needs to be conducted by a government agency.

The project site is located 2.3 miles north from downtown Vacaville, and is situated in the English Hills bordered by Cantelow Road, Steiger Hill Road, and Gibson Canyon Road. Lying in western Solano County, the Project is located in Sections 28-30, Township 7 North, Range 1 West, and in the Los Putos land grant (approximately Township 6 North, Range 1 West) as depicted on the Allendale, California USGS topographic quadrangle. Please find the Project map attached for your review.

The review of the Native American Heritage Commission Sacred Land File (SLF) had negative results. The records search at the Northwest Information Center at Sonoma State University, however, resulted in two previously recorded cultural resources in project area (P-48-0167 and P-48-1604). P-48-0167 consisted of a prehistoric habitation site/lithic scatter located partially along the southeastern border of the Morgan property. The west side of the site lies on in the project area, while the east side crosses Gibson Canyon Road. P-48-1604 consisted of the historic-era Vaca Dixon-Moraga 230 kV transmission line that runs through the center of the property.

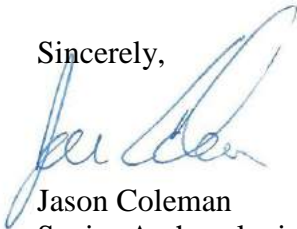
Both sites were relocated during survey and updated. P-48-0167 yielded two obsidian flakes, two basalt cores, multiple fragments of basalt shatter, and a single piece of faunal remains. SAS

archaeologists noted that P-48-0167 lies on an elevated mound above an unnamed seasonal drainage to the south. Given the propensity of prehistoric habitation sites along waterways, SAS deems the site and surrounding area as archaeologically sensitive. It should be noted that the eastern side of P-48-0167 that lies outside the Morgan property has undergone archaeological testing in the past, yielding obsidian, basalt, and cryptocrystalline silicate lithic materials, multiple bifaces, flaked stone tools, faunal remains, and the presence of intact midden. The western side of the site in the Morgan project area has never been archaeologically tested. Although this Project undertaking is defined as subdivision only, SAS will be making recommendations for archaeological testing and evaluation should this parcel ever be subject to future development involving subsurface construction.

Site P-48-1604 was also relocated and updated, and during survey several historic-era water conveyance system sites were identified. No additional prehistoric materials were discovered.

Thank you very much for your time.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Jason Coleman', with a stylized flourish at the end.

Jason Coleman
Senior Archaeologist and Principal
jason@solanoarchaeology.com



August 15, 2018

United Auburn Indian Community of the Auburn Rancheria
Attn. Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA 95603

RE: Cultural Resources Inventory for the Lands of Morgan Project, Solano County, California

Dear Mr. Whitehouse:

Private landowner William Morgan has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 300-acre property located in Vacaville, Solano County, for the proposed Lands of Morgan Project (Project). Mr. Morgan proposes to subdivide the property into multiple smaller parcels for future development. The undertaking is defined as the subdivision only as there are no current development plans in place.

We are writing to introduce the Project to you, and gather any information on undocumented sites that may exist in the project area. Any help here would be greatly appreciated. Additionally, if you have any official recommendations you would like to make in regards to the Project and its undertaking, or have any questions about the Project, please feel free to contact us. Please know that this inquiry is for informational purposes, and is not part of official AB 52 or SB 18 consultation that needs to be conducted by a government agency.

The project site is located 2.3 miles north from downtown Vacaville, and is situated in the English Hills bordered by Cantelow Road, Steiger Hill Road, and Gibson Canyon Road. Lying in western Solano County, the Project is located in Sections 28-30, Township 7 North, Range 1 West, and in the Los Putos land grant (approximately Township 6 North, Range 1 West) as depicted on the Allendale, California USGS topographic quadrangle. Please find the Project map attached for your review.

The review of the Native American Heritage Commission Sacred Land File (SLF) had negative results. The records search at the Northwest Information Center at Sonoma State University, however, resulted in two previously recorded cultural resources in project area (P-48-0167 and P-48-1604). P-48-0167 consisted of a prehistoric habitation site/lithic scatter located partially along the southeastern border of the Morgan property. The west side of the site lies on in the project area, while the east side crosses Gibson Canyon Road. P-48-1604 consisted of the historic-era Vaca Dixon-Moraga 230 kV transmission line that runs through the center of the property.

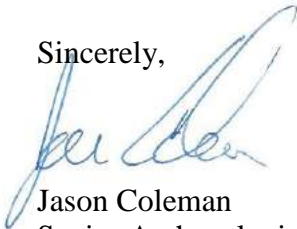
Both sites were relocated during survey and updated. P-48-0167 yielded two obsidian flakes, two basalt cores, multiple fragments of basalt shatter, and a single piece of faunal remains. SAS

archaeologists noted that P-48-0167 lies on an elevated mound above an unnamed seasonal drainage to the south. Given the propensity of prehistoric habitation sites along waterways, SAS deems the site and surrounding area as archaeologically sensitive. It should be noted that the eastern side of P-48-0167 that lies outside the Morgan property has undergone archaeological testing in the past, yielding obsidian, basalt, and cryptocrystalline silicate lithic materials, multiple bifaces, flaked stone tools, faunal remains, and the presence of intact midden. The western side of the site in the Morgan project area has never been archaeologically tested. Although this Project undertaking is defined as subdivision only, SAS will be making recommendations for archaeological testing and evaluation should this parcel ever be subject to future development involving subsurface construction.

Site P-48-1604 was also relocated and updated, and during survey several historic-era water conveyance system sites were identified. No additional prehistoric materials were discovered.

Thank you very much for your time.

Sincerely,



Jason Coleman
Senior Archaeologist and Principal
jason@solanoarchaeology.com



August 15, 2018

Cortina Rancheria – Klestel Dehe Band of Wintun Indians
Attn. Charlie Wright, Chairperson
P.O. Box 1630
Williams, CA 95987

RE: Cultural Resources Inventory for the Lands of Morgan Project, Solano County, California

Dear Mr. Wright:

Private landowner William Morgan has recently retained Solano Archaeological Services (SAS) to conduct a California Environmental Quality Act (CEQA) level cultural resources inventory of an approximate 300-acre property located in Vacaville, Solano County, for the proposed Lands of Morgan Project (Project). Mr. Morgan proposes to subdivide the property into multiple smaller parcels for future development. The undertaking is defined as the subdivision only as there are no current development plans in place.

We are writing to introduce the Project to you, and gather any information on undocumented sites that may exist in the project area. Any help here would be greatly appreciated. Additionally, if you have any official recommendations you would like to make in regards to the Project and its undertaking, or have any questions about the Project, please feel free to contact us. Please know that this inquiry is for informational purposes, and is not part of official AB 52 or SB 18 consultation that needs to be conducted by a government agency.

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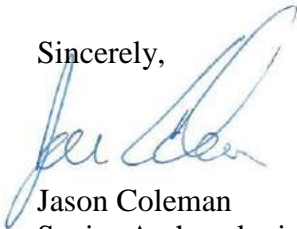
Both sites were relocated during survey and updated. P-48-0167 yielded two obsidian flakes, two basalt cores, multiple fragments of basalt shatter, and a single piece of faunal remains. SAS

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Site P-48-1604 was also relocated and updated, and during survey several historic-era water conveyance system sites were identified. No additional prehistoric materials were discovered.

Thank you very much for your time.

Sincerely,



Jason Coleman
Senior Archaeologist and Principal
jason@solanoarchaeology.com

ATTACHMENT B

Records Search Documentation

Records Search Findings Form

Project: Lands of Morgan Date: 7/19/18

Sites in the Project Area/APE

| P-48- P #s/Trinomials | Hardcopy/PDF? | # of Pages |
|---|---------------|------------|
| 841, 853, 848, 845, 849, 840 | | |
| 858, 842, 844, 824 | | |
| 1604 | | |
| 167 | | |

Sites ½ Mile Radius of the Project Area/APE

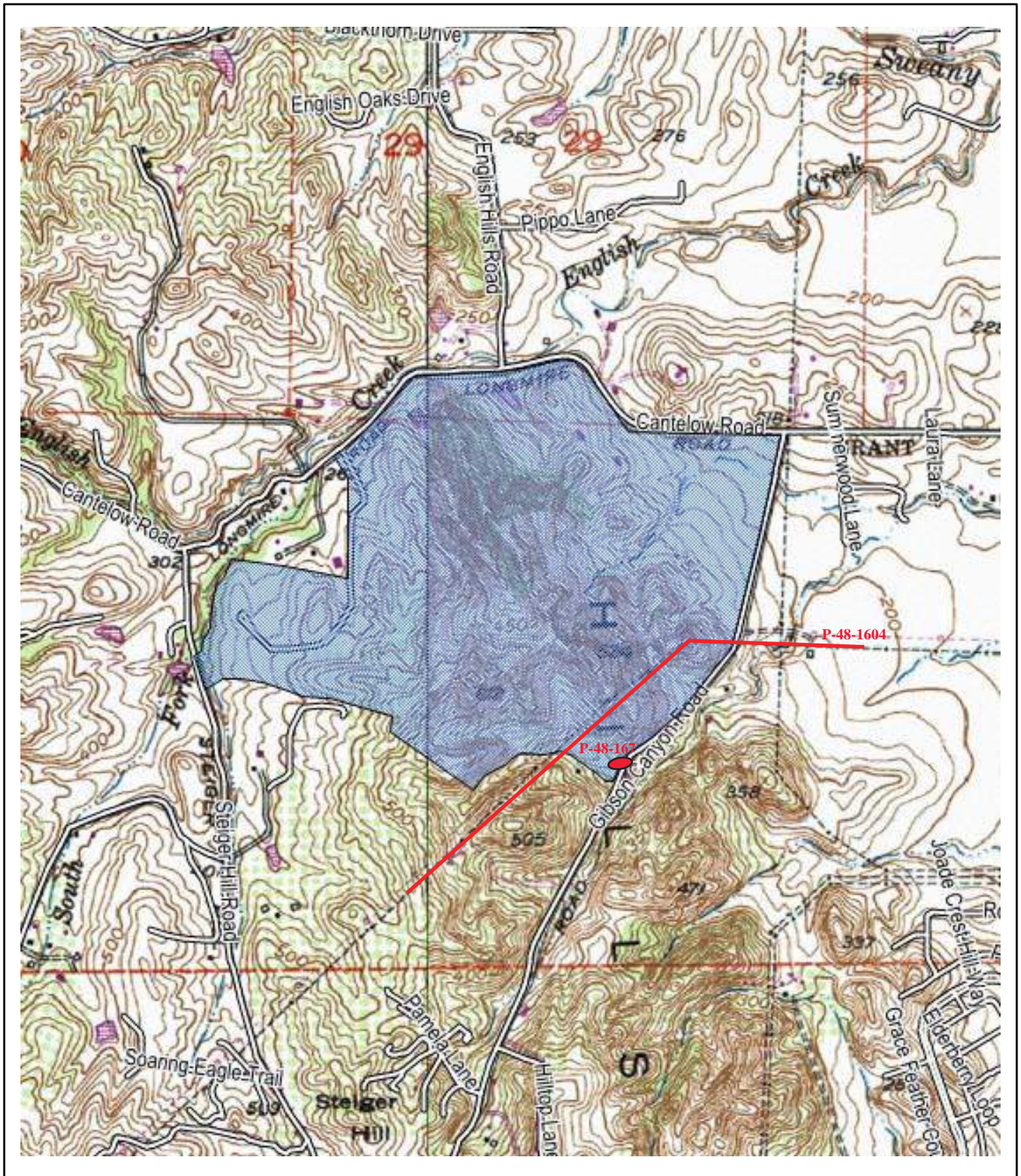
| P #s/Trinomials | Hardcopy/PDF? | # of Pages |
|-------------------------|---------------|------------|
| 424 | | |
| 430, 425, 432, 846 | | |
| 851, 843, 850, 847 | | |
| 431, 122, 837 | | |
| 841, 853, 848, 845, 849 | | |
| 840, 852, 842, 844 | | |

Studies in the Project Area/APE

| Study #s | Hardcopy/PDF? | # of Pages |
|------------|---------------|------------|
| 9124 35709 | | |
| 20960 | | |
| 47936 | | |
| | | |
| | | |
| | | |

Studies within ½ mi of the Project Area/APE

| Study #s | Hardcopy/PDF? | # of Pages |
|----------|---------------|------------|
| 32883 | | |
| 5152 | | |
| 27305 | | |
| 27449 | | |
| 5138 | | |
| | | |
| | | |



Project Cultural Resource Location Map

1:24,000

- Lands of Morgan Project Area
- Cultural Resource

2,000

Feet

1,000

Meters

T 7N, R 1W, Section 29, and unsectioned lands in the Los Potos Land Grant. 1978 Allendale, Calif. USGS 7.5' series.



(MONTICELLO
DAM)



Resources IN

ALLENDALE QUADRANGLE
CALIFORNIA
TOPOGRAPHIC SERIES

(Outdoor Contour
Map)

122° 01' 10.7008" W
038° 25' 57.5116" N

(WINTERS)

121° 58' 39.7491" W
038° 25' 57.5116" N

(MT VACA)

(DIXON)

036° 23' 09.9090" N
122° 01' 10.7008" W

(FAIRFIELD NORTH)

Produced by Trimble Terrain Navigator Pro
Topography based on USGS 1:24,000
Maps

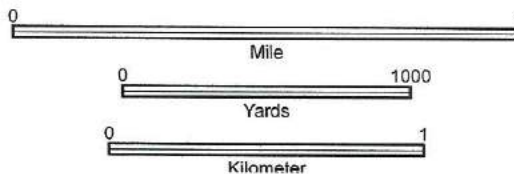
North American 1983 Datum (NAD83)

To place on the predicted North American
1927 move the projection lines 10M S and
94M W

Declination

GNMN
GN 0.62° E
MN 13.57° E

SCALE 1:24000



CONTOUR INTERVAL 10 FT

Printed Thu Jul 19, 2018

036° 23' 09.9090" N
121° 58' 39.7491" W

(DOZIER)

38121-C8-TM-024
ALLENDALE, CA
JAN 1, 1978

(MONTICELLO
DAM)



Resources Out

ALLENDALE QUADRANGLE
CALIFORNIA
TOPOGRAPHIC SERIES

(Outdoor Contour
Map)

122° 01' 48.2710" W
038° 26' 39.2640" N

(WINTERS)

121° 58' 01.8434" W
038° 26' 39.2640" N

(MT VACA)

(DIXON)

038° 22' 27.8600" N
122° 01' 48.2710" W

(FAIRFIELD NORTH)

Produced by Trimble Terrain Navigator Pro
Topography based on USGS 1:24,000
Maps

North American 1983 Datum (NAD83)

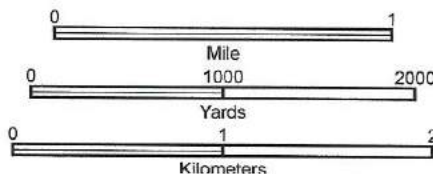
To place on the predicted North American
1927 move the projection lines 10M S and
94M W

Declination



GN 0.62° E
MN 13.57° E

(ELMIRA)
SCALE 1:36000



CONTOUR INTERVAL 10 FT

Printed: Thu Jul 19, 2018

038° 22' 27.8600" N
121° 58' 01.8434" W

(DOZIER)

38121-C8-TM-024
ALLENDALE, CA
JAN 1, 1978

(MONTICELLO
DAM)



122° 01' 48.2710" W

038° 26' 39.2640" N

Studies

(WINTERS)

ALLENDALE QUADRANGLE
CALIFORNIA
TOPOGRAPHIC SERIES

(Outdoor Contour
Map)

121° 58' 01.8434" W

038° 26' 39.2640" N

(MT VACA)

(DIXON)

20960

038° 22' 27.8600" N
122° 01' 48.2710" W

(FAIRFIELD NORTH)

Produced by Trimble Terrain Navigator Pro
Topography based on USGS 1:24,000
Maps

North American 1983 Datum (NAD83)

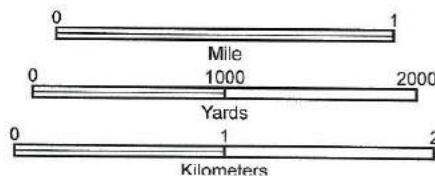
To place on the predicted North American
1927 move the projection lines 10M S and
94M W

Declination

★
GNMN

GN 0.62° E
MN 13.57° E

(ELMIRA)
SCALE 1:36000



CONTOUR INTERVAL 10 FT

Printed: Thu Jul 19, 2016 121° 58' 01.8434" W 038° 22' 27.8600" N

(DOZIER)

38121-C8-TM-024
ALLENDALE, CA
JAN 1, 1978

METADATA SHEET

P-48-000167

The location of this resource has been changed based on field work provided in the following record:

Date: 10/23/10

Author: Allika Ruby & Eric Wohlgemuth

Date: 7/1/11

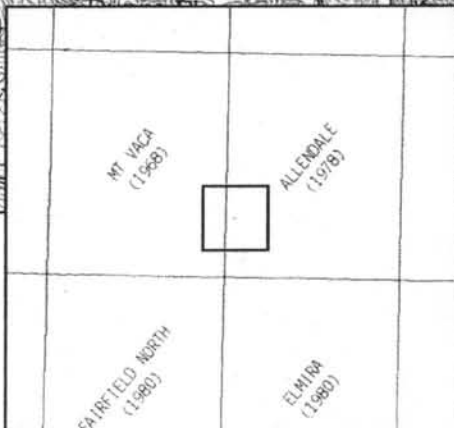
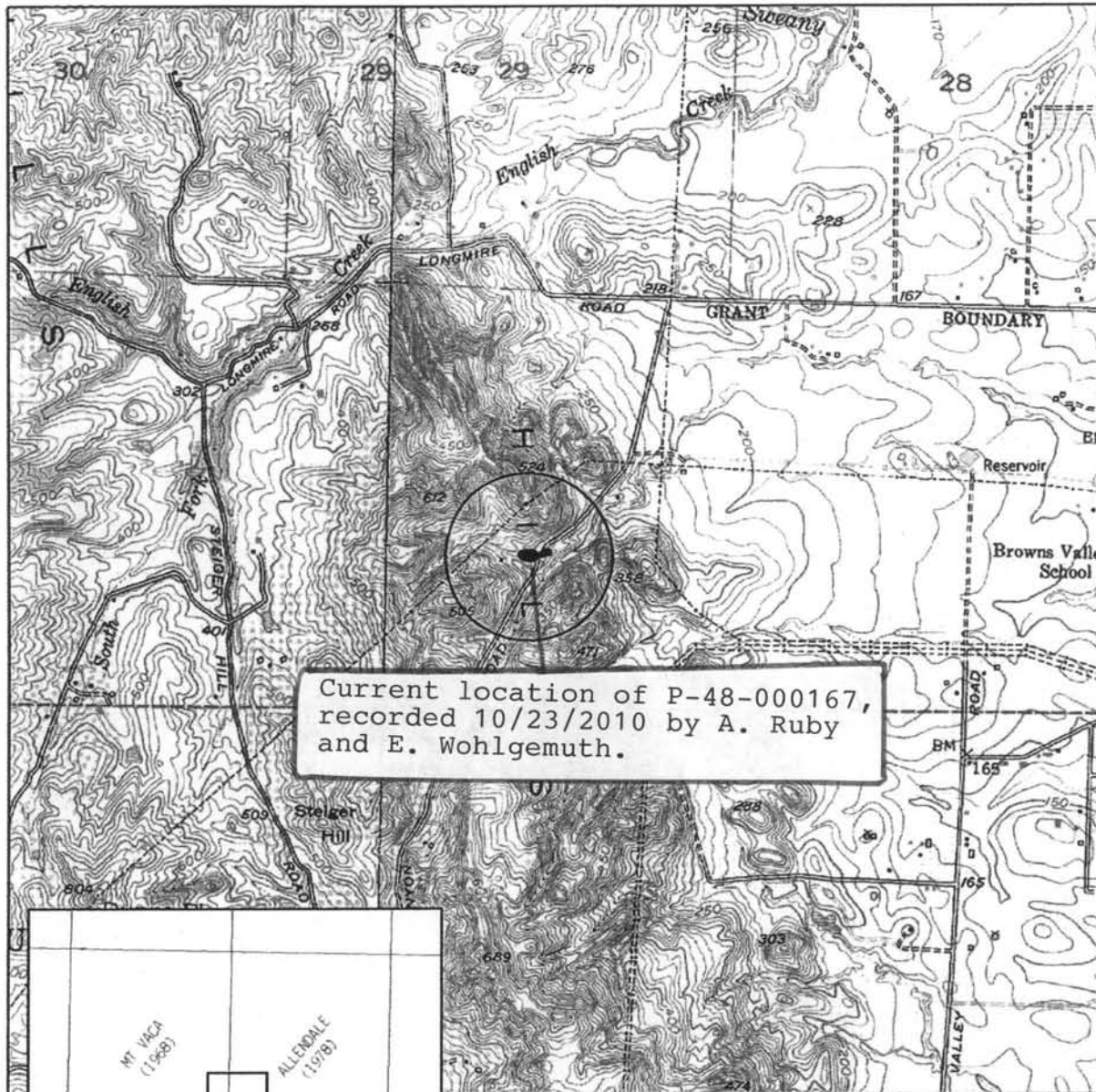
NWIC Staff: Lisa Hagel

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

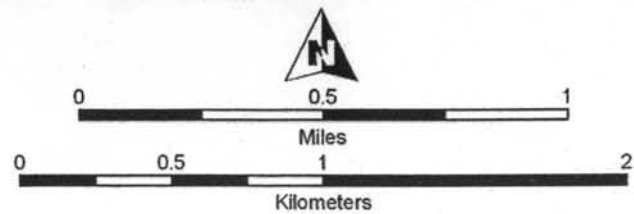
Primary # P-48-000167 (UPDATE)
HRI # (UPDATE)
Trinomial CA-SOL-334 (UPDATE)

Page 4 of 4

*Resource Name or #: (UPDATE)

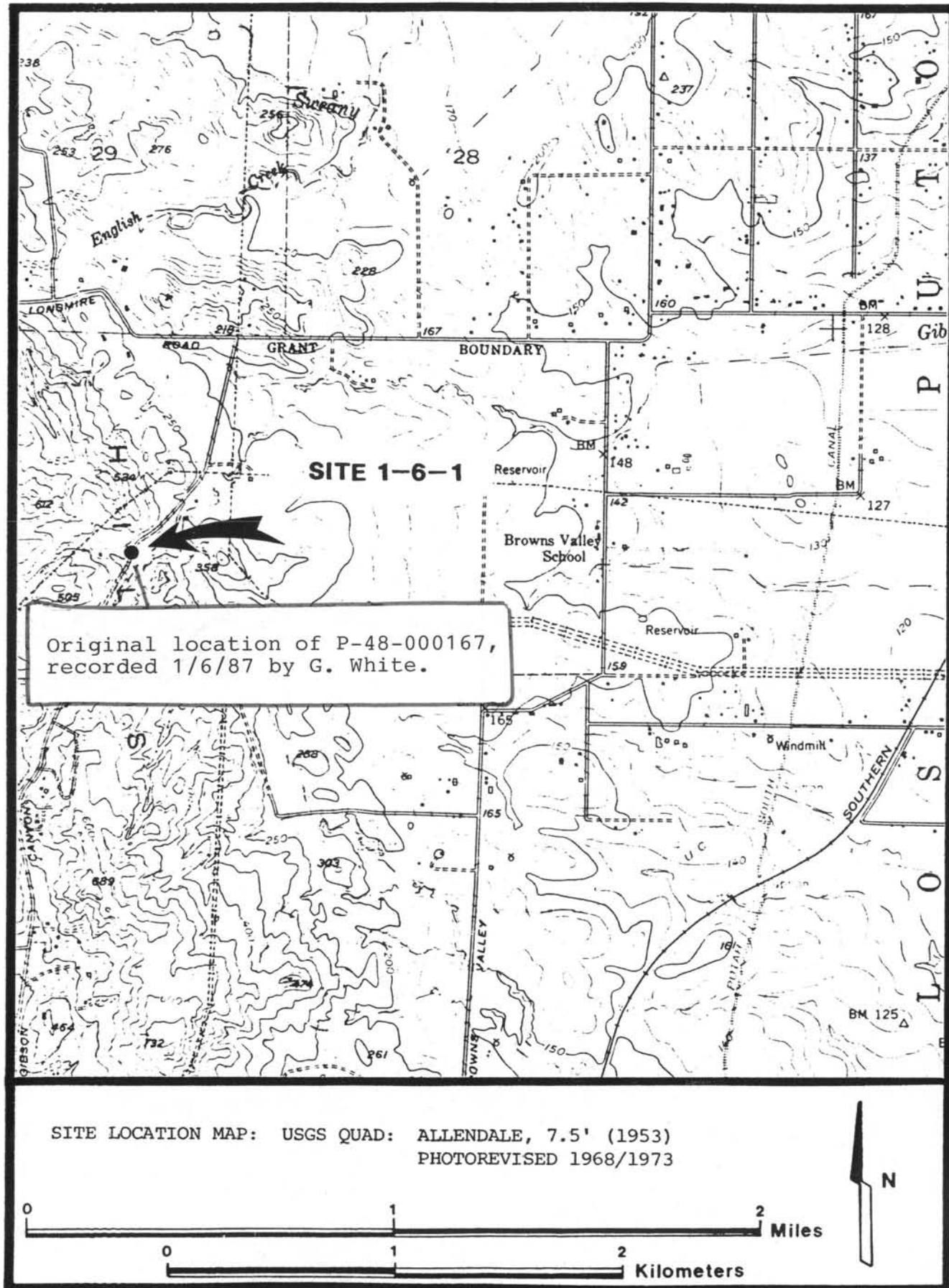


Key to USGS 7.5' quads depicted



SCALE 1:24,000

melinda 8/26/2010 11:41:07 AM



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-48-000167 (UPDATE)

HRI # (UPDATE)

Trinomial CA-SOL-334 (UPDATE)

Page 1 of 4

*Resource Name or #: (UPDATE)

*Recorded By: Allika Ruby and Eric Wohlgemuth

*Date: 8/26/2010

*P3a. Description:

This site consists of a prehistoric lithic scatter with midden. The site was first recorded by G. White in 1987, who estimated that the site's eastern boundary extended east of Gibson Road based on flakes and darkened soil he noted in the road's cutbank; he did not have access to this eastern area at that time.

This site record update describes work performed in the easternmost portion of the site prior to a Solano County Public Works road widening project. A surface reconnaissance confirmed that the site did extend to the east of Gibson Canyon Road, as widely scattered debitage, a fragment of ground stone, and darkened soil consistent with midden were noted. Based on these findings, an Extended Phase I study was undertaken, during which four 1-x-0.5-meter shovel test units (STUs) were hand-excavated to a maximum depth of 60 centimeters and soils screened through 1/4" mesh (see attached table and map). Subsequently, Phase II evaluation excavations were conducted wherein five additional 1-x-0.5-meter units were hand-excavated to depths ranging from 20-60 centimeters, and one 1-x-2-meter control unit (CU 1) was hand-dug to 40 centimeters. The Phase II excavations also used 1/4" mesh, although two buckets (20-liter samples) were screened using 1/8" mesh from each level of the control unit. In combined Extended Phase I and Phase II excavations, 123 prehistoric artifacts (mostly debitage) were found in excavations of 2.7 cubic meters. Five very small biface fragments and three flake tools (all of obsidian), as well as one granitic atlatl spur are the only tools recovered. An unmodified quartz crystal, 75 obsidian flakes, 29 chert flakes, and seven flakes of other toolstones round out the excavated assemblage. One hundred eleven pieces of modern debris were also collected, mostly structural (window glass and nails) or roadside debris (bottle glass, plastic).

Most of the STUs were excavated in places that were documented by geoarchaeologist Phil Kaijankoski of Far Western to have been redeposited by mechanical grading. CU 1, however, was placed in an ungraded area at the base of a large tree. While CU 1 revealed somewhat intact subsurface deposits, these had been badly bioturbated by large tree roots. Twenty eight obsidian hydration readings from the site reveal it was occupied throughout the Holocene, consistent with the age of Rincon soils to the Terminal Pleistocene.

The units are depicted on the attached sketch map; the mapping datum is a survey marker placed by Solano County to indicate the east edge of the new right-of-way. Its location is 587794 mE/4251540 mN, NAD83 Datum. The original datum recorded by White in 1987 is located on private property and was not accessed.

The recovered materials from private property will be returned to landowner David Huff (APN 0105-200-100) at the conclusion of this study. Materials from Solano County property will be curated at Sonoma State University.

*P11. Citation:

Ruby, Allika

2010 "Archaeological Survey and Extended Phase I Report for the Gibson Canyon Road Improvement Project, Solano County, California." Prepared for JRP Historical Consulting, Davis.

Wohlgemuth, Eric, Allika Ruby, and Philip Kaijankoski

2010 "Phase II Test Excavations at CA-SOL-334 for the Gibson Canyon Road Improvement Project, Solano County, California." Prepared for JRP Historical Consulting, Davis.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-48-000167 (UPDATE)

HRI # (UPDATE)

Trinomial CA-SOL-334 (UPDATE)

Page 2 of 4

***Resource Name or #:** (UPDATE)

***Recorded By:** Allika Ruby and Eric Wohlgemuth

***Date:** 8/26/2010

| CA-SOL-334 Assemblage. | | | | | | | | | | | | | | | | | | |
|------------------------|---------|----------------------|------|------------|----------|------------|----------------|--|--------------------------|------------|---------|----------|-------|---------|---------|-----------|-------|------------|
| | | Prehistoric Material | | | | | | | Historic/Modern Material | | | | | | | | | Notes |
| | | Flaked Stone | | | | Other | | | | | | | | | | | | |
| PROV | LEVEL | BIFACE | CORE | FLAKE TOOL | DEBITAGE | ATLTL SPUR | QUARTZ CRYSTAL | | BONE | BOTTLE CAP | CERAMIC | CUT NAIL | GLASS | PLASTIC | UNKNOWN | WIRE NAIL | Total | |
| CU 1 | 000-010 | 1 | - | - | 5 | - | - | | 1 | - | - | - | 12 | 1 | - | - | 20 | Ap stratum |
| | 010-020 | 1 | - | - | 3 | - | - | | 2 | - | - | - | 1 | - | - | - | 7 | A horizon |
| | 020-030 | - | - | - | 13 | - | - | | 2 | - | - | 1 | 3 | - | - | - | 19 | A horizon |
| | 030-040 | - | 1 | - | 12 | - | - | | 1 | - | - | - | 1 | - | - | - | 15 | A horizon |
| CU 1 Total | | 2 | 1 | - | 33 | - | - | | 6 | - | - | 1 | 17 | 1 | - | - | 61 | |
| STU 1 Total | 000-040 | - | - | - | 6 | - | - | | 1 | - | - | - | 3 | - | - | 1 | 11 | |
| STU 2 Total | 000-060 | 1 | - | - | 11 | - | - | | - | - | - | - | 19 | - | - | 1 | 32 | |
| STU 3 Total | 000-030 | 1 | - | - | 8 | - | - | | 4 | - | - | - | - | - | - | - | 13 | |
| STU 4 Total | 000-050 | 1 | - | 1 | 12 | - | 1 | | - | - | - | - | 4 | - | - | - | 19 | |
| STU 5 Total | 000-060 | - | 1 | - | 12 | - | - | | - | - | 2 | 1 | 19 | 1 | - | - | 36 | |
| STU 6 Total | 000-020 | - | - | 1 | - | - | - | | - | - | - | - | - | - | - | - | 1 | |
| STU 7 Total | 000-020 | - | - | - | 4 | 1 | - | | 2 | - | - | - | 1 | - | - | - | 8 | |
| STU 8 Total | 000-060 | - | 1 | - | 14 | - | - | | - | 1 | - | 1 | 22 | 1 | 1 | - | 41 | |
| STU 9 Total | 000-040 | - | - | 1 | 10 | - | - | | 1 | - | - | - | - | - | - | - | 12 | |
| Grand Total | | 5 | 3 | 3 | 110 | 1 | 1 | | 14 | 1 | 2 | 3 | 85 | 3 | 1 | 2 | 234 | |
| | | | | | | | | | | | | | | | | | | |

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-48-000167 (UPDATE)

HRI # (UPDATE)

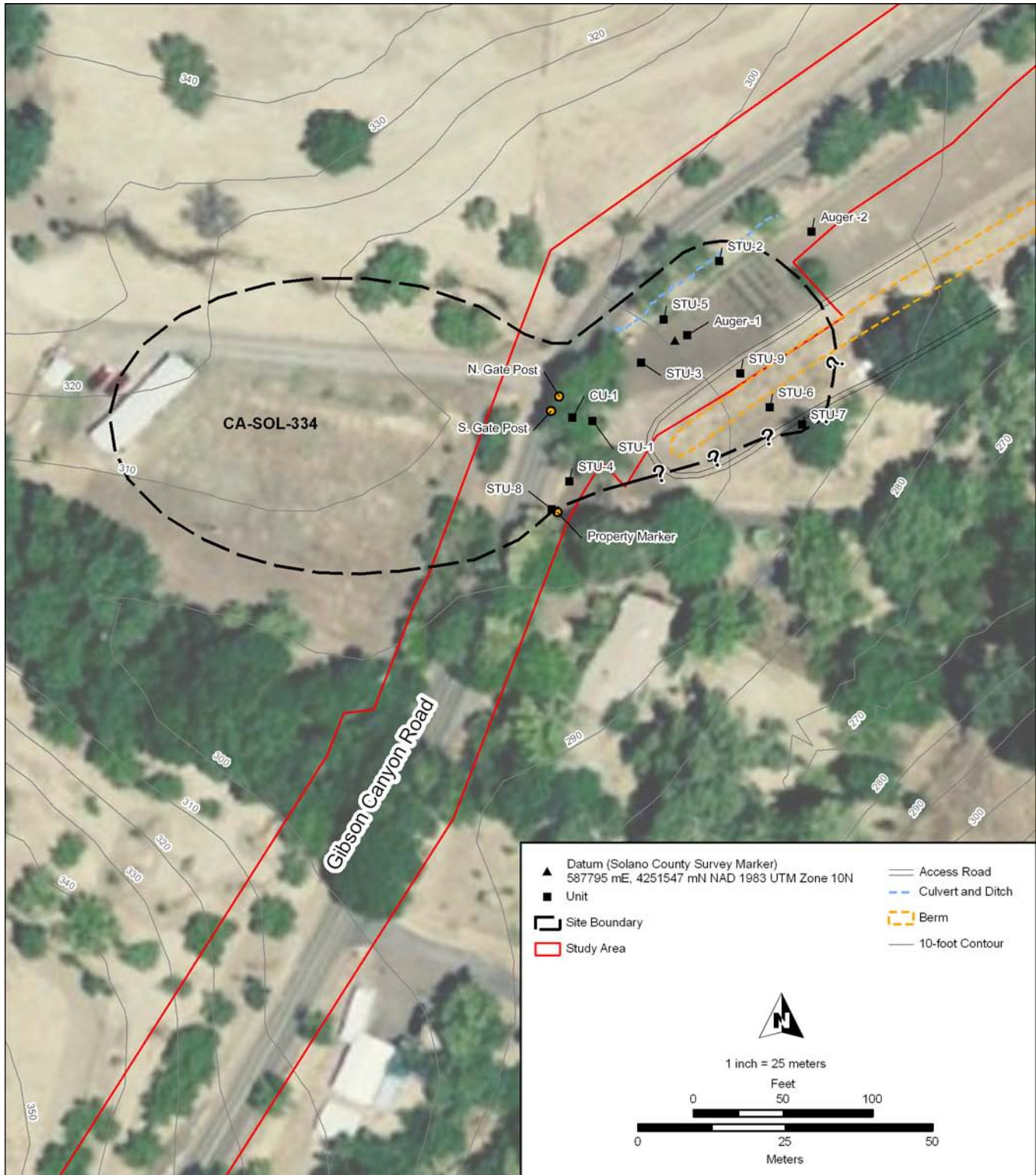
Trinomial CA-SOL-334 (UPDATE)

Page 3 of 4

*Resource Name or #: (UPDATE)

*Drawn by: Far Western

*Date: 10/23/2010



jill 9/13/2010 2:39:18 PM

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

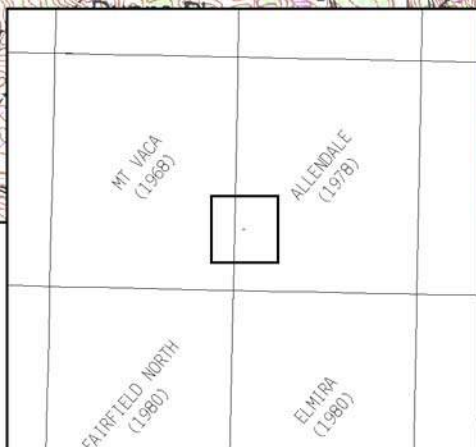
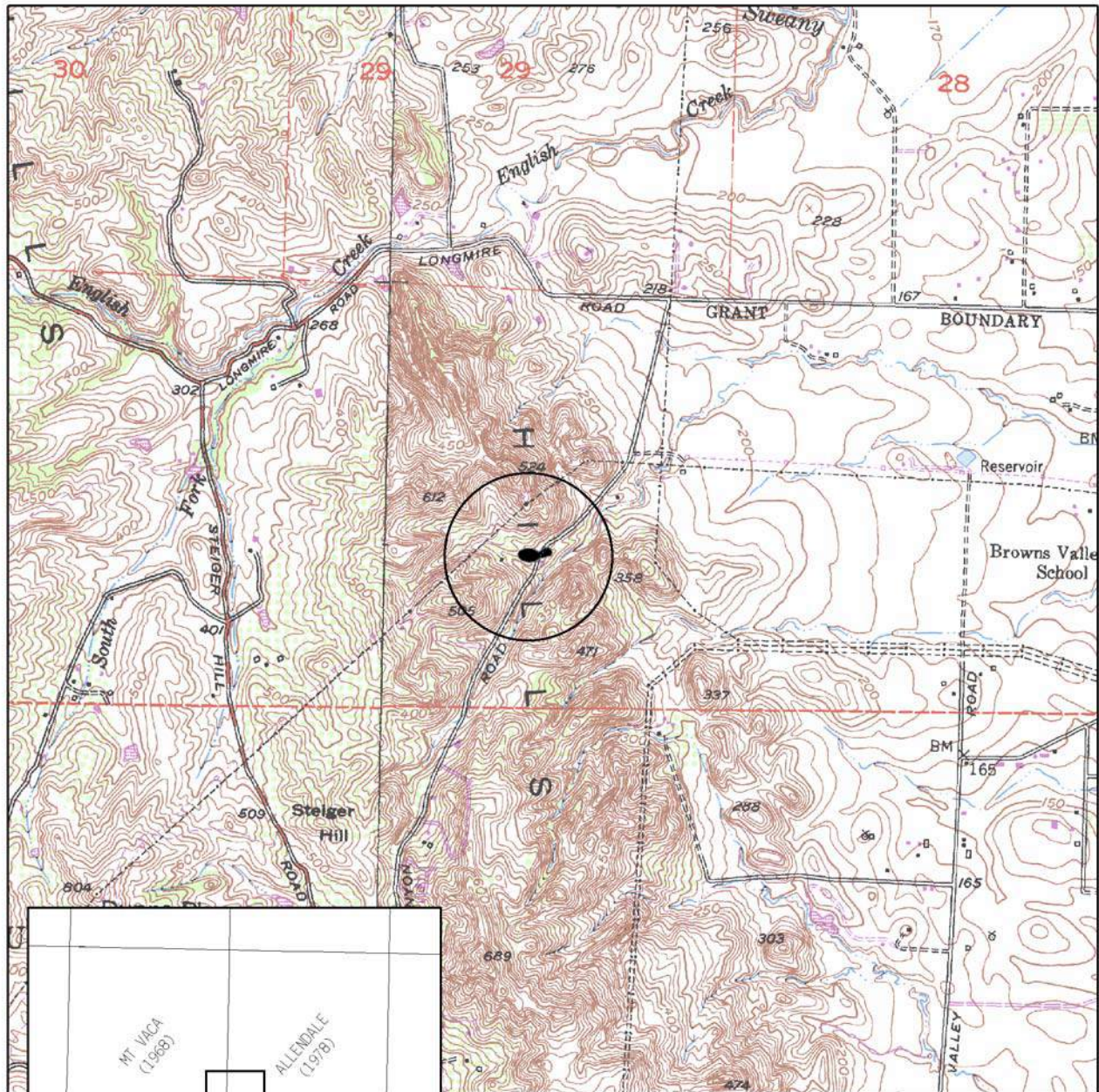
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HRI # (UPDATE)

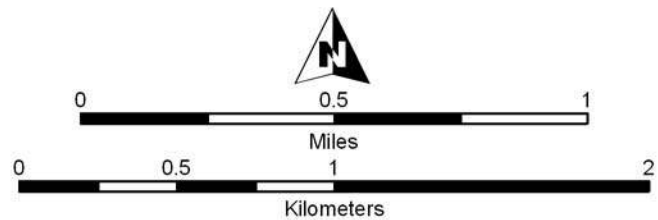
Trinomial CA-SOL-334 (UPDATE)

Page 4 of 4

*Resource Name or #: (UPDATE)



Key to USGS 7.5' quads depicted



SCALE 1:24,000

melinda 8/26/2010 11:41:07 AM

CONTINUATION SHEET

Primary # P-48-000167 (UPDATE)

HRI # _____

Trinomial CA-SOL-334 (UPDATE)

Page 1 of 4

*Resource Name or #: (UPDATE)

*Recorded By: Allika Ruby

*Date: 10/23/2008

This site consists of a prehistoric lithic scatter with midden. The site was first recorded by G. White in 1987, who estimated that the site's eastern boundary extended east of Gibson Road based on flakes and darkened soil he noted in the road's cutbank; he did not have access to this eastern area at that time.

This site record update describes work performed in the easternmost portion of the site prior to a Solano County Public Works road widening project. A surface reconnaissance confirmed that the site did extend to the east of Gibson Canyon Road, as widely scattered debitage, a fragment of ground stone, and darkened soil consistent with midden were noted. Based on these findings, an Extended Phase I study was undertaken, during which four 1.0-x-0.5-meter units were hand-excavated to a maximum depth of 60 centimeters and soils screened through 1/4" mesh (see attached table and map). In all, 47 prehistoric artifacts, mostly debitage, were found in the units. Four obsidian flaked tools and tool fragments were recovered, although three are very small biface fragments. The single intact item is a flake tool.

Although subsurface cultural deposits were identified, they yielded a low density of cultural material and a relatively restricted range of artifact types. It's likely that the study area represents the east edge of the site. Based on the results, the site boundary has been slightly expanded eastward to include units 1, 3, and 4 (see attached Location Map). Unit 2, the northmost of the four units, contained mixed historic and modern debris throughout all its levels and is not intact. The integrity of the deposit in this eastern area is poor due to past earth-leveling activities.

The units are depicted on the attached sketch map; the mapping datum is a survey marker placed by Solano County to indicate the east edge of the new right-of-way. Its location is 587794 mE/4251540 mN, NAD83 Datum. The original datum recorded by White in 1987 is located on private property and was not accessed.

The recovered materials will be returned to the landowner, David Hoff (APN No. 0105-200-100), at the conclusion of this study.

References:

Ruby, Allika

2010 "Archaeological Survey and Extended Phase I Report for the Gibson Canyon Road Improvement Project, Solano County, California." Prepared for JRP Historical Consulting, Davis.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-48-000167 (UPDATE)
HRI # _____
Trinomial CA-SOL-334 (UPDATE)

Page 2 of 4

*Resource Name or #: (UPDATE)

*Recorded By: Allika Ruby

*Date: 10/23/2008

Materials recovered from excavation units.

| | Tools | | Debitage - material | | | | Other Prehistoric | | Historics | |
|--------------------|----------|------------|---------------------|----------|----------|----------|-------------------|----------------|-----------|-----------|
| | Biface | Flake Tool | OBS | CCS | BAS | PTW | Faunal Bone | Quartz Crystal | Glass | Wire Nail |
| STU 1 | | | | | | | | | | |
| 0-10 | - | - | - | 1 | 1 | - | 1 | - | 2 | 1 |
| 10-20 | - | - | - | - | - | 1 | - | - | 1 | - |
| 20-30 | - | - | 2 | - | - | - | - | - | - | - |
| 30-40 | - | - | 1 | - | - | - | - | - | - | - |
| Total | - | - | 3 | 1 | 1 | 1 | 1 | - | 3 | 1 |
| STU 2 | | | | | | | | | | |
| 0-10 | - | - | 4 | - | - | - | - | - | 5 | 1 |
| 10-20 | - | - | 1 | - | - | - | - | - | 2 | - |
| 20-30 | - | - | - | 1 | - | - | - | - | 1 | - |
| 30-40 | - | - | - | - | - | - | - | - | 1 | - |
| 40-50 | 1 | - | 3 | - | - | - | - | - | 8 | - |
| 50-60 | - | - | 2 | - | - | - | - | - | 2 | - |
| Total | 1 | - | 10 | 1 | - | - | - | - | 19 | 1 |
| STU 3 | | | | | | | | | | |
| 0-10 | 1 | - | 3 | - | - | - | 1 | - | - | - |
| 10-20 | - | - | 1 | 3 | - | 1 | 3 | - | - | - |
| 20-30 | - | - | - | - | - | - | - | - | - | - |
| Total | 1 | - | 4 | 3 | - | 1 | 4 | - | - | - |
| STU 4 | | | | | | | | | | |
| 0-10 | - | - | 1 | - | - | - | - | 1 | 4 | - |
| 10-20 | - | - | 2 | - | - | - | - | - | - | - |
| 20-30 | - | - | 3 | 1 | 1 | - | - | - | - | - |
| 30-40 | 1 | 1 | 3 | 1 | - | - | - | - | - | - |
| 40-50 | - | - | - | - | - | - | - | - | - | - |
| Total | 1 | 1 | 9 | 2 | 1 | - | - | 1 | 4 | - |
| Grand Total | 3 | 1 | 26 | 7 | 2 | 2 | 5 | 1 | 26 | 2 |

Notes: Levels are centimeters below surface; OBS - obsidian; CCS- cryptocrystalline silicate;
BAS - basalt; PTW - petrified wood

SKETCH MAP

Primary # P-48-000167 (UPDATE)

HRI # _____

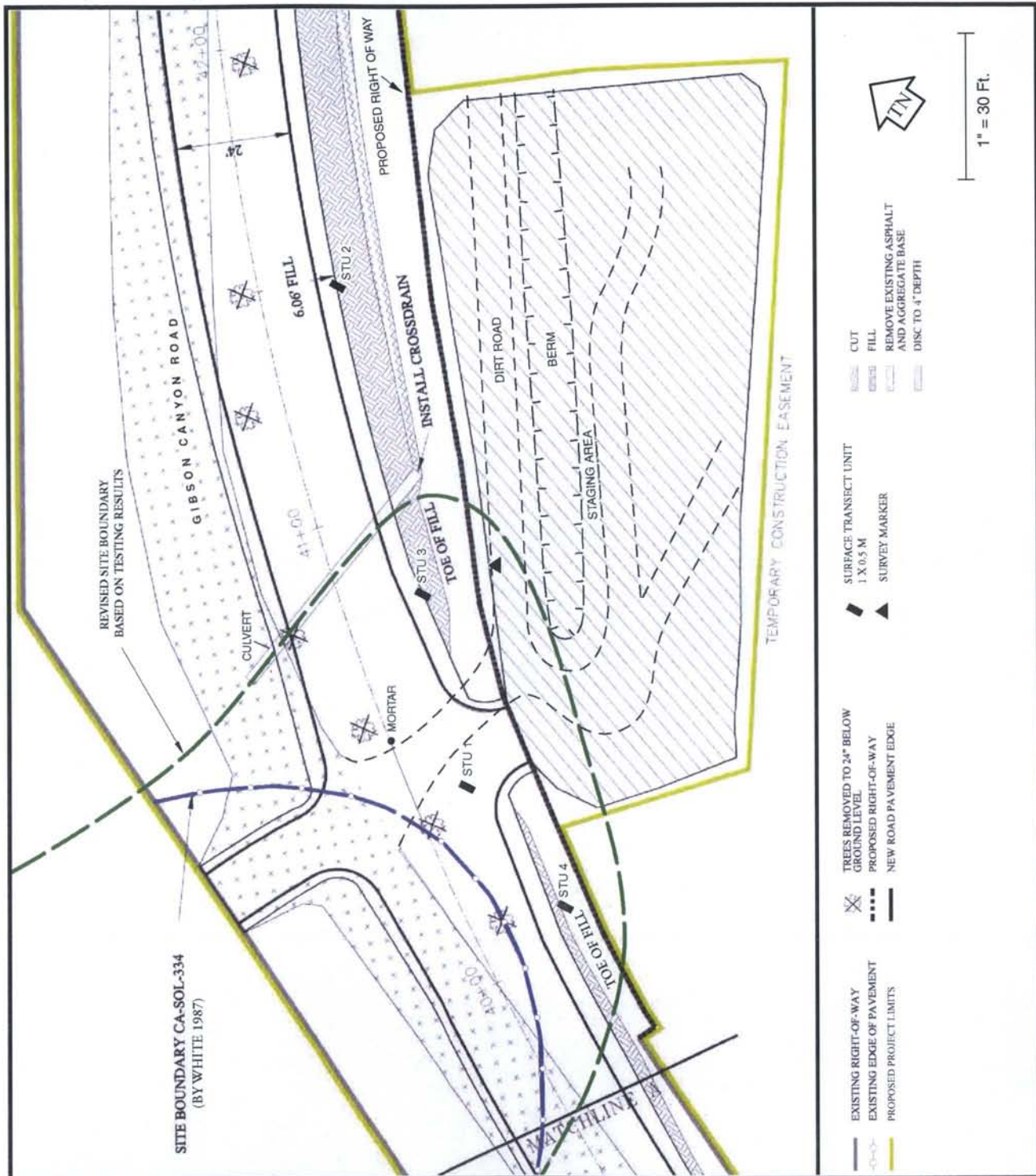
Trinomial CA-SOL-334 (UPDATE)

Page 3 of 4

*Resource Name or #: (UPDATE)

*Recorded By: Allika Ruby

*Date: 10/23/2008



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-48-000167 (UPDATE)

HRI # _____

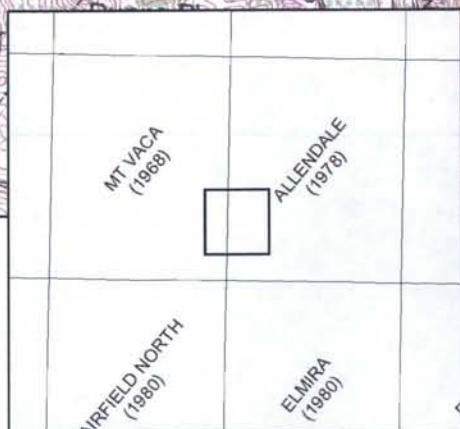
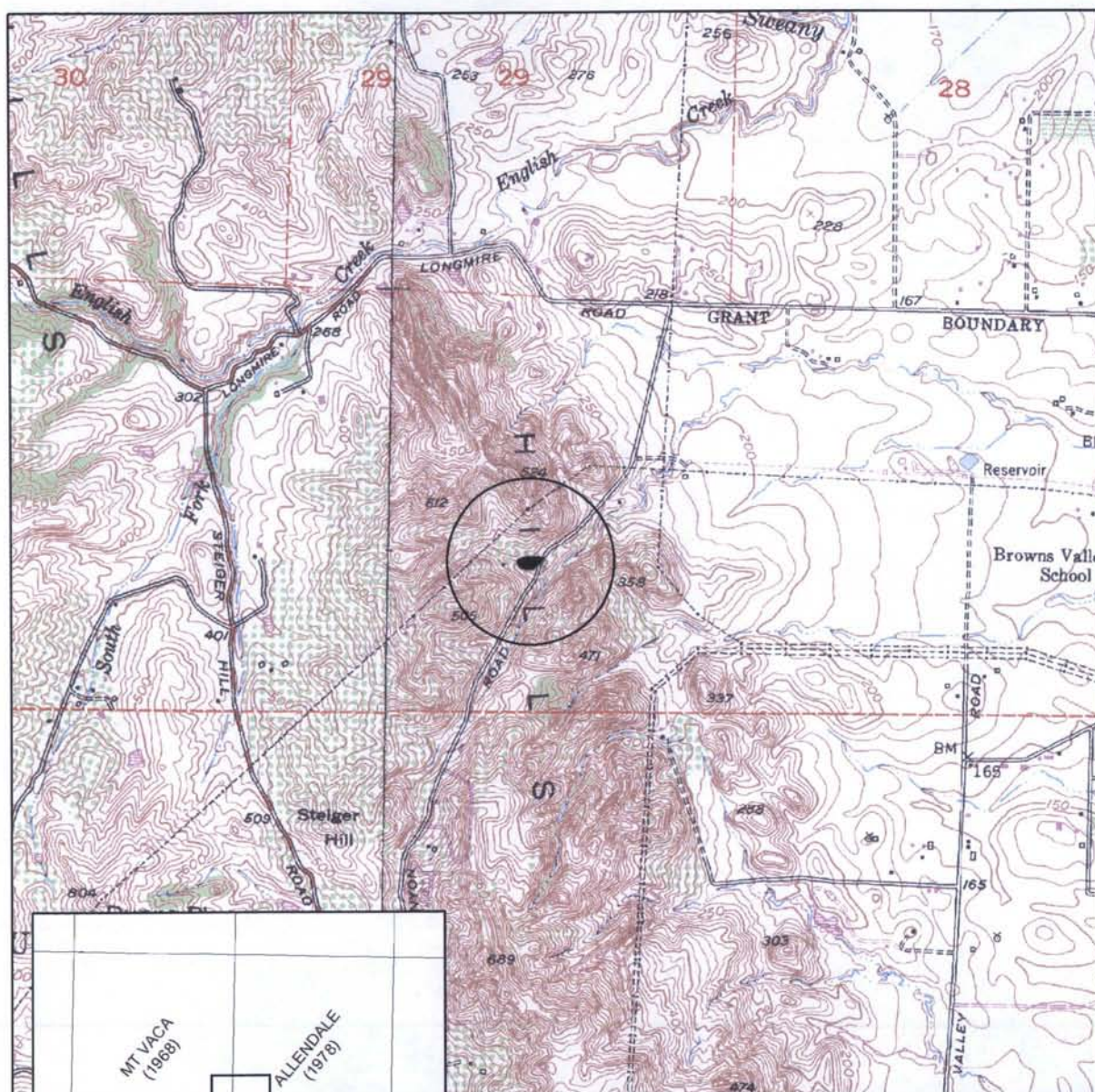
Trinomial CA-SOL-334 (UPDATE)

Page 4 of 4

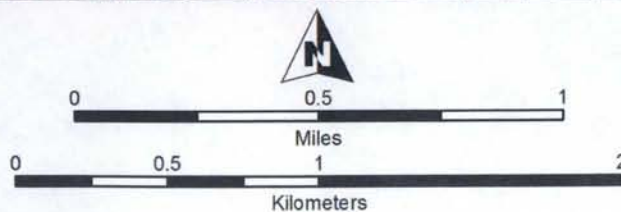
*Resource Name or #: (UPDATE)

*Map Name:

*Year:



Key to USGS 7.5' quads depicted



SCALE 1:24,000

DRAFT

1. County: SOLANO
2. USGS Quad: ALLENDALE, 7.5' (1953), photorevised 1968/1973 (498B)
3. UTM Coordinates: Zone 10, 587825 Easting/ 4251300 Northing
4. Township 7N, Range 1W, LOS PUTOS LANDGRANT
5. Map Coordinates: 425 mmS/4251300 mmE (from NW corner of map).
6. Elevation: 250'
7. Location: The site is on a long, flat alluvial fan adjacent to an unnamed feeder stream of Gibson Canyon Creek in the English Hills north of Vacaville. Take Gibson Canyon road south from Longmire Road approximately .65 miles to a point just past a bend in the road. The site is on the west and probably the east sides of Gibson Canyon road. The east side of Gibson Canyon Road in the area of the site was not surveyed to confirm if the site extends to the other side. The known portion of the site is west and across the road from 7144 Gibson Canyon Road.
8. Prehistoric site.
9. Site Description: The site consists of dark soil (possibly midden), basalt, obsidian, and chert debitage and flake tools, and thermally altered rock. The flake scatter is very light with a maximum density of <1 per 5m². These are visible mainly in the roadway. The thermally altered rock was observed mainly in and around the P.G. & E. access road gate. In this area, due to erosion of the road, bricks, river cobbles, and cement, have been placed to build up the roadbed.
10. Area: 80m (length) x 50m (width), 4000m²; Method of determination: visual observation, paced.
11. Depth: \pm 0.50 meter Method: estimated from road cut near entrance on east side of Gibson Canyon Road.
12. Features: None noted
13. Artifacts: chipped cobbles (core or core tools), obsidian scraper, obsidian biface medial fragment (projectile point ?).
14. Non-Artifactual Constituents: thermally-altered rock
15. Date Recorded: 1-6-87
16. Recorded by: G. White; Field Checked: J. Holson, M. Smith

5-9124

17. Affiliation: Hager/Holson and Associates, P.O. Box 4367, Berkeley, CA., 94704.
18. Human Remains: None Noted
19. Site Integrity: Good; The first 20-25 meters of the site starting at Gibson Canyon Road and continuing westerly up the slope have been impacted by an access road. In this area, the road cut has been filled to prevent erosion. The road then levels off and continues upslope at less of an incline. The area also may have been used for pasturage and/or an orchard. However, only a few apple trees remain next to the drainage on the north edge of the site. The intermittent drainage on the north edge of the site has been filled with tires and other debris presumably to prevent erosion.
20. Nearest Water: Gibson Canyon Creek flowing in a northerly direction is 50 meters to the east from the eastern edge of the site. Intermittent streams are located adjacent to the north and south edges of the site.
21. Largest Body of Water within 1km: Not Applicable
22. Site Vicinity Vegetation Community: Oak Woodland/Grassland
23. On Site Vegetation Community: Small grasses with willow, apple and oaks along drainages.
24. Site Soil: dark brown and light brown clay loam
25. Surrounding Soil: light clay loam
26. Geology: sandstone
27. Landform: alluvial fan
28. Slope: 10%
29. Exposure: southern (open)
30. Landowner(s) and/or Tenants:
31. Remarks: The site probably continues easterly across Gibson Canyon Road as evidenced by the dark soil in the cut bank along Gibson Canyon Road. This area was not surveyed however. Surface visibility was very good during the survey but very few materials were seen outside of the road cut.
32. References: *A Cultural Resources Study for the Vaca-Dixon Moraga Transmission Line Upgrade Project* (1987). Ms submitted to Pacific Gas and Electric Company, San Francisco.
- a

- 33. Name of Project: A Cultural Resources Study for the Vaca-Dixon Moraga Transmission Line Upgrade Project (1987).
- 34. Type of Investigation: Archaeological Survey
- 35. Site Accession Number: N/A Curated At: N/A
- 36. Photos: Color - Roll 3:15-17, Roll 5:17-22 Taken by: G. White, M. Smith
- 37. Photo Accession Number: HH86-18, On file at: Pacific Gas and Electric Company, San Francisco.

Site Map

Page 4 of 7

1. Permanent Trinomial _____

2. Common Name _____

3. Agency Number 1-6-14. MAP ALLENDALE, 7.5' (1953)PHOTOREVISED 1968/1973

From Datum To

Azimuth

Distance

House at 7139 Gibson
Canyon Road

244°

Chipped Obsidian Nodule

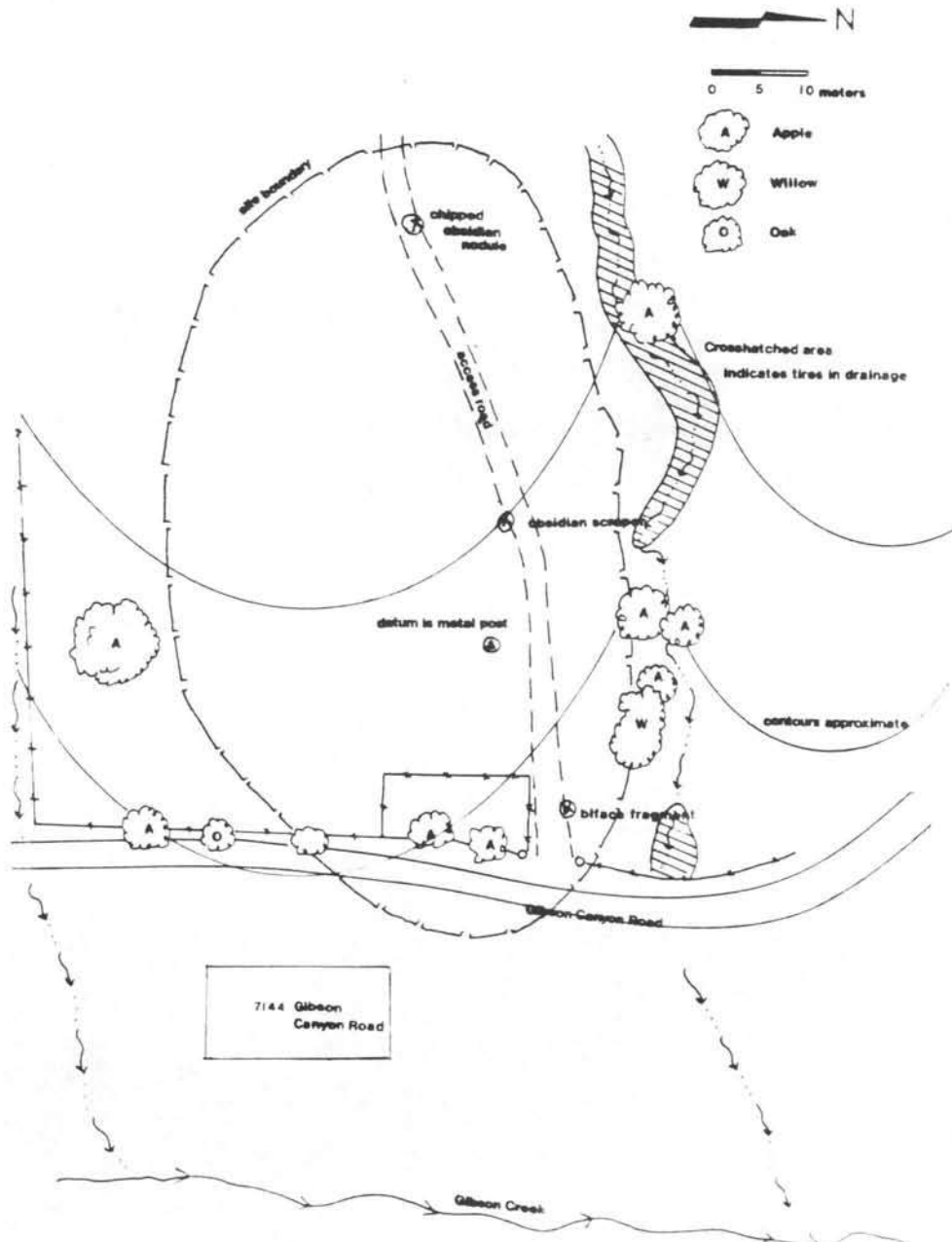
260°

44m

Obsidian Scraper

278°

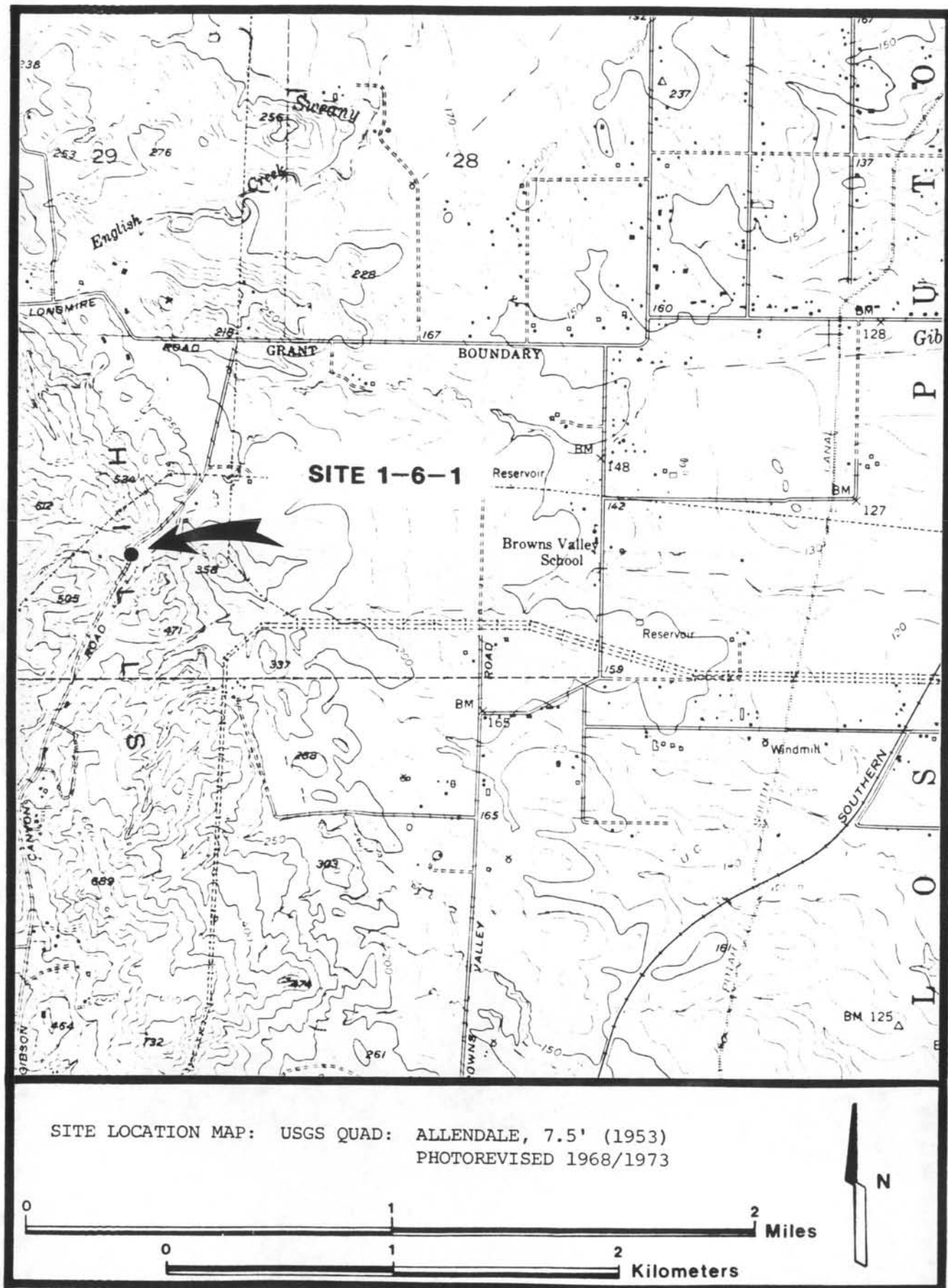
25



Notes _____

Drawn By G. WhiteDate JAN 87

2



SITE 1-6-1. View from Datum looking West.



SITE 1-6-1. View from Datum looking North along access road.



SITE 1-6-1. From Datum looking South to Gibson Canyon Road and filled area of access road.



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

Primary # **P-48-001604**
HRI #

Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

*Resource Name or #: SAS-001 Vaca Dixon-Moraga 230 kV Transmission Line Segment

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County: Solano

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

*b. USGS 7.5' Quad: Allendale Date: 1953 T 7 N, R 1 W, Unsection land; M.D. B.M.

c. Address: Eubanks Drive City: Vacaville Zip: 95688

d. UTM: Zone: 10; 590,881 mE/ 4,251,754 mN NAD 83 Western Terminus
591,939 mE/ 4,251,661 mN NAD 83 Eastern Terminus

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 100 feet above sea level.

From the City of Vacaville head north on Interstate 505 for 2.9 miles, then exit onto Midway Road and head west for 0.6 miles. Turn left onto Eubanks Road and travel for 0.5 miles and park. The resource will be adjacent to you.

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

This historic-era resource consists of a 3,636-foot long double-tower transmission segment built as part of the Vaca Dixon-Moraga 230 kV line. This segment records the resource from its western terminus at the Putah South Canal to its eastern terminus at Interstate 505, and includes two parallel lines with a total of eight towers in the segment. The towers are metal lattice structures that measure approximately 200 feet high and 20-feet by 20-feet at the base. The line connects to the Vaca Dixon Substation which was constructed in 1922. The Vaca Dixon-Moraga 230 kV line was constructed prior to 1942 and provided electrical power to the Moraga area.

*P3b. Resource Attributes: AH15. Standing structures; AH16. Other

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a.



P5b. Description of Photo: Site overview, facing south. August 3, 2016.

*P6. Date Constructed/Age and Sources:

☒ Historic

☐ Prehistoric

☐ Both

*P7. Owner and Address:

Applied Biosystems, Inc.
Vacaville, CA 95688

*P8. Recorded by:

J. Coleman
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

*P9. Date Recorded: August 3, 2016

*P10. Survey Type: Intensive pedestrian

*P11. Report Citation: Coleman, 2016 Cultural Resources Survey Report for the Chancellor and Eubanks Project, Solano County, California. Submitted to Buzz Oates Construction, Inc. by Solano Archaeological Services.

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

DPR 523A (1/95)

*Required information

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

Primary # **P-48-001604**

HRI #

Trinomial

Resource Name or #: Reviewer

Date

Page 2 of 3

*Resource Name or #: SAS-001 Vaca Dixon-Moraga 230 kV Transmission Line Segment

L1. Historic and/or Common Name: Vaca Dixon-Moraga 230 kV Transmission Line

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

b. Location of point or segment:

590,881 mE/ 4,251,754 mN NAD 83 Western Terminus

591,939 mE/ 4,251,661 mN NAD 83 Eastern Terminus

L3. Description: The segment was identified on the 1953 Allendale, CA USGS 7.5' topographic quadrangle. Additional map research indicates the line was constructed prior to 1942 and connected to the Vaca Dixon Substation which was constructed by PG&E in 1922. However, the existing line, although it may follow an early 20th century electrical transmission line alignment, does not date to that period and the transmission towers and existing lines date to the 1960s – 1970s. Such towers and lines are ubiquitous throughout California and elsewhere and do not possess any specific significant historical associations.

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

a. Top Width: ~15 feet

b. Bottom Width: ~20 feet

c. Height or Depth: ~ 200 feet

d. Length of Segment: 0.7 mile (3,636 feet)

L5. Associated Resources:

None

L6. Setting:

The resource is located in flat agricultural land adjacent to large industrial warehouses and complexes.

L7. Integrity Considerations:

The towers are regularly maintained.

L4e. Vaca Dixon-Moraga 230 kV Transmission Towers , facing south



L8a.



L8b. Description of Photo, Map, or Drawing

The line continuing eastward in the distance, facing east.

L9. Remarks: Individually and collectively as part of the Vaca Dixon-Moraga 230 kV Transmission Line the SAS-001 segment does not satisfy California Register of Historic Resources criteria and is not recommended eligible for listing.

L10. Form Prepared by:

J. Coleman
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

L11. Date: August 3, 2016

LOCATION MAP

Trinomial

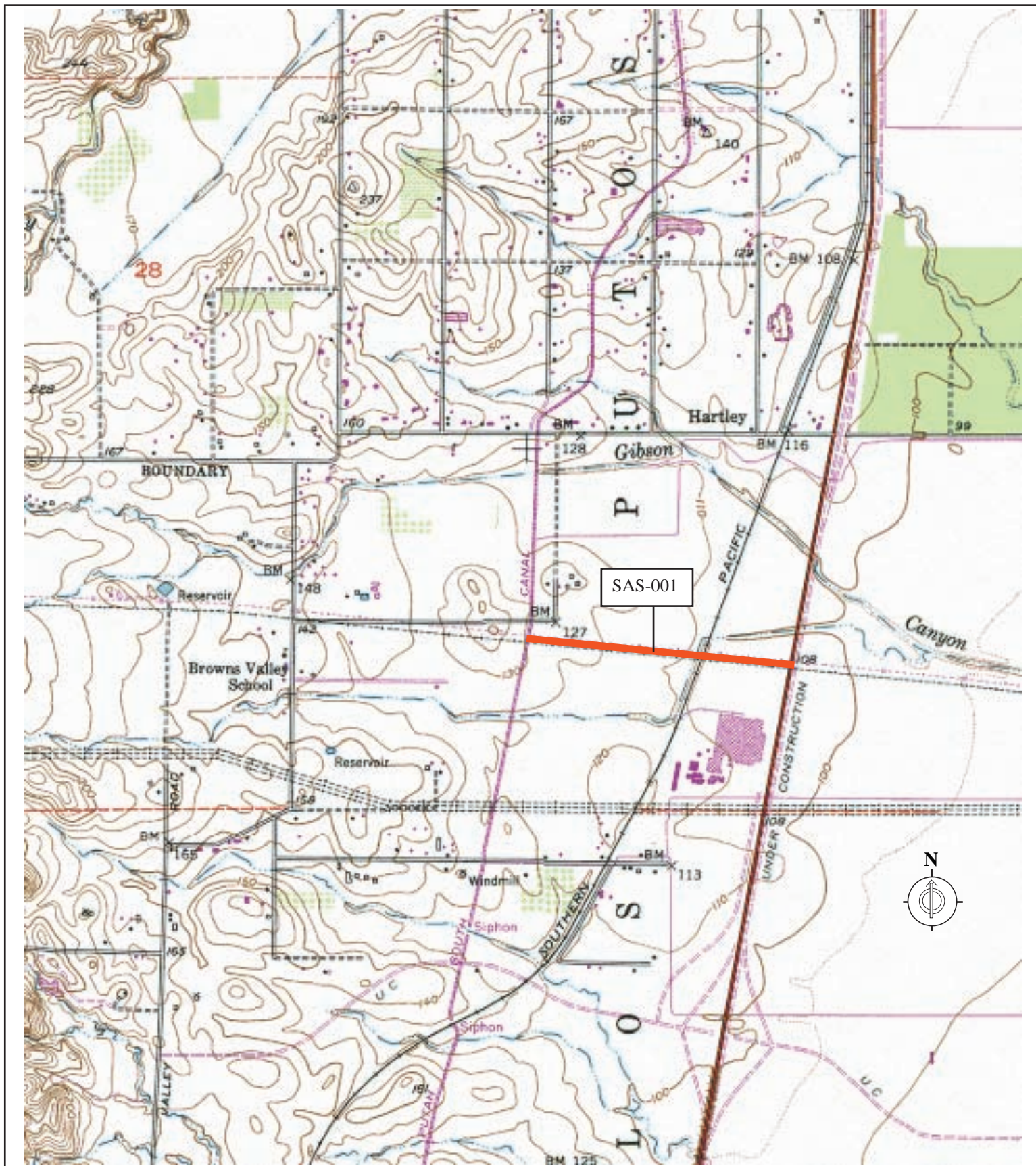
Page 3 of 3

*Resource Name or #: SAS-001 Vaca Dixon-Moraga 230 kV Transmission Line Segment

*Map Name: Allendale

*Scale: 1:24,000

*Date of Map: 1953, PR 1968, 1973, PI 1978



PRIMARY RECORD

Primary # **P-48-001604**

HRI #

Trinomial

NRHP Status Code

Other Listings

Review Code

Reviewer

Date

Page 1 of 4

*Resource Name or #: Tulucay-Vaca 230kV

P1. Other Identifier: N/A

*P2. Location: ☒ Not for Publication ☐ Unrestricted

*a. County: Napa and Solano

*b. USGS 7.5' Quad: Cuttings Wharf, Napa, Mount George, Fairfield North, Mount Vaca, Allendale, Calif. Date: T ; R ; ¼ of ¼ of Sec ; M.D.B.M.

c. Address: N/A

City:

Zip:

d. UTM: Zone: 10

Elevation: Varies along length of transmission line

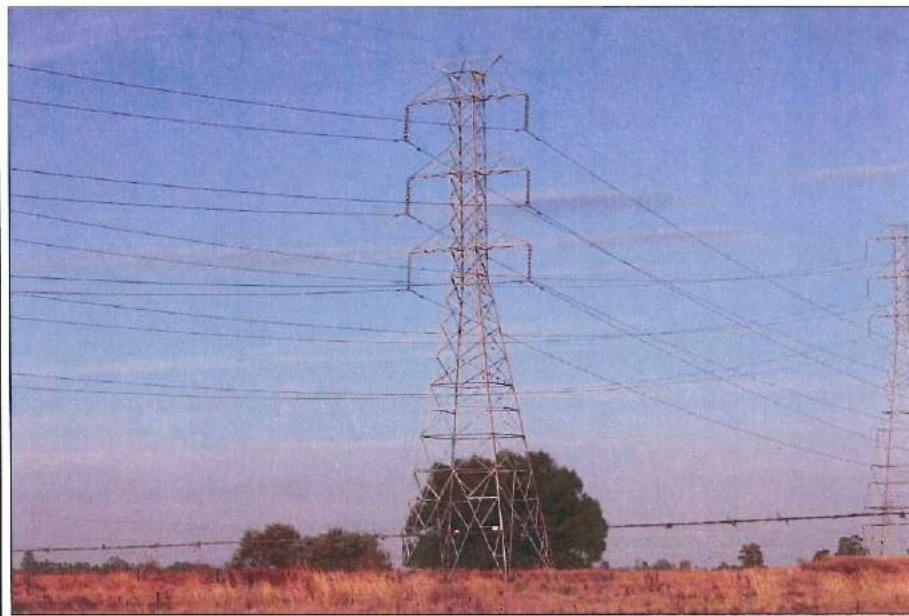
e. Other Locational Data: Specific locational information regarding PG&E electrical transmission systems is confidential. The Tulucay-Vaca 230kV transmission line begins at the Tulucay Substation and heads east-northeast across Napa and Solano counties. The transmission line ends at the Vaca-Dixon Substation near Vacaville, California.

*P3a. Description: This resource is a transmission line that transverses Napa and Solano counties. The line consists of a number of different types of transmission towers. The different tower types do not represent unique designs, but rather standard designs used to address specific siting needs and to facilitate the effective transmission of electric current. The different types of towers function as a single unit for the efficient transmission of electric current. The lattice steel towers along the line are supported by concrete footings/foundations. The towers support ceramic insulators and six large conductor wires. The conductor wire and insulators appear in good condition. Guy wires are used on areas where the linear system turns or needs added support. Multiple towers are located in areas where the line straddles a road or other feature of the landscape. The concrete footing/foundations at the tower feet appear to be original and several of the footings are cracked and crumbling. All towers surveyed in this system exhibit effects of weathering, including rust.

*P3b. Resource Attributes: HP11 (Engineering Structure)

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

P5a. Photo or Drawing



P5b. Description of Photo:

Tower 0/4 facing 65° NE

*P6. Date Constructed/Age and

Sources: ☒ Historic

☐ Prehistoric ☐ Both

*P7. Owner and Address:

Pacific Gas and Electric
San Francisco, California

*P8. Recorded by:

Jeremy Adams
Cardno ENTRIX
701 University Avenue, Suite 200
Sacramento, CA 95825

*P9. Date Recorded: 9/15/2011

*P10. Survey Type: Architectural
Inventory

*P11. Report Citation: Adams, J. 2011. *Cultural Resources Eligibility Evaluation for Pacific Gas and Electric's Vaca Dixon-Lakeville 230kV Reconductoring Project, Sonoma, Napa, and Solano Counties, CA*. Prepared for Pacific Gas and Electric.

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

DPR 523A (1/95)

*Required information

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 4

*NRHP Status Code

*Resource Name or # Tulucay-Vaca 230kV

B1. Historic Name: N/A

B2. Common Name: Tulucay-Vaca 230kV

B3. Original Use: Electric transmission

B4. Present Use: Electric transmission

*B5. Architectural Style: N/A

*B6. **Construction History:** The Tulucay-Vaca 230kV transmission line was constructed in 1956 by Pacific Gas and Electric Company (PG&E). The Tulucay-Vaca 230kV transmission line extends from the Tulucay Substation near Vallejo to the Vaca-Dixon Substation near Vacaville. The transmission line has sixteen different types of towers, the majority being type 4G, 3N, and NGX. The towers use ceramic insulators to hold the conductor wire. The lattice steel towers are supported by concrete footings/foundations. The towers support ceramic insulators and six large conductor wires. The conductor wire and insulators appear in good condition. Guy wires are used on areas where the linear system turns or needs added support. Multiple towers are located in areas where the line straddles a road or other feature of the landscape. The concrete footing/foundations at the tower feet appear to be original and several of the footings are cracked and crumbling. All towers surveyed in this system exhibit effects of weathering, including rust.

*B7. Moved? ☒No ☐Yes ☐Unknown Date:

*Original Location:

*B8. Related Features: None

B9a. Architect: N/A

b. Builder: PG&E

*B10. Significance: Theme: Electric Transmission

Area: Sonoma and Napa Counties

Period of Significance: 1950s **Property Type:** Electric Transmission Structure **Applicable Criteria:** N/A

Criterion A or 1: The Tulucay-Vaca 230kV transmission line does not meet Criterion A or 1 for inclusion on the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR). The Tulucay-Vaca 230kV transmission line represents one of many electric transmission line systems in California that were built after the pioneer period of electric transmission, 1890-1920. From 1920 to the present California experienced dramatic improvement in electric transmission lines that facilitated transmission of higher voltage electric current across very long distances. Beginning in the 1920s there also was an increase in the number and expansion of existing electric utility companies. The Tulucay-Vaca 230kV transmission line represent expansion of existing electric transmission systems. The transmission line improved and expanded electric service across Napa and Solano counties. However, the transmission line is not related to the original development or construction of electric transmission systems in California. Therefore, the Tulucay-Vaca 230kV transmission line is important to the local community, but it is not significant to the broad patterns of the history of the development of electric transmission systems in California or PG&E.

Criterion B or 2: The Tulucay-Vaca 230kV transmission line does not meet Criterion B or 2 for inclusion on the NRHP or CRHR. Archival research did not identify any individuals important in the development of electric transmission systems or PG&E associated with the Tulucay-Vaca 230kV transmission line. Therefore, the transmission line is not associated with the lives of any significant persons important in the design or development of electric transmission systems or towers.

Criterion C or 3: The Tulucay-Vaca 230kV transmission line does not meet Criterion C or 3 for inclusion on the NRHP or CRHR. The steel lattice towers that are part of the Vaca-Lakeville No. 1 transmission line include sixteen different types. The different tower types do not represent unique designs, but rather standard designs used to address specific siting needs and to facilitate the effective transmission of electric current. The different types of towers function as a single unit for the efficient transmission of electric current. None of the towers are unique in design or construction and do not represent the best example of a particular type of tower. The conductors, insulators, foundations, and guying wires used for all tower structures are standard construction. The design, construction techniques, and equipment (guy wires, insulators, etc.) used for construction and operation of the Tulucay-Vaca 230kV were in existence and operation throughout California and the United States prior to the construction of the line. The design and construction of the Tulucay-Vaca 230kV transmission line is not unique or distinguishable from other electric transmission line systems of a similar capacity, function, and location.

Criterion D or 4: The Tulucay-Vaca 230kV transmission line does not meet Criterion D or 4 for inclusion on the NRHP or CRHR. Archival research for the Tulucay-Vaca 230kV transmission line was conducted at several repositories including PG&E archives. Additional research regarding the Tulucay-Vaca 230kV transmission line would not likely yield any significant new information regarding the transmission line.

a.

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 3 of 4

*Resource Name or # Tulucay-Vaca 230kV

B11. Additional Resource Attributes: None

*B12. References: None

B13. Remarks: Tower 4/24 was previously recorded by Pappas in 2008 as an isolate IO-08-10 as part of a survey project across the Burton Property, Solano County.

A map is not included with this BSO because specific locational information regarding PG&E electrical transmission systems is confidential.

***B14. Evaluator:**

Jeremy Adams
Cardno ENTRIX
701 University Avenue, Suite 200
Sacramento, CA 95825

*Date of Evaluation: 9/15/2011

(Sketch Map with north arrow required.)

(This space reserved for official comments.)

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

Primary # **P-48-001604**

HRI #

Trinomial

Page 4 of 4

Resource Name or #: Tulucay-Vaca 230kV

L1. Historic and/or Common Name: None

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

b. Location of point or segment: Specific locational information regarding PG&E electrical transmission systems is confidential. The Tulucay-Vaca 230kV transmission line begins at the Tulucay Substation and heads east-northeast across Napa and Solano counties. The transmission line ends at the Vaca-Dixon Substation near Vacaville, California.

L3. Description:

See P3a on Primary Record.

L4. Dimensions:

a. Top Width:

Varies by type of tower

b. Bottom Width:

c. Varies by type of tower

d. Height or Depth:

Approximately 120 feet tall

e. Length of Segment:

Approximately 20 miles

L5. Associated Resources:

None

L6. Setting:

Napa and Solano Counties

L7. Integrity Considerations:

The line is currently operational and does not exhibit any integrity issues.

L8b. Description of Photo, Map, or Drawing

Tower 0/4 facing northwest

L9. Remarks:

None

L10. Form Prepared by:

Jeremy Adams

Cardno ENTRIX

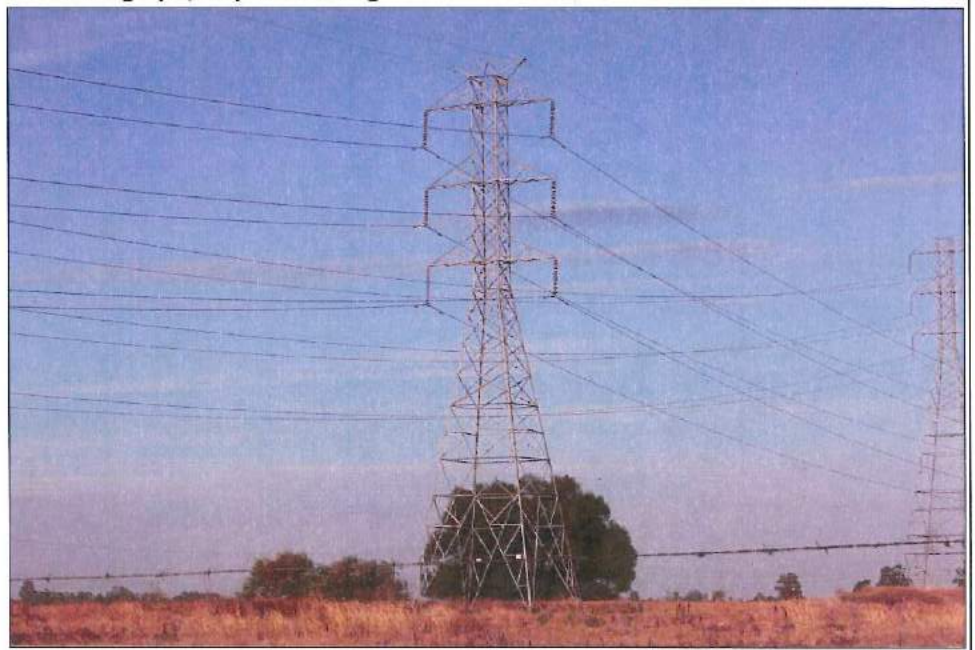
701 University Avenue, Suite 200

Sacramento, CA 95825

L11. Date: 9/15/2011

L4e. Sketch of Cross-Section Facing: N/A

L8a. Photograph, Map or Drawing



ATTACHMENT C

Site Records

*Recorded by: Coleman et al.

*Date: August 14, 2018

☐ Continuation

☒ Update

Originally recorded in 1987 by G. White from Holman and Associates, P-48-000167 consisted of a prehistoric lithic scatter west of Gibson Canyon Road measuring approximately 80 meters (m) E-W by 50 m N-S. White stated that the site likely extends along the eastern side of the road as well but survey limitations did not allow for verification. The site yielded dark midden soils containing basalt, obsidian, and chert debitage at a maximum density of 1 flake per 5m². Most of the material was observed along the access road that cuts westward from Gibson Canyon Road. The deposit was estimated to be approximately 0.5 m deep as evident from a road cut near the entrance along Gibson Canyon Road. In 2008 the site was relocated by Ruby and Wohlgemuth from Far Western as part of a Solano County Public Works road widening project. After field reconnaissance verifying the deposit along the east side of Gibson Canyon Road, Far Western conducted archaeological testing in the site expansion area and discovered 5 biface fragments, 3 flaked stone tools, a granite atlatl spur, an unmodified quartz crystal, 75 obsidian flakes, 29 chert flakes, and 7 other flakes of various stone types. Obsidian hydration readings concluded that the site was occupied throughout the Holocene, consistent with the age of Rincon soils to the terminal Pleistocene. The site area originally discovered by White west of Gibson Canyon Road was not tested.

During August of 2018 Solano Archaeological Services was contracted to conduct a CEQA-level study of the Morgan property west of Gibson Canyon Road. Site P-48-000167 was relocated in the original area discovered by White in 1987. The site area lie on a saddle landform sloping downward from the northwest. The site was also situated just north of an unnamed seasonal drainage meandering southeastward from the hills to the west. The framework of an old shed was observed at the top of the saddle, and clearly the top of the saddle had been scraped by mechanical activity. As the site slopes downward to the creek more scraping was evident and likely occurred during installation of adjacent power poles. Two obsidian interior flakes (<2 cm in length) and two basalt cores were found along the slope, and on the saddle top four pieces of basalt shatter, one chert flake, and one faunal remain were observed on the ground surface. As the project undertaking was for a subdivision without plans for subsurface construction, no immediate archaeological testing was recommended. However, if any future plans for development involving subsurface activities become proposed on this area of parcel APN 0105-170-150 west of Gibson Canyon Road, it is highly recommended that archaeological testing and evaluation be conducted prior to any construction.

Date: August 2018

Crew: J. Coleman, M. Rives, S. Talcott, B. Akey, and A. Boltz

Affiliation: Solano Archaeological Services

Site Condition: Fair

CRHR eligibility: Potentially eligible



Site overview of P-48-000167 west of Gibson Canyon Road as it slopes downward toward unnamed drainage in background.

SKETCH MAP

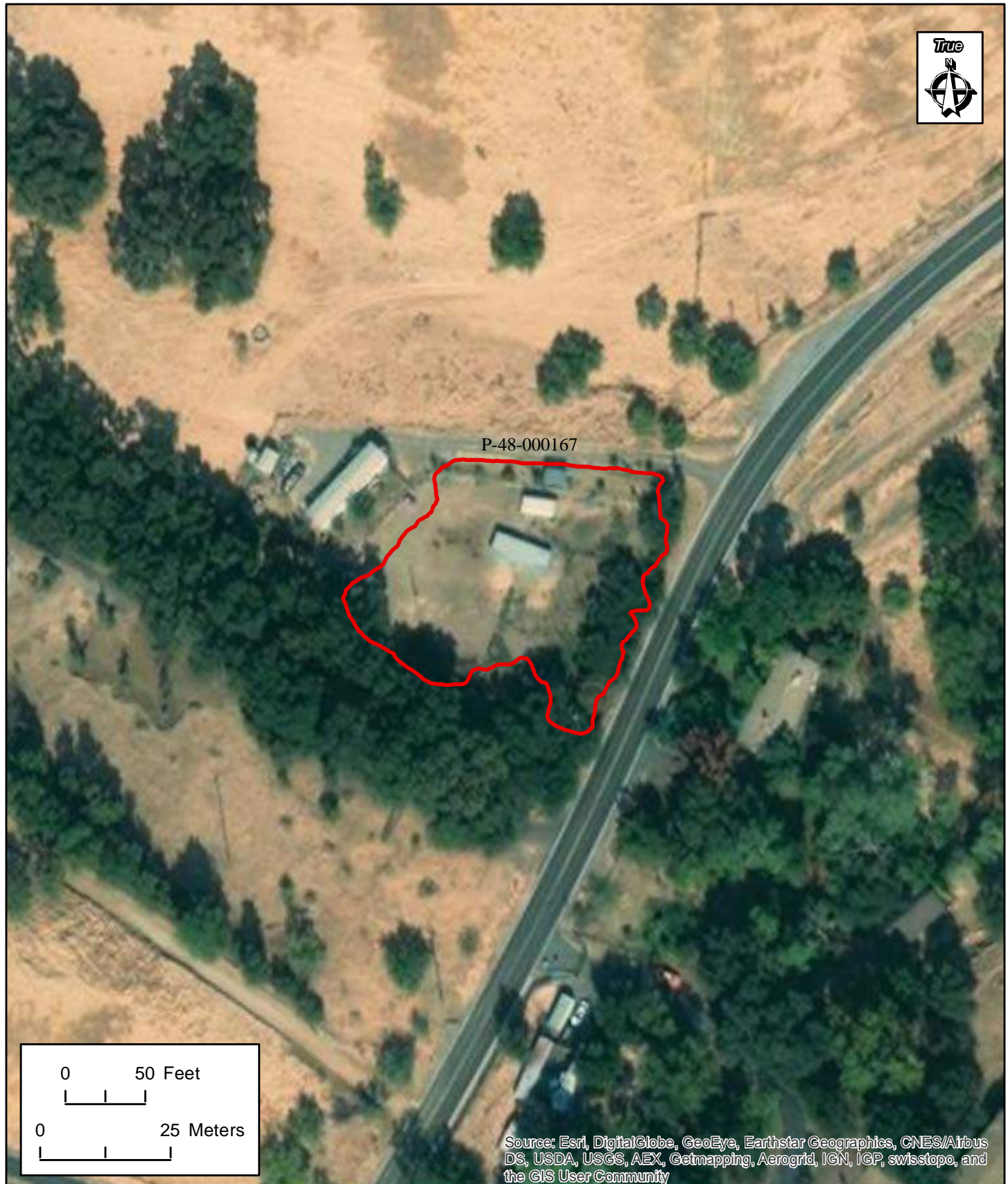
Trinomial CA-SOL-334

Page 2 of 3

*Resource Name or #

Drawn By: L. Wood and J. Coleman

*Date 8/18/2018



State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-48-000167

HRI#

Trinomial CA-SOL-334

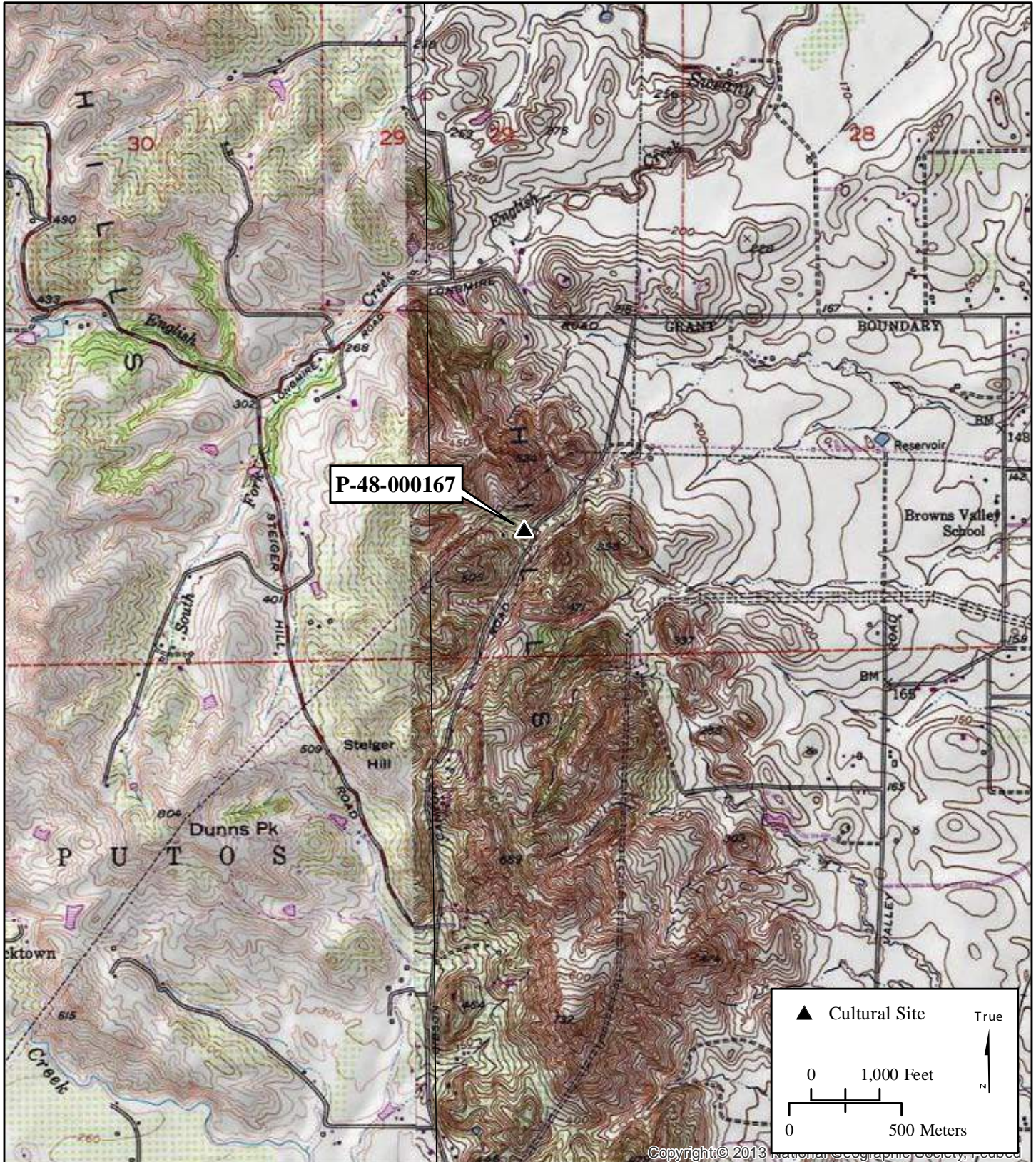
Page 3 of 3

*Resource Name or #

*Map Name: Allendale

*Scale: 1:24,000

*Date of Map: 1975, pr 1978



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

Primary # P-48-001604

HRI#

Trinomial

Page 1 of 2

*Resource Name or #: Vaca Dixon-Moraga 230kV Transmission Line Segment

*Recorded by: Coleman et al.

*Date: August 14, 2018

☐ Continuation

☒ Update

According to the Northwest Information Center, P-48-001604 was first recorded in 2011 by J. Adams of Cardno Entrix as the Tulucay-Vaca 230kV PG&E transmission line. No accompanying location map, however, was produced in which to compare the line with the Vaca Dixon-Moraga 230 kV PG&E transmission line segment recorded by J. Coleman in 2016. Coleman recorded the 3,636-foot long segment from its western terminus at the Putah South Canal to its eastern terminus at Highway 505. According to historic USGS topographic quadrangles, the line was constructed prior to 1942. Coleman recommended the resource ineligible for California Register of Historical Resources listing.

During August of 2018 Solano Archaeological Services was contracted to conduct a CEQA-level study of the Morgan property west of Gibson Canyon Road. The Vaca Dixon-Moraga 230kV transmission line was easily relocated, and a new 2,780-foot segment on the Morgan property was recorded. Construction was consistent with previous recordation, and the line remains in good condition. There were no observable changes to the line on the new recorded segment, and resource is still recommended ineligible for CRHR listing.

Date: August 2018

Crew: J. Coleman and A. Boltz

Affiliation: Solano Archaeological Services

Site Condition: Good

CRHR eligibility: Ineligible



Site overview of P-48-001604 west of Gibson Canyon Road, facing west.

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-48-001604

HRI#

Trinomial

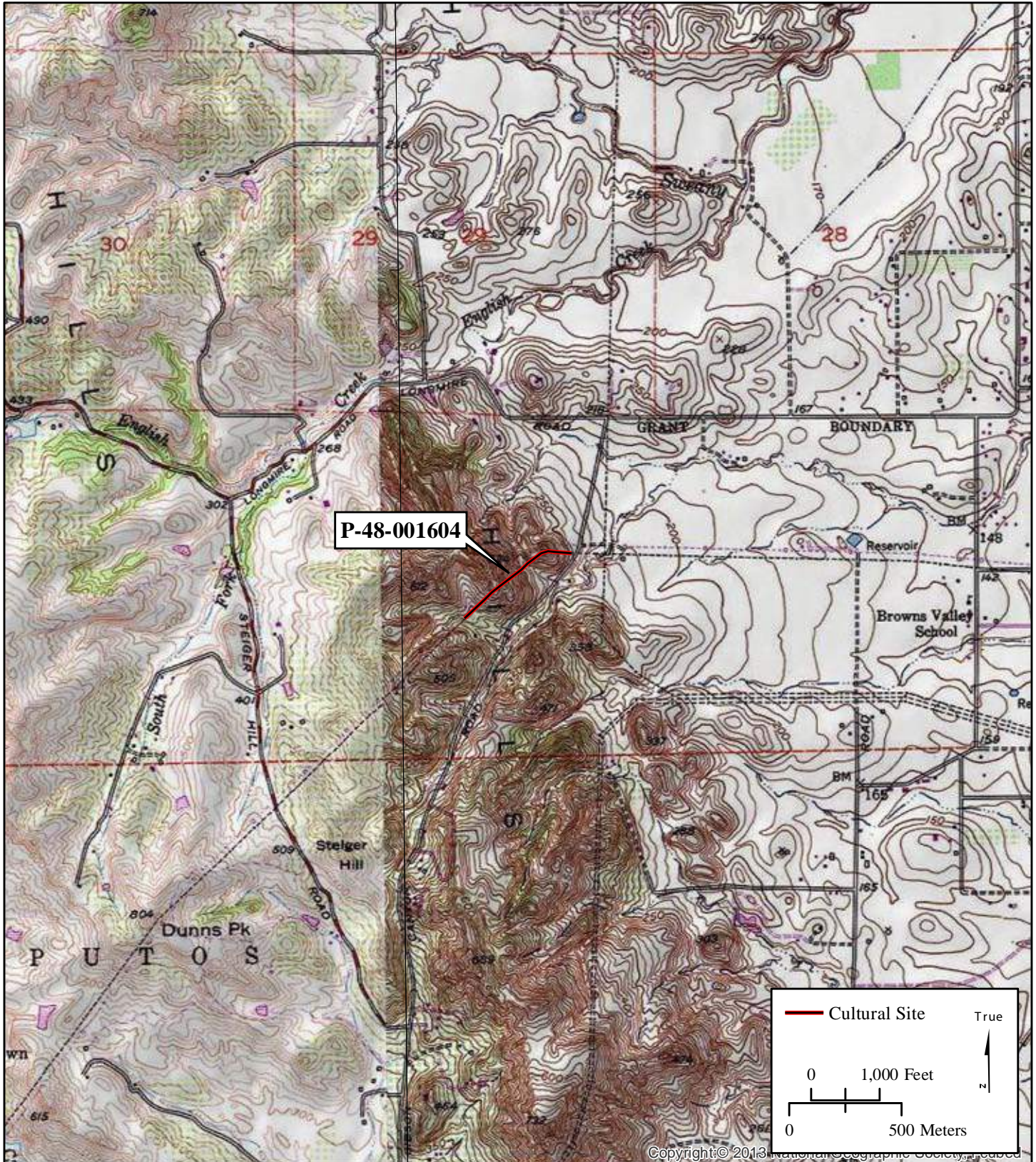
Page 2 of 2

*Resource Name or #

*Map Name: Allendale

*Scale: 1:24,000

*Date of Map: 1978



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

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 6

* Resource Name or #: SAS-001 Water Conveyance System

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County: Solano

*b USGS 7.5' Quad: Allendale

Date: 1978 T 6N R 1W

Unsectioned land; *Los Puntos* land grant M.D. B.M.

c. Address: Gibson Canyon Road City: Vacaville Zip: 95688

d. UTM: Zone: 10; 587,930 mE/ 4,252,346 mN Datum: NAD 83 NORTHEAST TERMINUS
10; 587,665 mE/ 4,252,048 mN NAD 83 SOUTHWEST TERMINUS

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 208-324'

From the intersection of East Monte Vista Blvd. and Dobbins Street in Vacaville, head north on Dobbins street for 4.0 miles. Dobbins Street turns into Gibson Canyon Road during this drive. Park the car where you can and hike to the UTM coordinates above.

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

This site consists of a historic-era water conveyance system comprised of five features (A-E) located in the English Hills between Gibson Canyon Road and Steiger Hill Road north of Vacaville proper. The system was essentially built on a naturally created seasonal drainage emanating from hills with a northeast aspect. The features lie directly on top of the drainage from an elevation of 324-208 feet above sea level, and consist of four water catchment/spillways (Features A-D) and two conjoining segments of mechanically modified natural drainages (Feature E).

*P3b. Resource Attributes: AH6. Water conveyance system

*P34. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other

P5a.



P5b. Description of Photo:

Feature A overview (# 1219), facing west, August 14, 2018.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

*P7. Owner and Address:

Donald Pippo Trust
4142 Cantelow Road
Vacaville, CA 95688

*P8. Recorded by:

J. Coleman, M. Rives, S. Talcott, and B. Akey
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

P9. Date Recorded: August 14, 2018

P10. Survey Type: Intensive pedestrian

*P11. Report Citation: Coleman, 2018 Archaeological Survey Report for the Lands of Morgan Project, Solano County, California. Submitted to William Morgan by Solano Archaeological Services.

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

*Recorded by: Coleman et al.

*Date: August 14, 2018

☒ Continuation

☐ Update

Features A-D vary in size slightly but are all essentially the same design and constructed in the same manner. Each water catchment/spillway feature has two retaining walls built from stacked and mortared basalt cobbles built into the ground perpendicular to the flow of the drainage, and in the middle of the walls is a ramped spillway that sends flowing waters downward to the next tier. Each water catchment/spillway feature is located topographically where the sloped incline of a hill meets a plateau, indicating that the function of the features was to capture waters that might normally spread out over the plateau, and send them downward through the spillway. The basalt cobble utilized to build these structures were slightly “faced” or worked to provide a flatter surface on the walls, and old cement containing a high pea gravel content was utilized to mortar the cobbles into place. Around Features A, B, and D were isolated modified cobbles on the ground that appear to have once been utilized as part of features. The outside of the walls, particularly the tops, and the spillway were dressed with a coating of cement to provide a smooth finish. Feature E was comprised of two conjoining segments of drainages that appeared to be mechanically modified by a front loader, as the paths were rectilinear in shape and size. Below are the details of each feature:

Feature A: Water catchment walls were six-foot long and were built at a slightly pitched angle to possibly better flow waters toward the center spillway. The spillway was seven feet long downhill from the catchment walls and five feet wide. It was constructed to follow the path of the natural drainage, and as such was built at an incline to flow waters downhill.

Feature B: The water catchment walls measured four feet (southeast wall) and three feet (northwest wall) long and were built completely perpendicular to the spillway utilizing the same construction methods. The spillway was seven feet long and appeared to be pitched at approximately 60°.

Feature C: This feature was the highest in elevation of the four water catchment/spillway structures. Most of this water catchment/spillway feature has been destroyed but there are enough wall remnants present to surmise that this was the same design as the other water catchment/spillway features along this drainage. Measurements, however, are not possible. Nearby is a fig tree and a pile of cement rubble made from newer concrete. There are old tires placed along the drainage likely to help with erosion control. Also present was an underground segment of old pipe along the hill’s incline possibly used to help drain waters. Other sections of this pipe were not seen.

Feature D: This water catchment/spillway feature was complete and exhibited seven-foot walls and generally was more consistent with measurements in its construction. The top of the walls were dressed, and the six-foot wide and seven-foot long spillway lay partially filled in by the sedimentation process and erosion. This feature was located at the lowest elevation and at a point where the hill begins to taper into the flatter surrounding pastureland. The style and construction were similar to Features A-C, and the water catchment walls were completely perpendicular to the spillway.

Feature E: This consists of the two conjoining modified drainage segments. The longer of the two, which runs south-north along the mapped seasonal drainage, measures approximately 728 feet long, while the shorter segment measures 292 feet long. Each of the segments appears to have been mechanically scraped with a front loader, creating a rectilinear path approximately 6-10 feet wide. The function of the modification would be to allow more water to flow more easily through the path.



SAS-001 Feature A facing north.



SAS-001 Feature A facing south.



SAS-001 Feature B facing north.



SAS-001 Feature B facing east.



SAS-001 Feature C rubble, facing west.



SAS-001 Feature C remnants, facing south.



SAS-001 Feature D spillway buried with sediments, facing west.



SAS-001 Feature E rectilinear drainage swath, facing west.

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

Primary #
HRI #
Trinomial

Page 4 of 6

Resource Name or #: SAS-001 Water Conveyance System

L1. Historic and/or Common Name: Modified drainage segments

L2a. Portion Described: ☒ Entire Resource: Entire area of modification was recorded.

☐ Segment

☐ Point Observation

Designation: none

b. Location of point or segment:

Larger segment:

UTM: Zone: 10; 587,930 mE/ 4,252,184 mN
10; 587,665 mE/ 4,252,048 mN

Datum: NAD 83 NORTHEAST TERMINUS
NAD 83 SOUTHWEST TERMINUS

Smaller segment:

UTM: Zone: 10; 587,830 mE/ 4,252,185 mN
10; 587,750 mE/ 4,252,150 mN

Datum: NAD 83 NORTHEAST TERMINUS
NAD 83 SOUTHWEST TERMINUS

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

This linear resource consists of two conjoining modified drainage segments. The longer of the two, which runs south-north along the mapped seasonal drainage, measures approximately 728 feet long, while the shorter segment measures 292 feet long. Each of the segments appears to have been mechanically scraped with a front loader, creating a rectilinear path approximately 6-10 feet wide. The function of the modification would be to allow more water to flow more easily through the path.

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

a. Top Width: n/a

b. Bottom Width: 6-10 feet

c. Height or Depth: 4-6 feet

d. Length of Segment: 728 feet and 292 feet

L5. Associated Resources:

None

L4e. Sketch of Cross-Section



L8a. Photograph, Map or Drawing

none

L6. Setting: (Describe natural features, landscape characteristics, slope, etc., as appropriate.)
The modified segments of the natural drainages are in a hilly oak-woodland to prairie grassland vegetative zone exhibiting slopes ranging from 20-60%.

L7. Integrity Considerations: Some of the modifications have been filled in from erosion and sedimentation processes.

L8b. Description of Photo, Map, or Drawing

none

L9. Remarks:

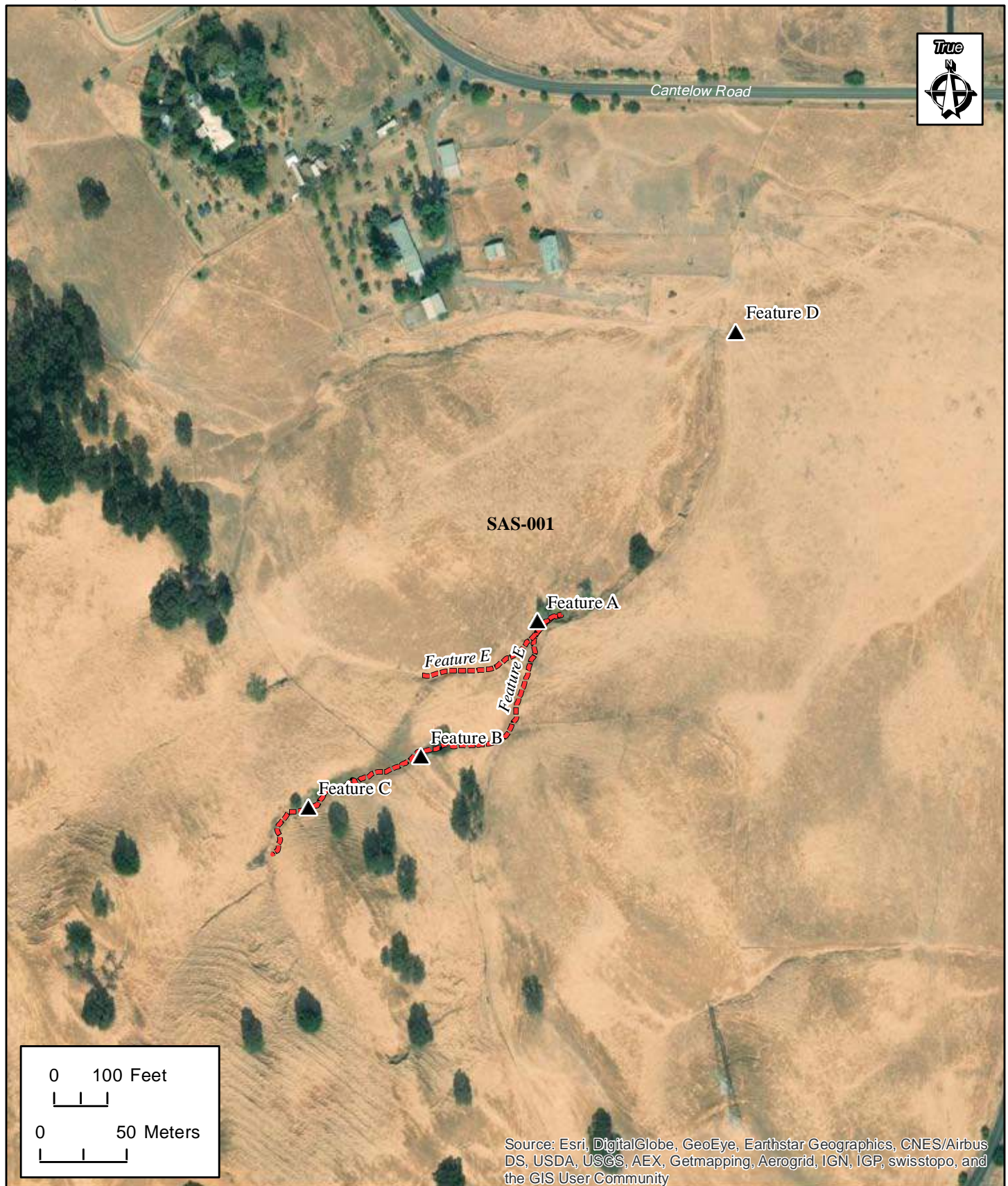
As SAS-001 does not possess qualities of historic significance meeting California Register of Historical Resources (CRHR) criteria A-D, the site is recommended as ineligible for CRHR listing.

L10. Form Prepared by:

J. Coleman
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

L11. Date: August 14, 2018

SKETCH MAP



State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #
HRI#
Trinomial

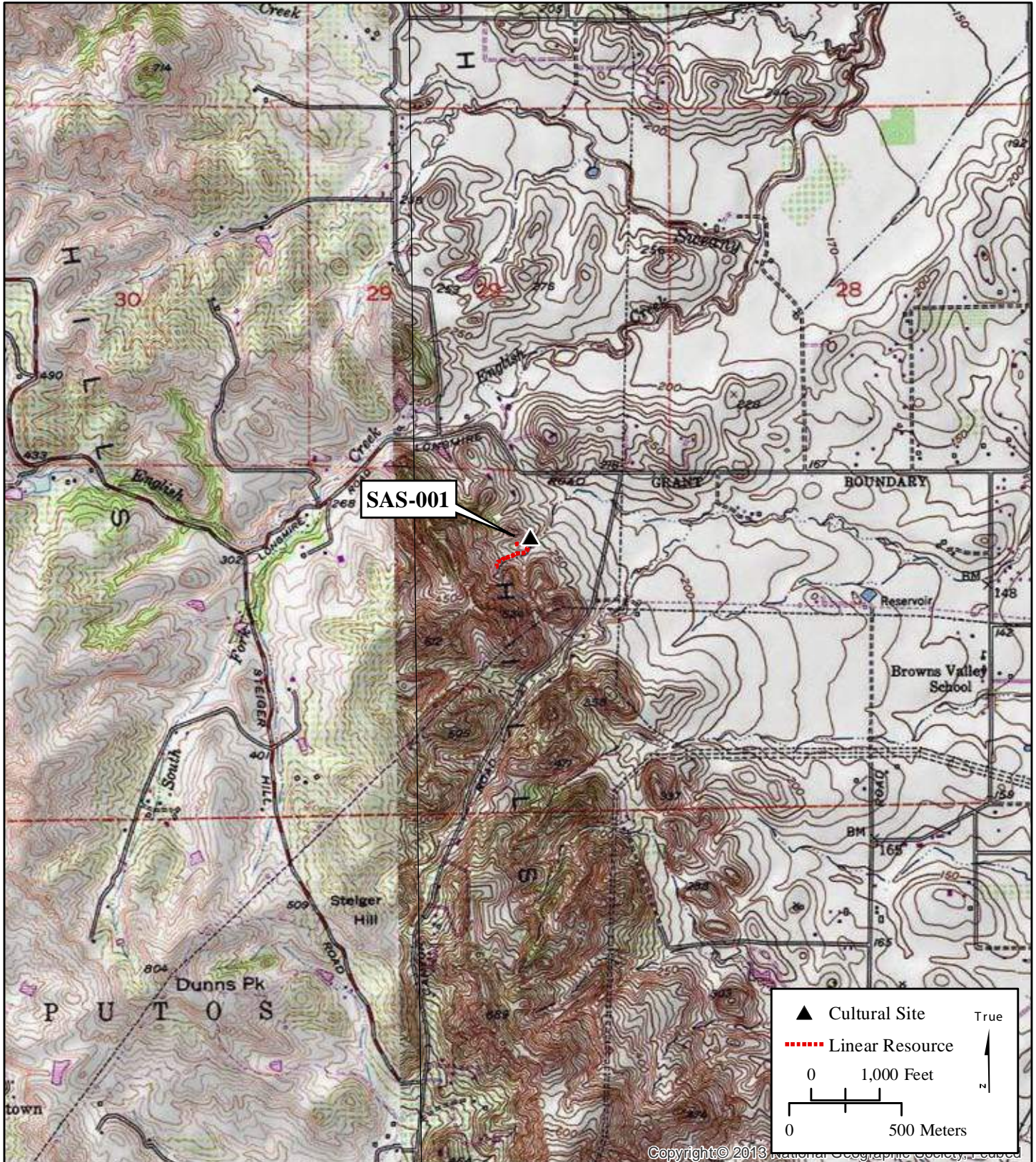
Page 6 of 6

*Resource Name or # SAS-001

*Map Name: Allendale

*Scale: 1:24,000

*Date of Map: 1975, pr 1978



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

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 5

* Resource Name or #: SAS-002 Water Conveyance System

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County: Solano

*b USGS 7.5' Quad: Mt. Vaca

Date: 1969 T 7N R 1W

SE ¼ of the SE ¼ of Section 30

M.D. B.M.

c. Address: Cantelow Road

City: Vacaville

Zip: 95688

d. UTM: Zone: 10; 587,175 mE/ 4,252,646 mN Datum: NAD 83 FEATURE A

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 220'

From the intersection of East Monte Vista Blvd. and Dobbins Street in Vacaville, head north on Dobbins street for 4.3 miles. Dobbins Street turns into Gibson Canyon Road during this drive. Turn left onto Cantelow Road heading west and drive for 0.7 mile, then park and hike to the UTM coordinate above.

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

This site consists of a historic-era water conveyance system comprised of four features (A-D) located in the English Hills just north of Cantelow Road in Vacaville. The system was essentially built right on English Creek in the English Hills. Feature A consists of a circular brick-lined cistern, Feature B is cement headgate, and Features C and D are each comprised of a cement footing on opposite sides of the creek. No artifacts were observed in association with the features. SEE CONTINUATION SHEET

*P3b. Resource Attributes: AH6. Water conveyance system

*P3d. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other

P5a.



P5b. Description of Photo:

Feature B overview (# 1252), facing northeast, August 14, 2018.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

*P7. Owner and Address:

Donald Pippo Trust
4142 Cantelow Road
Vacaville, CA 95688

*P8. Recorded by:

J. Coleman, M. Rives, S. Talcott, and B. Akey
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
Suisun, CA 94585

P9. Date Recorded: August 14, 2018

P10. Survey Type: Intensive pedestrian

*P11. Report Citation: Coleman, 2018 Archaeological Survey Report for the Lands of Morgan Project, Solano County, California. Submitted to William Morgan by Solano Archaeological Services.

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

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

Primary #
HRI#
Trinomial

Page 2 of 5

*Resource Name or #: SAS-002 Water Conveyance System

*Recorded by: Coleman et al.

*Date: August 14, 2018

☒ Continuation

☐ Update

Feature A: The cistern is located along the south bank of English Creek and is built from mortared brick. It is approximately 3-feet high and 6-feet in diameter, and rests on a solid dirt pad several feet above the creek bottom. There are two milled 2x12 planks and some old pipe resting in the cistern, and a tree currently resides inside as well. The cistern was originally used to hold water for a variety of purposes.

Feature B: This feature consists of a large cement headgate that crosses English Creek. The two main water catchment walls are approximately 3-feet high, 2-feet deep, and 6-feet long, and were placed directly into the banks during construction. The spillway in the center is now missing its gate, which was likely metal to hold the amount of water pressure that could be caused by quickly flowing winter waters, but there are vertical grooves along the inside of the walls that the gate once slid into that can still be seen. Crumbling cement fragments now constitute remnants of the spillway. Downstream long, rounded and slightly vertical basalt outcrops located adjacent to the spillway were utilized as natural weirs to control the flow of moving waters.

Feature C: This is a crumbling diamond-shaped footing located right on the southern bank of English Creek. It is made from old cement and measures approximately 3-feet wide by 2.5-feet long by 2-feet high. The eastern and western ends are solid but the center and shorter sides are recessed for some unknown purpose. A large willow tree now grows from the center of the footing. A few old bricks lay nearby but may not be particularly associated with the footing.

Feature D: This is a smaller square-shaped footing located directly across English Creek from Feature C. It was placed three to four feet up on the northern bank, and measures approximately 1.5 feet by 1.5 feet by 1-foot high. A large threaded headless bolt protrudes from the top of the footing. It is speculated that Features C and D were related in function, and may have once held something that crossed the creek.



SAS-002 Feature B facing southwest.



SAS-002 Feature B wall grooves where gate once slid, facing northeast.



SAS-002 Feature A brick cistern, facing southeast.

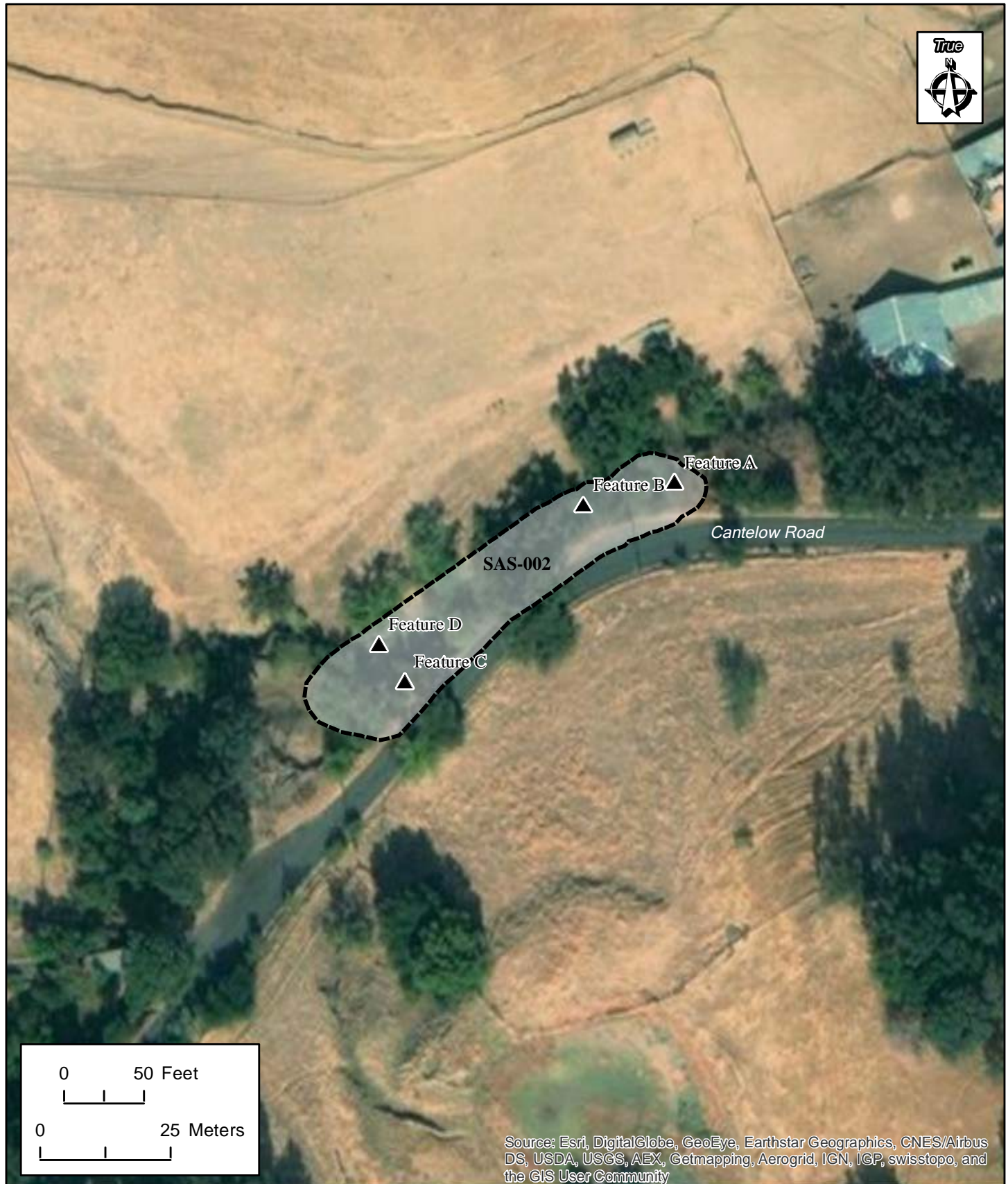


SAS-002 Feature C footing, facing southwest.



SAS-002 Feature D footing at right, facing northeast.

SKETCH MAP



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

State of California Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

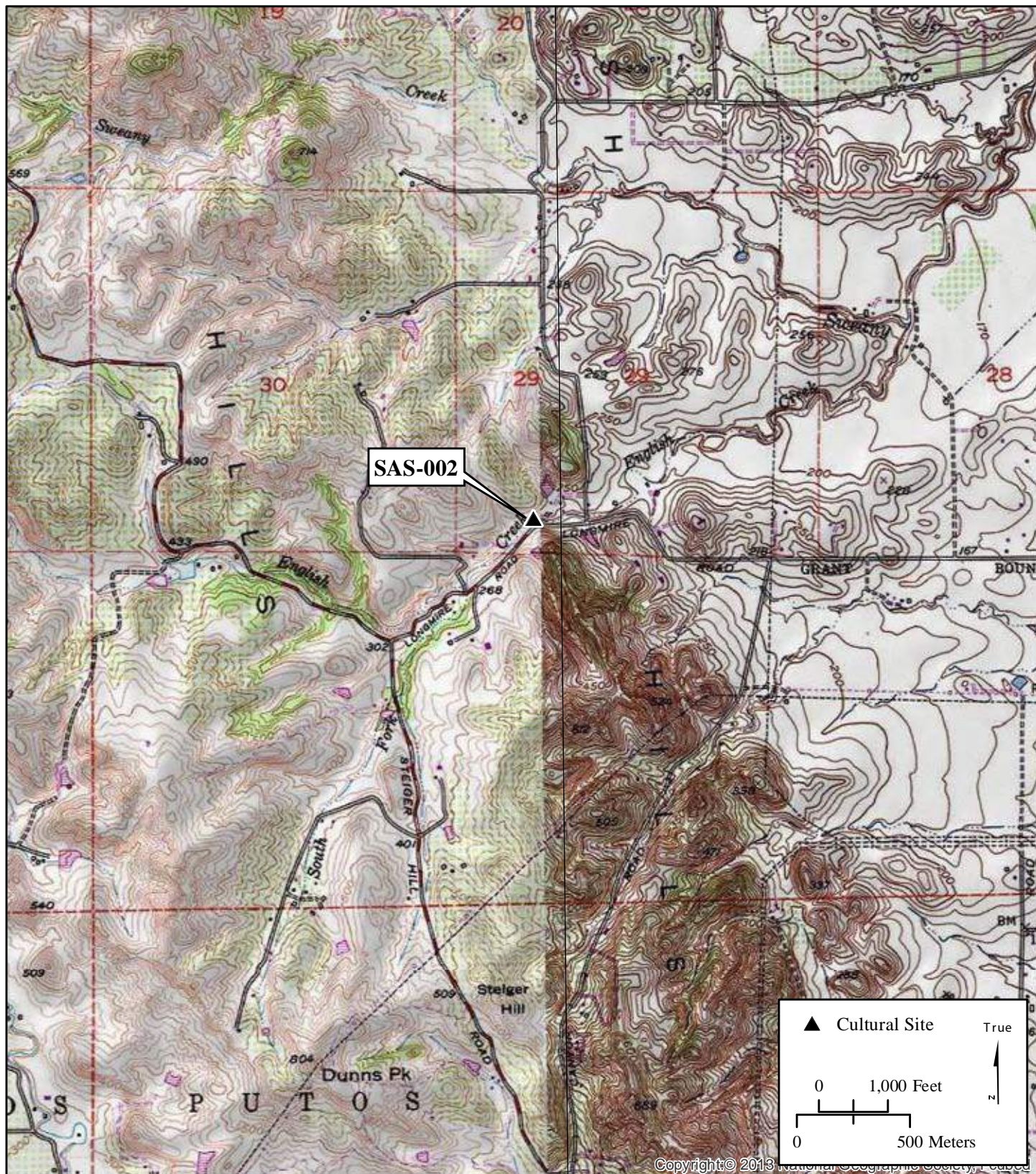
Primary #
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Page 5 of 5 *Resource Name or # SAS-002

*Map Name: Mount Vaca

*Scale: 1:24,000

*Date of Map: 1969, pr 1978



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

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 3

* Resource Name or #: SAS-003 Water Conveyance System

P1. Other Identifier:

*P2. Location: ☒ Not for Publication ☐ Unrestricted
and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*a. County: Solano

*b USGS 7.5' Quad: Mt. Vaca

Date: 1969 T 6N R 1W

Unsectioned land in *Los Puntos* land grant M.D. B.M.

c. Address: Steiger Hill Road City: Vacaville Zip: 95688

d. UTM: Zone: 10; 586,579 mE/ 4,251,826 mN Datum: NAD 83 Center point

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Elevation: 295'

From the intersection of East Monte Vista Blvd. and Dobbins Street in Vacaville, head north on Dobbins street for 2.4 miles. Dobbins Street turns into Gibson Canyon Road during this drive. Turn left onto Steiger Hill Road heading west and drive for 1.5 miles, then park and hike to the UTM coordinate above.

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

This site consists of a historic-era retaining wall with pipe outlet located adjacent to the English Creek South Fork in the English Hills of Vacaville, California. The wall was built along the bottom of the creek's east embankment, and functions to drain waters collected further up the hill to the southeast via the drain pipe. Built with a slight buttress toward the creek, the wall stands approximately 4-feet high and is slightly bowed in length for approximately 10-feet. The wall was constructed from modified basalt cobbles that were faced to provide a smoother finish. The cobbles were mortared into place with cement containing a high sand content. The pipe outlet, made from cement and measuring approximately 14-inches in diameter, exits from the retaining wall at the wall length midpoint about 3-feet high. Approximately 50 feet further northeast up the hill the pipe was observed in a small patch of indented ground.

*P3b. Resource Attributes: AH6. Water conveyance system; AH11. Walls

*P3d. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other

P5a.



P5b. Description of Photo:

SAS-003 overview (# 1286), facing north, August 14, 2018.

*P6. Date Constructed/Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

*P7. Owner and Address:

Donald Pippo Trust
4142 Cantelow Road
Vacaville, CA 95688

*P8. Recorded by:

J. Coleman, M. Rives, S. Talcott, and B. Akey
Solano Archaeological Services
131 Sunset Ave., Ste. E 120
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*Resource Name or #: SAS-002 Water Conveyance System

*Recorded by: Coleman et al.

*Date: August 14, 2018

☒ Continuation

☐ Update

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*Resource Name or # SAS-003

*Map Name: Mount Vaca

*Scale: 1:24,000

*Date of Map: 1969, pr 1978

