# APPENDIX F

## Cultural Resources Report

# Archaeological and Built Environment Resources Inventory Report for the Pittsburg Technology Park Specific Plan

## Contra Costa County, California

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## MANAGEMENT SUMMARY

ECORP Consulting, Inc. was retained in 2023 to conduct a cultural resources inventory for the Environmental Impact Report in support of the Pittsburg Technology Park Specific Plan (Proposed Project) in Contra Costa County, California. Pittsburg Data Hub, LLC proposes to complete an Environmental Impact Report in support of the Pittsburg Technology Park Specific Plan. The Specific Plan will serve as the overarching policy document and will provide the necessary zoning and development standards for the development of a technology park and subsequent economic development. A technology park is proposed in the northern portion of the Proposed Project Area. The southern portion of the Project Area is intended to provide opportunities for economic development by expanding the variety of technology-focused business park opportunities.

The inventory included a records search, literature review, and field survey. The records search results indicated that eight previous cultural resources studies have been conducted within the Project Area. As a result of those previous studies, one resource was previously recorded within the Project Area: P-7-2956, Pittsburg-Telsa Transmission Line. A portion of the Delta View Golf Course was previously recorded adjacent to the Project Area to the west, and a portion of it is with the Project Area. Previously recorded resource P-7-2695 (Contra Costa Canal) bisects the Project Area, but is outside of the Project Area's boundaries.

ECORP completed an archaeological and architectural history survey of the Project Area. As a result of the field survey, ECORP recorded two cultural resources within the Project Area: PT-01 (Delta View Golf Course) and PT-02 (telephone line). ECORP evaluated PT-01 (Delta View Golf Course) for the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) and determined that it is not eligible for either register. ECORP also evaluated PT-02 and determined that it is not eligible for the NRHP and CRHR. Resource P-7-2956 (Pittsburg-Telsa Transmission Line) was previously evaluated for the NRHP and CRHR, and the segment that passes through the Project Area was determined to be eligible for the NRHP and CRHR (Supernowicz 2017). Though P-7-2956 is an eligible resource, the Proposed Project will have no adverse effect on it as an Historic Property or significant impact on it as an Historical Resource. Resource P-7-26955 (Contra Costa Canal) bisects the Project Area into northern and southern portions, but is outside of the Project Area's boundaries; it was evaluated in 2003 and determined to be eligible for the NRHP and CRHR under Criterion A/1 (Herbert 2003). However, the portion of the canal that serves as access between the northern and southern areas was previous evaluated by Supernowicz (2017), who found that the 400-foot-long segment where the canal has been undergrounded no longer maintains integrity, and impacts to that segment would not constitute an adverse effect to a Historic Property under the NEPA or a significant impact to a Historical Resource under the California Environmental Quality Act. Recommendations for the management of unanticipated discoveries are provided.

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## LIST OF ACRONYMS AND ABBREVIATIONS

| Term | Description |
|---|---|
| AB | Assembly Bill |
| AC | Alternating current |
| ACHP | Advisory Council on Historic Preservation |
| APE | Area of Potential Effects |
| BERD | Built Environment Resource Directory |
| BLM | Bureau of Land Management |
| BP | Before present |
| Caltrans | California Department of Transportation |
| CCR | California Code of Regulations |
| CCTS | Central California Taxonomic System |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CHL | California Historical Landmarks |
| CHRIS | California Historical Resources Information System |
| CRHR | California Register of Historical Resources |
| CVP | Central Valley Project |
| CWA | Clean Water Act |
| DC | Direct current |
| DPR | Department of Parks and Recreation |
| GLO | General Land Office |
| LSV | Lower Sacramento Valley |
| MLD | Most Likely Descendant |
| MOA | Memorandum of Agreement |
| NAHC | Native American Heritage Commission |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NRHP | National Register of Historic Places |

| Term | Description |
|---|---|
| NPS | National Park Service |
| NWIC | Northwest Information Center |
| OHP | Office of Historic Preservation |
| PG&E | Pacific Gas and Electric Company |
| PRC | Public Resources Code |
| Project | Pittsburg Technology Park |
| RPA | Registered Professional Archaeologist |
| SHPO | State Historic Preservation Officer |
| TCRs | Tribal Cultural Resources |
| USACE | U.S. Army Corps of Engineers |
| USBR | U.S. Bureau of Reclamation |
| USC | U.S. Code |
| USGS | U.S. Geological Survey |

# 1.0 INTRODUCTION

ECORP Consulting, Inc. was retained in 2023 to conduct an archaeological and built environment resources inventory in support of an Environmental Impact Report for the Pittsburg Technology Park Specific Plan (Proposed Project) in the City of Pittsburg, Contra Costa County, California. A survey of the Proposed Project Area was required to identify potentially eligible cultural resources (i.e., archaeological sites and historic buildings, structures, and objects) that could be affected by the Project.

## 1.1 Project Location

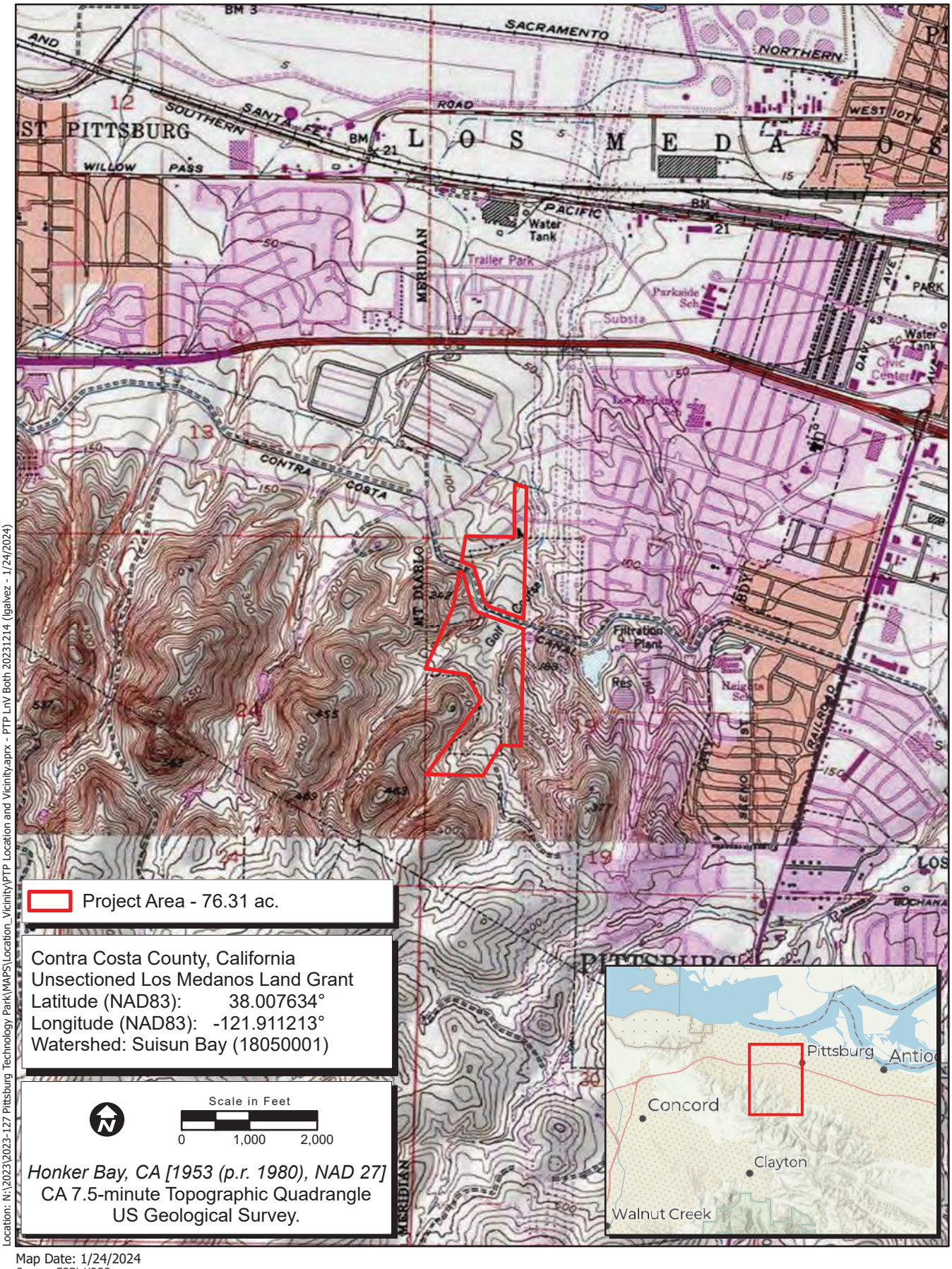
The Project Area consists of 76.31 acres of property located in Section 19 of the Los Medanos Land Grant of Township 2 North, Range 1 East and Section 24 of Township 2 North, Range 1 West, Mount Diablo Base and Meridian, as depicted on the 1953 (photorevised 1980) U.S. Geological Survey (USGS) Honker Bay, California 7.5-minute topographic quadrangle map (Figure 1). The Project is located in the City of Pittsburg, south of West Leland Road, west of a residential housing development, and east of Ripple Rouge Road (Figure 2). Residential housing and commercial development surround the Project Area to the west, north, and east. Open fields and a portion of Delta View Golf Course abut the Project Area to the south. The Contra Costa Canal is oriented east–west through the center of (but outside of) the Project Area, bisecting the Project Area into northern and southern portions.

The Proposed Project consists of the completion of an Environmental Impact Report in support of the Pittsburg Technology Park Specific Plan. The Specific Plan will serve as the overarching policy document and will provide the necessary zoning and development standards for the development of a technology park and subsequent economic development. A technology park consisting of a data center, which includes three buildings, a parking lot, access roads, landscaping, ancillary support infrastructure, and open spaces are planned in addition to utility corridors for sewer, storm water drainage, water, and fiber optic cable in the northern portion of the Proposed Project Area. The southern portion of the Project Area is intended to provide opportunities for economic development by expanding the variety of technology-focused business park opportunities.

## 1.2 Area of Potential Effects

The Area of Potential Effects (APE) consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the project. The APE is defined for projects subject to regulations implementing Section 106 (federal law and regulations). For projects subject to the California Environmental Quality Act (CEQA) review, the term Project Area is used rather than APE. The terms Project Area and APE are interchangeable for the purpose of this document.

The horizontal APE consists of all areas where activities associated with a project are proposed and, in the case of this project, equals the Project Area subject to environmental review under the National Environmental Policy Act (NEPA) and CEQA.

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Map Date: 1/24/2024
*Sources: ESRI, USGS*

**Figure 1. Project Location and Vicinity**

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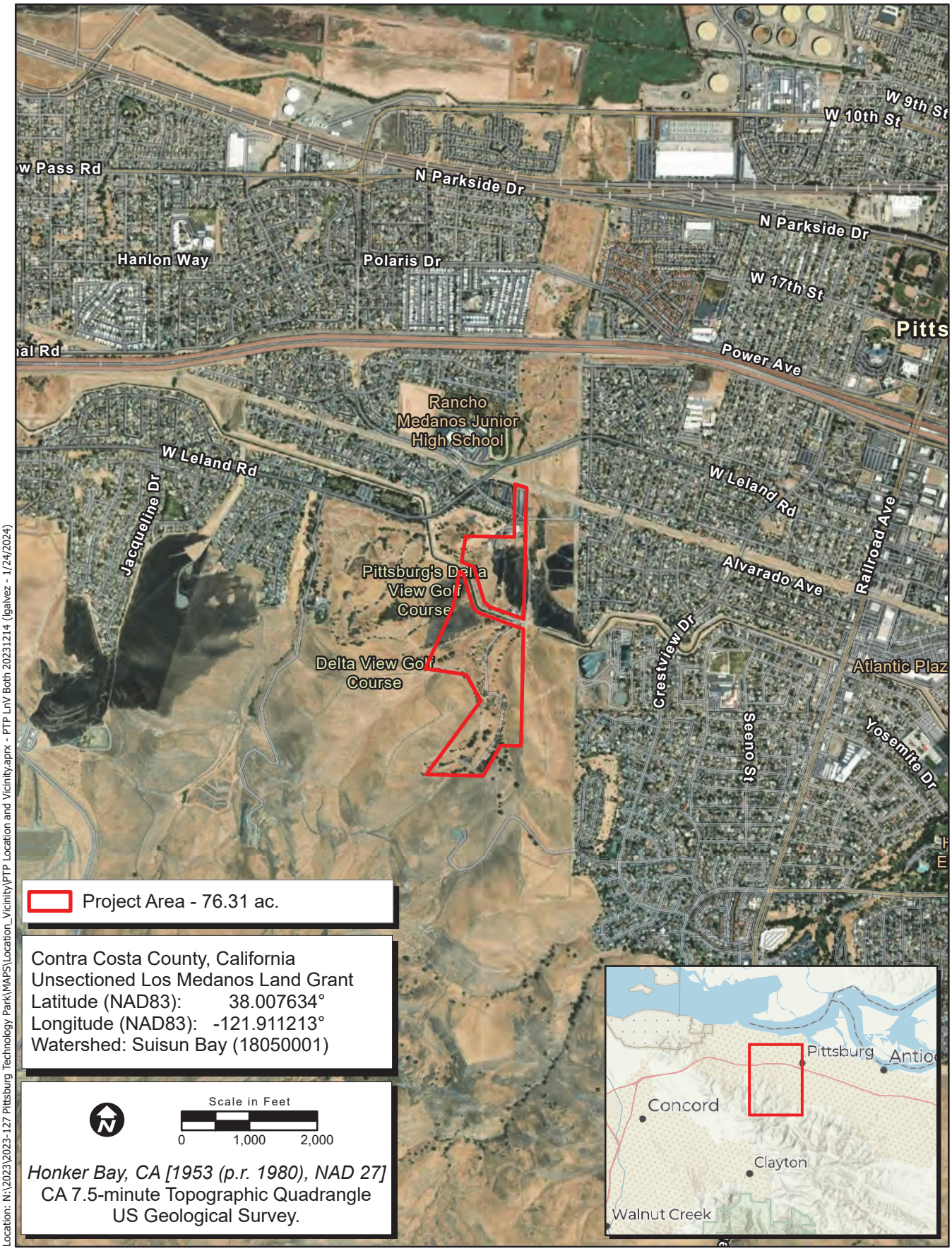


Location: N:\2023\2023-127 Pittsburg Technology Park\MAPS\Location_Vicinity\PTP Location and Vicinity.aprx - PTP LnV Both 20231214 (jgalvez - 1/24/2024)

Map Date: 1/24/2024
*Sources: ESRI, USGS*

**Figure 2. Location and Vicinity with Aerial**

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This includes areas proposed for construction, vegetation removal, grading, trenching, stockpiling, staging, paving, and other elements in the official Project description. The horizontal APE is illustrated on Figures 1 through 3 and represents the survey coverage area.

The vertical APE is described as the maximum depth below the surface to which excavations for project foundations and facilities will extend. Therefore, the vertical APE for this Project includes all subsurface areas where archaeological deposits could be affected. The subsurface vertical APE varies across the Project Area, but could extend as deep as 20 feet below the current surface; therefore, a review of geologic and soils maps was necessary to determine the potential for buried archaeological sites that cannot be seen on the surface.

The vertical APE also is described as the maximum height of structures that could impact the physical integrity and integrity of setting of cultural resources, including districts and traditional cultural properties. For this Project, the above-surface vertical APE is up to 30 feet.

## 1.3 Regulatory Context

The CEQA lead agency for this Project is the City of Pittsburg. Currently, there is no known NEPA or Section 106 lead agency; however, if the Project would impact Waters of the U.S., the U.S. Army Corps of Engineers (USACE) would be the NEPA lead.

A review of the regulatory context is provided below; however, the inclusion of any of these laws and regulations in this report does not make a law or regulation apply when it otherwise would not. Similarly, the omission of any other laws and regulations from this section does not mean that they do not apply. Rather, the purpose of this section is to provide context in explaining why the study was carried out in the manner documented herein.

### 1.3.1 National Environmental Policy Act

NEPA establishes national policy for the protection and enhancement of the environment. Part of the function of the federal government in protecting the environment is to "preserve important historic, cultural, and natural aspects of our national heritage." Cultural resources need not be determined eligible for the National Register of Historic Places (NRHP) through the National Historic Preservation Act (NHPA) of 1966 (as amended) to receive consideration under NEPA. NEPA is implemented by regulations of the Council on Environmental Quality (40 Code of Federal Regulations [CFR] 1500-1508).

The definition of *effects* in the NEPA regulations includes adverse and beneficial effects on historic and cultural resources (40 CFR 1508.8). Therefore, the *Environmental Consequences* section of an Environmental Impact Statement [see 40 CFR 1502.16(f)] must analyze potential effects to historic or cultural resources that could result from the proposed action and each alternative. In considering whether an alternative may "significantly affect the quality of the human environment," a federal agency must consider, among other things:

- Unique characteristics of the geographic area, such as proximity to historic or cultural resources (40 CFR 1508.27(b)(3)), and

- The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP (40 CFR 1508.27(b)(8)).

Therefore, because historic properties are a subset of *cultural resources*, they are one aspect of the *human environment* defined by NEPA regulations.

### 1.3.2 National Historic Preservation Act

The federal law that covers cultural resources that could be affected by federal undertakings is the NHPA of 1966, as amended. Section 106 of the NHPA requires that federal agencies take into account the effects of a federal undertaking on properties listed in or eligible for the NRHP. The agencies must afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. A federal undertaking is defined in 36 CFR 800.16(y):

> A federal undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license, or approval.

The regulations that stipulate the procedures for complying with Section 106 are in 36 CFR 800. The Section 106 regulations require:

- definition of the APE;
- identification of cultural resources within the APE;
- evaluation of the identified resources in the APE using NRHP eligibility criteria;
- determination of whether the effects of the undertaking or project on eligible resources will be adverse; and
- agreement on and implementation of efforts to resolve adverse effects, if necessary.

The federal agency must seek comment from the State Historic Preservation Officer (SHPO) and, in some cases, the ACHP, for its determinations of eligibility, effects, and proposed mitigation measures. Section 106 procedures for a specific project can be modified by negotiation of a Memorandum of Agreement (MOA) or Programmatic Agreement between the federal agency, the SHPO, and, in some cases, the project proponent.

Effects to a cultural resource are potentially adverse if the lead federal agency, with the SHPO's concurrence, determines the resource eligible for the NRHP, making it a Historic Property, and if application of the Criteria of Adverse Effects (36 CFR 800.5[a][2] et seq.) results in the conclusion that the effects will be adverse. The NRHP eligibility criteria, contained in 36 CFR 60.4, are as follows:

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

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

B. that are associated with the lives of persons significant in our past; or

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

D. that have yielded, or may be likely to yield, information important in prehistory.

In addition, the resource must be at least 50 years old, barring exceptional circumstances (36 CFR 60.4). Resources that are eligible for, or listed on, the NRHP are *historic properties*.

Regulations implementing Section 106 of the NHPA (36 CFR 800.5) require that the federal agency, in consultation with the SHPO, apply the Criteria of Adverse Effect to historic properties within the APE. According to 36 CFR 800.5(a)(1):

> An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association.

### 1.3.3 California Environmental Quality Act

CEQA is the state law that applies to a project's impacts on cultural resources. A project is an activity that may cause a direct or indirect physical change in the environment and that is undertaken or funded by a state or local agency, or requires a permit, license, or lease from a state or local agency. CEQA requires that impacts to Historical Resources be identified and, if the impacts will be significant, then apply mitigation measures to reduce the impacts.

A Historical Resource is a resource that 1) is listed in or has been determined eligible for listing in the California Register of Historical Resources (CRHR) by the State Historical Resources Commission, or has been determined historically significant by the CEQA lead agency because it meets the eligibility criteria for the CRHR, 2) is included in a local register of historical resources, as defined in Public Resources Code (PRC) 5020.1(k), or 3), and has been identified as significant in a historical resources survey, as defined in PRC 5024.1(g) (California Code of Regulations [CCR] Title 14, Section 15064.5(a)).

The eligibility criteria for the CRHR are as follows (CCR Title 14, Section 4852(b)):

(1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;

(2) It is associated with the lives of persons important to local, California, or national history;

(3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or

(4) It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, the resource must retain integrity, which is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association (CCR Title 14, Section 4852(c)). Resources that have been determined eligible for the NRHP are automatically eligible for the CRHR.

Impacts to a Historical Resource, as defined by CEQA (listed in an official historic inventory or survey or eligible for the CRHR), are significant if the resource is demolished or destroyed or if the characteristics that made the resource eligible are materially impaired (CCR Title 14, Section 15064.5(b)). Demolition or alteration of eligible buildings, structures, and features that they would no longer be eligible would result in a significant impact. Whole or partial destruction of eligible archaeological sites would result in a significant impact. In addition to impacts from construction resulting in destruction or physical alteration of an eligible resource, impacts to the integrity of setting (sometimes termed *visual impacts*) of physical features in the Project Area could also result in significant impacts.

Tribal cultural resources (TCRs) are defined in Section 21074 of the California PRC as sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either included in or determined to be eligible for inclusion in the CRHR, or are included in a local register of historical resources as defined in subdivision (k) of Section 5020.1, or are a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. Section 1(b)(4) of Assembly Bill (AB) 52 established that only California Native American tribes, as defined in Section 21073 of the California PRC, are experts in the identification of TCRs and impacts thereto. Because ECORP does not meet the definition of a California Native American tribe, it only addresses information in this report for which it is qualified to identify and evaluate, and that which is needed to inform the cultural resources section of CEQA documents. This report, therefore, does not identify or evaluate TCRs. Should California Native American tribes ascribe additional importance to or interpretation of archaeological resources described herein, or provide information about non-archeological TCRs, that information is documented separately in the AB 52 tribal consultation record between the tribe(s) and lead agency and summarized in the TCRs section of the CEQA document, if applicable.

### 1.3.4 U.S. Army Corps of Engineers Regulations

If the Project would affect waters of the United States, the Project proponent then must meet requirements of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972, and is therefore, seeking authorization from the U.S. Army Corps of Engineers. The USACE Sacramento District provides guidance for preparation of Section 106 reports in "2020 Sacramento District Regulatory Branch Guidelines for Compliance with Section 106 of the NHPA of 1966, as amended." Apart from the requirements of the NHPA, all historic properties are subject to consideration under the USACE's NEPA processes (33 CFR Part 325, Appendix B), and the USACE's public interest review requirements contained

in 33 CFR 320.4. Therefore, historic properties are included as a factor in the district engineer's decision on each Clean Water Act (CWA) 404 permit application.

If the Project or activity is found to have an adverse effect on NRHP-designated historic properties, the district engineer will coordinate with the SHPO to seek ways to avoid or reduce effects on designated historic properties. At any time during CWA 404 permit processing, the district engineer may consult with the involved parties to discuss and consider possible alternatives or measures to avoid or minimize adverse effects of a proposed activity in accordance with the procedures described in 33 CFR Part 325, Appendix C. If the consultation results in a mutual agreement among the SHPO, the permit applicant, and the district engineer regarding the treatment of designated historic properties, then the district engineer may formalize that agreement either through special conditions added to the CWA 404 permit or by signing a MOA with these parties. Such a MOA will constitute the comments of the SHPO and the ACHP. The criteria involved in making an adverse effect determination are described fully in 33 CFR Part 325, Appendix C.

The USACE district engineer, in accordance with 33 CFR 320.4, shall weigh all factors including the effects of the undertaking on historic properties and any comments of the ACHP and the SHPO, and any views of other interested parties, in making a decision about a permit application. The district engineer will add permit conditions to avoid or reduce effects on historic properties that are determined necessary in accordance with 33 CFR 325.4. The district engineer will consider the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 Federal Register 44716) for making decisions. If permitting the project would cause irrevocable loss of important scientific, prehistoric, historical, or archeological data, the district engineer, in accordance with the Archeological and Historic Preservation Act, will advise the Secretary of the Interior of the extent of loss of data, implementation of plans to mitigate such a loss, and the inclusion of permit conditions for mitigation.

## 1.4 Report Organization

The following report documents the study and its findings and was prepared in conformance with the CEC's requirements and the California Office of Historic Preservation's (OHP) *Archaeological Resource Management Reports: Recommended Contents and Format.* Appendix A includes a confirmation of the records search with the California Historical Resources Information System (CHRIS) and historical society coordination. Appendix B contains documentation of a search of the Sacred Lands File. Appendix C presents photographs of the Project Area. Appendix D contains confidential cultural resource site locations and site records.

Sections 6253, 6254, and 6254.10 of the California Code authorize state agencies to exclude archaeological site information from public disclosure under the Public Records Act. In addition, the California Public Records Act (Government Code § 6250 et seq.) and California's open meeting laws (The Brown Act, Government Code § 54950 et seq.) protect the confidentiality of Native American cultural place information. Because the disclosure of information about the location of cultural resources is prohibited by the Archaeological Resources Protection Act of 1979 (16 U.S. Code [USC] 552 470hh) and Section 307103 of the NHPA, it is exempted from disclosure under Exemption 3 of the federal Freedom of

Information Act (5 USC 552). Likewise, the Information Centers of the CHRIS maintained by the OHP prohibit public dissemination of records search information.

# 2.0 SETTING

## 2.1 Environmental Setting

The Project Area is near the southern edge of Suisun Bay, within the larger San Francisco Bay. The Sacramento and San Joaquin rivers flow westward into the Suisun Bay, approximately 1.5 miles north of the Project Area. Open fields and low-elevation hills, which are incised by small streams, are adjacent to the southern boundary of the Project Area and continue to the south. The Project Area is surrounded by residential and commercial development to the west, north, and east. Elevations within the Project Area range from 100 to 150 feet above mean sea level. An unnamed, seasonal stream parallels the Project Area's eastern boundary.

## 2.2 Geology and Soils

Barnard et al. (2013) describes the geology of the San Francisco Bay region as a tectonically active basin created from a structural trough that formed during the Late Cenozoic era. An estuary formed in the basin during interglacial periods and a fluvial system during glacial periods. The current drainage configuration of the Central Valley was established by approximately 0.4 to 0.6 million years ago (Barnard et al. 2013). During the Early Holocene, the basin flooded and the rise in sea level caused inundation of the Sacramento River channels. Additionally, the rising ocean filled the Central Bay and San Pablo Bay as evidenced by the initial development of tidal salt marshes.

The underlying geology of the San Francisco Bay Region identified as the Franciscan Complex, which is composed of oceanic crust and overlying pelagic and terrigenous sedimentary rocks and it is known for blueschist metamorphic rocks, sedimentary matrix mélange as well as sandstone, shale, chert, and conglomerate and dates to the Pliocene-Pleistocene (Graymer 2018; Jennings et al 1977; Jennings and Burnett 1961). The San Franciso Bay Region is bordered by the Hayward Zone Fault to the east and the San Andra Fault Zone to the west.

According to the Natural Resources Conservation Service Web Soil Survey (2023) website, four soil types are present in the Project Area.

**Table 1. Soil Types within the Project Area**

| Map Unit Symbol | Map Unit Name | Soil Description | Drainage Classification | Project Area Segment(s) | Percent of Project Area |
|---|---|---|---|---|---|
| AbE | Altamont clay, 15 to 30 percent slopes, MLRA 15 | Residuum weathered from sandstone and shale, clayey | Well drained | Northwestern, Southeastern | 12.5 |
| AcF | Altamont-Fontana complex, 30 to 50 percent slopes | Residuum weathered from sandstone and shale, steep clayey | Well drained | Southern | 10.0 |
| CaC | Capay clay, 1 to 15 percent slopes, MLRA 17 | Clayey alluvium derived from sedimentary rock, clayey terrace | Moderately well drained | Central | 68.7 |
| RbC | Rincon clay loam, 2 to 9 percent slopes, MLRA 14 | Clayey alluvium derived from sedimentary rock, fine loamy bottom | Well drained | Northern, Northwestern | 8.8 |
| | | | | **Total** | **100.0** |

The underlying geology of the Project Area consists of Pliocene-Pleistocene aged deposits, which consists of sandstone, shale, and gravel deposits that are mostly loosely consolidated (Jennings et al. 1977). The underlying geology of the Project Area dates to the Pliocene-Pleistocene era, which spans from 5.3 million to 11,700 years ago. Because it is generally accepted that humans were present in North America as long as 20,000 years ago, the most recent 1 percent of deposition is within the range of human occupation. Therefore, the northern portion of the Project Area has a low-to-moderate potential for containing intact buried deposits. The potential is moderate in areas within 200 feet of the unnamed seasonal streams that flow through the Project Area. The potential along streams is moderate because pre-contact resources are generally located closer to natural waterways and alluvium, which is located along streams. The hillsides within the Project Area have a low potential for buried pre-contact archaeological sites.

## 2.3 Vegetation and Wildlife

Prior to the arrival of European settlers, the Project Area would have been covered by perennial bunch grasses and other forbs. The introduction of Old-World annual grasses after European contact transformed the area into land for grazing animals. Today, typical vegetation includes wild oats, ryegrasses, foxtail, and other bromes, bluegrass, and fescues (some of which are native). Thistles, both native and (mostly) introduced, are also common, and one Eurasian import, yellow star-thistle, is a particular irritant. Native flowers, such as fiddleneck, red maids, poppy, turkey mullein, and telegraph weed, still exist in the vicinity of the Project Area.

Typical fauna in the vicinity of the Project Area includes California ground squirrel, coyote, mountain lion, California jackrabbit, badger, raccoon, beaver, and western pond turtle.

# 3.0 CULTURAL CONTEXT

## 3.1 Regional Pre-Contact History

It is generally believed that human occupation of California began at least 10,000 years before present (BP). The archaeological record indicates that between approximately 10,000 and 8,000 BP, a predominantly hunting economy existed, characterized by archaeological sites containing numerous projectile points and butchered large animal bones. Animals that were hunted probably consisted mostly of large species still alive today. Bones of extinct species have been found but cannot definitively be associated with human artifacts. Although small animal bones and plant grinding tools are rarely found within archaeological sites of this period, small game and floral foods were probably exploited on a limited basis. A lack of deep cultural deposits from this period suggests that groups included only small numbers of individuals who did not often stay in one place for extended periods (Wallace 1978).

Around 8,000 BP, there was a shift in focus from hunting toward a greater reliance on plant resources. Archaeological evidence of this trend consists of a much greater number of milling tools (e.g., metates and manos) for processing seeds and other vegetable matter. This period, which extended until around 5,000 BP, is sometimes referred to as the Millingstone Horizon (Wallace 1978). Projectile points are found in archaeological sites from this period, but they are far fewer in number than from sites dating to 8,000 BP. An increase in the size of groups and the stability of settlements is indicated by deep, extensive middens at some sites from this period (Wallace 1978).

Archaeological evidence indicates that reliance on both plant gathering and hunting continued as in the previous period, with more specialized adaptation to particular environments in sites dating to after about 5,000 BP. Mortars and pestles were added to metates and manos for grinding seeds and other vegetable material. Flaked-stone tools became more refined and specialized, and bone tools were more common. New peoples from the Great Basin began entering Southern California during this period. These immigrants, who spoke a language of the Uto-Aztecan linguistic stock, seem to have displaced or absorbed the earlier population of Hokan-speaking peoples. During this period, known as the Late Horizon, population densities were higher than before, and settlement became concentrated in villages and communities along the coast and interior valleys (Erlandson 1994; McCawley 1996). Regional subcultures also started to develop, each with its own geographical territory and language or dialect (Kroeber 1925; McCawley 1996; Moratto 1984). These were most likely the basis for the groups that the first Europeans encountered during the 18th century (Wallace 1978). Despite the regional differences, many material culture traits were shared among groups, indicating a great deal of interaction (Erlandson 1994). The presence of small projectile points indicates the introduction of the bow and arrow into the region sometime around 2,000 BP (Moratto 1984; Wallace 1978).

## 3.2 Local Pre-Contact History

Archaeological research in central California began in the late nineteenth century at the University of California at Berkeley. Later, guided by Kroeber, scientific investigation and excavation of San Francisco Bay area shell mounds began. N.C. Nelson described and mapped over 400 major Bay Area mounds, some of which had already been leveled or destroyed, but many were still large and obvious when the

survey was complete in 1908 (Nelson 1909). Uhle had excavated the Emeryville Shellmound (ALA-309) in 1902, where he noted that deeper earlier deposits contained different artifact assemblages, different burial modes, and differing percentages of faunal remains than did shallower later deposits, thus indicating cultural change through time (Uhle 1907). Nelson later reported on excavations at CCO-295 (Nelson 1910) and Loud (1924) reported on CCO-298 and CCO-300, all located along the eastern Bayshore. Kroeber (1925) summarized their data as did Schenck (1926), adding new data from additional excavations at Emeryville. Both 'ejected Uhle's hypothesis, concluding that the mounds showed great homogeneity internally and between sites and demonstrated very little cultural change through time, and were therefore of scant research value.

In 1939, following several years of work by Sacramento Junior College, Lillard, Heizer, and Fenenga (Lillard et al. 1939) presented a cultural sequence based on sites in the Lower Sacramento Valley (LSV) and Delta; this came to be known as the Central California Taxonomic System (CCTS) after Beardsley (1954). Formulated before the advent of radiocarbon (and later, obsidian hydration) dating, depositional stratigraphy, cultural patterns, and regular changes in artifact assemblages at LSV sites were used as the key time markers. A tripartite chronological system was proposed, with Early, Middle, and Late Horizon.

Fredrickson presented another formulation of the CCTS, with a different explanatory model, based largely on North Coast data but also applicable to East Bay shellmounds, Delta sites, and some interior Contra Costa County sites (Fredrickson 1973, 1974). He proposed a different organizational scheme, with 12,000 years of California prehistory divided into five patterns based on similar technology, economic practices, mortuary patterns, concepts of wealth, and changes in type, amount, and direction of trade; relative chronology was emphasized over assigning patterns to specific time periods: Paleo-Indian (12,000 to 8,000 BP); Lower, Middle, and Upper Archaic (8,000 BP to AD 500); and Upper and Lower Emergent (AD 500 to 1800). These chronological sequences generally correspond to three cultural patterns: Windmiller (Lower to Middle Archaic), Berkeley (Middle to Upper Archaic), and Augustine (Emergent).

Windmiller tradition (as defined by Beardsley 1948) is general defined by large, heavy-stemmed and leaf-shaped projectile points commonly made of a variety of materials other than obsidian, *Haliotis* and *Olivella* shell beads and ornaments, trident fish spears, baked clay balls (presumably for cooking in baskets), flat slab milling stones, small numbers of mortars, and ventrally extended burials oriented toward the west. The subsistence pattern of Windmiller groups probably emphasized hunting and fishing, with supplemental seed collecting (possibly including acorns) (Heizer 1949; Moratto 1984; Ragir 1972).

The Berkeley Pattern (Fredrickson 1974) in general characterized by tightly flexed burials with variable orientation, red ochre stains in burials, distinctive *Olivella* and *Haliotis* beads and ornaments, distinctive charmstones, cobble mortars and evidence of wooden mortar, numerous bone tools and ornaments, large, heavy foliate and lanceolate concave base projectile points made of materials other than obsidian, and objects of baked clay.

The Augustine Pattern (Frederickson 1974) era primarily represents both local innovation and the blending of new cultural traits introduced into the Central Valley, the emergence of which appears to have been associated with the expansion of Wintun populations from the north, leading to an increase in settlements in the area after 550 BP (Bennyhoff 1993; Moratto 1984). This pattern is distinguished in the

archaeological record by intensive fishing, extensive use of acorns, elaborate ceremonialism, social stratification, and cremation of the dead. Artifacts include bow and arrow technology (evidenced by small projectile points), mortars and pestles, and fish harpoons with unilaterally or bilaterally placed barbs in opposed or staggered positions (Bennyhoff 1950). Mortuary patterns include flexed burials and cremations, with elaborate material goods found in association with prestigious individuals.

## 3.3 Ethnohistory

The Native Americans who inhabited the Mount Diablo and Delta region at the time of Spanish contact in the 1770s are most commonly known as Bay Miwok, with Plains Miwok to the northeast, Ohlone to the south and west, and Northern Valley Yokuts to the east.

The pre-contact Bay Miwok were hunters and gatherers; they adapted to and managed their abundant local environment so well that some places were continuously occupied for thousands of years. Compared to modern standards, population density always remained relatively low, but the Delta area was one of the most densely lived-in areas of pre-contact California for centuries. The Miwok had perfected living in and managing a myriad of environments, some were rich enough to allow large permanent “villages” or "collectors" to exist, others were less abundant and encouraged a “more mobile "forager" way of life. Littoral (shoreline) and riparian environments, including the Delta marshlands, were the most productive and intensively utilized and occupied (Levy 1978).

The acorn was the dietary staple of the Bay Miwok, but a large number of floral and faunal resources were utilized, particularly grass seeds. Like other native Californians, the Miwok managed their environment to improve it for their use. For example, burning grass and brush lands annually to improve the environment for local fauna, maintain an open environment, and improve productivity of many resources they depended upon (Levy 1978).

The basic unit of Bay Miwok society was most likely the tribelet", which consists of a small independent group of usually related, intermarried families occupying a specific territory and speaking the same language or dialect. The tribelet might consist of 200 to 400 people in favorable areas, but perhaps 100 to 200 in less productive zones. Inter-tribelet relationships were socially and economically necessary, however, to supply both marriage partners and goods and services not locally available. Trade and marriage patterns were usually, but not always, dictated by proximity; traditional enemies were usually also defined by proximity (Levy 1978).

Regional festivals and religious dances would bring groups together during periods of suspended hostilities. There was usually a strict distinction between women’s work harvesting plant foods, processing and cooking them, weaving baskets, raising small children, and men’s work, which included hunting and fishing, trade, warfare, and training older sons. Textiles and basketry were very important throughout central California, used for everything from baby beds and carriers to burial shrouds, food storage, and cooking vessels, and even the common woven brush hut was a kind of large basket; fine basket making skills conferred prestige on women (Levy 1978).

The Spanish reported (relatively) large permanent villages in the Diablo/Delta region in the 1770s, indicating the local resource catchment was large, varied, and abundant enough to support a sedentary hunting and gathering economy (Levy 1978).

## 3.4 Regional History

The first Viceroy of New Spain, Antonio de Mendoza, commissioned maritime explorer Hernando de Alarcón to chart the Gulf of California and Colorado River in 1540. Alarcón and his crew became the first Europeans to reach Alta (Upper) California when they set foot on the banks of the Colorado River in what is now Imperial County. In 1542, Juan Rodriguez Cabrillo sailed north up the Pacific coast of Mexico in search of the Strait of Anián. Cabrillo and his crew, the first Europeans to explore the Alta California coastline, visited San Diego Bay, Santa Catalina Island, and San Pedro Bay, and may have reached as far north as Point Reyes. In 1579, the English privateer Sir Francis Drake visited Miwok villages north of San Francisco Bay. Sebastian Vizcaíno, sailing north from Mexico, charted Monterey Bay in 1602 (Starr 2005).

Spanish colonization of Alta California began in 1769 with the Portolá land expedition. Led by Captain Gaspar de Portolá and Father Junipero Serra, the expedition proceeded north from San Diego on foot to the Santa Clara Valley, where an advance party of scouts led by José Ortega became the first Europeans to observe San Francisco Bay. Spain subsequently established a string of 21 Franciscan missions, 4 presidios (forts), and 4 pueblos (towns) in coastal regions of Alta California (Starr 2005). In 1808, the explorer Gabriel Moraga led an expedition from San Jose pueblo into the Central Valley. Moraga named the valley's major rivers, including the Sacramento and San Joaquin, but made no attempt to establish missions, presidios, or pueblos in Alta California's interior (Avella 2003).

The Republic of Mexico achieved independence from Spain in 1821. A year later, Alta California became a territory of Mexico with its capital at Monterey. In 1827, the American fur trapper Jedediah Smith led a party of Rocky Mountain Fur Company trappers across the Mojave Desert to Southern California, north up the Central Valley, and east into Nevada, demonstrating the possibility of overland travel across the Sierra Nevada (Starr 2005).

During the 1830s, the Mexican government confiscated mission lands and expelled Alta California's Franciscan friars. Former mission lands, along with unclaimed lands in the Sacramento and San Joaquin valleys, became granted to retired soldiers and other Mexican citizens. Vast swaths of Alta California's coastal regions and interior valleys became private ranchos, or cattle ranches. Three of the region's Spanish pueblos—Los Angeles, San Jose, and Sonoma—survived as Mexican towns. Other settlements developed around presidios at San Francisco, Monterey, Santa Barbara, and San Diego. Many rancho owners, called californios, maintained residences in town, while hired vaqueros and unpaid Native American laborers worked on ranchos to produce cow hides and tallow, commodities prized by foreign merchants (Starr 2005).

After 1821, the Mexican government began welcoming non-Hispanic immigrants to Alta California. Hundreds of Americans, British, and other foreigners arrived to establish trading relationships; others became naturalized Mexican citizens and applied for land grants. John Sutter, a German-speaking immigrant from Switzerland, built a fort at the confluence of the Sacramento and American rivers in 1839

and petitioned the Mexican governor of Alta California for a land grant; he received nearly 49,000 acres along the Sacramento River in 1841 (Hurtado 2006).

Following the Mexican-American War of 1846-1848, Mexico ceded Alta California to the U.S. Under the Treaty of Guadalupe Hidalgo, Congress agreed to honor the property rights of former Mexican citizens living within the new boundaries of the U.S. This meant recognizing Alta California's Mexican land grants. In 1851, Congress passed the California Land Act creating the Board of Land Commissioners to determine the validity of the individual grants, placing the burden of proof on patentees. The Board, with assistance from U.S. courts, confirmed most of California's Mexican land grants in subsequent decades (Starr 2005).

In January 1848, one of John Sutter's hired laborers, James Marshall, discovered gold in the flume of a lumber mill at Coloma on the South Fork of the American River. News of Marshall's discovery spread around the world, leading to the California Gold Rush. Tens of thousands of prospectors arrived in the Sierra Nevada foothills in 1849, prompting the creation of hundreds of small mining camps along streambeds. The cities of Marysville, Sacramento, and Stockton sprang up along the Feather, Sacramento, and San Joaquin rivers as supply centers for the mines; San Francisco became California's largest city and the focal point for Gold Rush economic activity. In 1850, following a year of rapid growth, Congress admitted California as the 31st U.S. state (Starr 2005). In the following decades, federal surveyors arrived in California to stake out 36-square-mile townships and 1-square-mile sections on California's unclaimed i.e., non-rancho) public lands. At general land offices, buyers paid cash for public lands. After 1862, many filed homestead applications to obtain 40-, 80-, and 160-acre tracts at low upfront costs in exchange for establishing farms (Robinson 1948).

## 3.5 City of Pittsburg

The earliest recorded history of Pittsburg dates back to 1839, when the Mexican government granted about 9,000 acres, known as "Rancho Los Medanos," to brothers Jose Antonio Mesa and Miguel Jose Mesa Garcia. Issued by Governor Juan B. Alverado, it was one of the final land grants issued prior to the formation of California as a state (City of Pittsburg & Pittsburg Historical Society 2022).

In 1849 Colonel Jonathon Drake Stevenson of the New York Volunteers and his partner, Dr. William Parker, purchased Rancho Los Medanos for land speculation. General William Tecumseh Sherman laid the city's first streets. Colonel Stevens called the area "New York of the Pacific" after Stevens' desire to create a prosperous city that would be a "second New York" (Huklaniski 1917). In 1850, a strong effort to make the new city California's state capital was defeated by a small margin (Huklaniski 1917).

Due to its location next to the Suisun Bay at the convergence of the Sacramento and Joaquin Rivers, Stevenson saw the possibility of establishing a great city along the river route to gold country. For the duration of the Gold Rush, the area turned into a stopping point for schooners sailing upriver from San Francisco. Fishing, farming, and cattle raising for the hide and tallow industry constituted the major economic activities of the city during this time.

The discovery of coal in the Mount Diablo foothills in 1859 created a booming coal industry in the area. The city then became known as "Black Diamond," due to the influence of the Black Diamond Coal Company. The Mount Diablo coalfield was the largest in California. As a result, the boomtown of

Nortonville emerged in the foothills of Mount Diablo and became the largest town in the county by 1870 (City of Pittsburg n.d.).

In the 1870s, commercial fishing also took hold, and multiple canneries were established in the area. By 1927, approximately 3 million pounds of fish a year were being exported from six companies in Pittsburg (Ferrante 2021). The town consisted of the largest Delta fishing community in California, made up of primarily Sicilian immigrants (City of Pittsburg n.d.; Pittsburg Historical Society 2022).

Lumber baron Charles Appleton Hopper, who became the local "Father of Industry," purchased the original Rancho Los Medanos land grant as well as additional acreage in 1900 (City of Pittsburg n.d.). Hooper introduced industrial growth to the area with the creation of the Industrial Center of the West in 1903, an early manufacturing venture. In 1906, Hoover provided financing to Bowers Rubber works, and by 1910, Columbia Steel had opened, being the largest foundry of its kind on the west coast (City of Pittsburg n.d.). The new industrial growth created thousands of jobs for residents. In 1911, city officials changed the town's name to "Pittsburg," in honor of Pittsburgh, Pennsylvania's similar steel heritage (City of Pittsburg n.d.; Pittsburg Historical Society 2022).

Built in 1942, Camp Stoneman in Pittsburg served as the main point of embarkation for troops on the west coast during World War II (City of Pittsburg n.d.). For thousands of troops, Camp Stoneman was their last contact on American soil. The camp had a tremendous impact on the growth and diversity of Pittsburg. Following the end of the Korean War in 1954, Camp Stoneman closed. The City of Pittsburg claimed the property for school, commercial, and residential development (City of Pittsburg n.d.).

In 1957, the State of California closed the Sacramento Delta to fishing, bringing an end to one of the most lucrative and traditional industries in Pittsburg. However, Pittsburg remained an industrial hub. After US Steel purchased Columbia Steel in the 1930s, the Pittsburg foundry expanded to serve large public works projects, like the construction of the San Francisco Bay Bridge (USS-POSCO Industries 2023). To this day, the steel industry remains an important part of Pittsburg's economy, and Pittsburg remains a thriving industrial city.

## 3.6 Golf Courses

The game of golf originated over 400 years ago in Scotland on grassy seaside dunes and hollows, a landscape known as "linksland." These public lands, used passively for grazing animals, offered townspeople sufficient space for developing the game of golf. The first U.S. golf tournament occurred in 1888 in Charleston, South Carolina on a three-hole course. Golf in the U.S. began as a game played by affluent members of private clubs. Many private courses appeared at seaside settings such as Pebble Beach, California reminiscent of Scottish linksland. But as the game increased in popularity, demand arose for greater access to golf courses, prompting construction of public courses. Modern construction techniques made possible the creation of golf courses on sites selected for economic and demographic purposes rather than naturally favorable sites. It became commonplace for public golf courses to be developed on derelict, mismanaged, or abandoned lands to provide an attractive green open space alternative (Staley 2013).

### 3.6.1 Landscape Architects John Fleming and Robert Muir Graves

The westernmost portion of the Delta View Golf Course, west of the Project Area is located on the southern section of the former Camp Stoneman Rifle Range. Delta View Golf Course opened in 1947, following the closure of Camp Stoneman. It was originally a nine-hole course. The back nine was not constructed until 1991. Although urban legend says that the golf course was designed by famed golf course architect Alister MacKenzie, the course was not built until ten years after Mackenzie's death (Davis 2018). The course was actually designed by San Francisco-based architect John Fleming, who drew much of his inspiration from MacKenzie (Davis 2018).

The original 9-hole Delta View Golf Course designed by Fleming offered a challenging golf course on rolling terrain with beautiful views of the Delta as well as Mt. Diablo. Being the first golf course in Contra Costa County to have a sprinkler system, the Delta View Golf Course had complete grass fairways (Oakland Tribune 1947). The course became popular with golfers, also holding small tournaments and other events.

In 1991, Delta View was expanded to an 18-hole golf course, with the additional course being designed by Robert Muir Graves. The rolling terrain of the expanded 18-hole, 6,317-yard Delta View course allowed for elevated tees and undulating greens (GolfPass 2023). Delta View Golf Course rented the land from the City of Pittsburg and was responsible for the upkeep and maintenance of the property (Davis 2018). Although popular for decades, many golf courses, including Delta View Golf Course, suffered in more recent years due to changing economics, decline in the popularity of golf, and increasing water costs (Davis 2018). On March 1, 2018, Delta View Golf Course closed due to legal and economic factors (Davis 2018). In June 2022, a 19-acre grassfire burned the golf course and its remaining buildings.

## 3.7 Irrigation and Water Conveyance

Certain components of a water conveyance system are common to all types of systems, while some components only pertain to particular systems. However, most water conveyance systems will consist of a diversion structure and conduit. Functions associated with diversion and conduits can pertain to agriculture, mining, domestic water supply, or other uses. The materials used for a water conveyance system can be influenced by a few factors, which include the purpose, long-term use of the system, geology and topographic elements, and builder's skill. Associated resources to the water conveyance system could include agricultural fields (JRP Historical Consulting, Inc. 2000).

Techniques used to build, design, and construct irrigation networks and canals have varied widely depending largely on the period they were constructed, investors, and location in California. California has a unique history when it comes to water distribution; people tend to settle in areas with access to natural resources, but during the Gold Rush, many urban centers were quickly established in areas near valuable mineral resources and the lack of water sources did not deter this rapid growth. Instead, innovative systems and businesses were established to transport water from areas of excess such as the storm-fed rivers of Northern California or the Sierra Nevada to areas of need such as deserts and drought-stricken valleys.

### 3.7.1 Central Valley Project

The Central Valley Project (CVP) was one of the largest public works projects in the country. The idea was developed in the 1920s as a collaboration between the U.S. Bureau of Reclamation (USBR) and the State of California, the CVP consists of a series of canals, dams, channels, reservoirs, and pumping stations (Arrigoni 2016). The system was built in between 1935 and the mid-1950s to provide irrigation, flood and river control, municipal water, and prevent the intrusion of saltwater into freshwater and potable water networks within the Central Valley (Herbert 2009). The CVP resulted in California's Central Valley region becoming one of the most agriculturally productive regions in the nation.

### 3.7.2 Contra Costa Canal

The Contra Costa Canal is part of a large water project that distributed water throughout California. The Canal was part of the USBR Central Valley Project (Herbert 2009). Between 1927 and 1931, California State Engineer Edward Hyatt was tasked with developing a system to distribute water throughout the state. Hyatt recommended a system of canals, reservoirs, and transfer systems to provide water for agricultural, industrial, and metropolitan areas (Herbert 2009).

The Contra Costa Canal is part of the originally proposed water distribution system as proposed in 1931. Construction originally began on the canal in 1937, and after a brief break at the start of World War II resumed in 1945. Currently, the distribution of the water is managed by the Contra Costa County Water District, which the Contra Costa County Board of Supervisors voted into existence in 1936. The Contra Costa Water District purchases the water from USBR and sells it to local landowners and agencies (Herbert 2009).

## 3.8 Transmission Lines

The number of electric utility companies in California significantly increased in the 1880s to meet the demand of the growing population and widespread use of Thomas Edison's new version of the incandescent light bulb (Adams 2010). Electric utility companies prior to the 1880s typically used low-voltage direct currents (DC), also invented by Edison, which transmitted electricity only about three miles. Because the electricity could not travel a long distance, only urban, densely populated areas could economically be served by these electric companies. Despite the limitations of DC systems, the California Electric Light Company of San Francisco was the first to begin installing long-distance electric transmission lines in California in 1879 (Adams 2010).

The alternating current (AC) system was developed later by Nikola Tesla and William Stanley (of the Westinghouse Company) and was more powerful than the DC system with the capability of transmitting higher voltages of electricity a significantly further distance (Adams 2010). California first saw use of the AC system when electrical engineer Almerian Decker and his partners opened the San Antonio Light and Power Company and in 1892 transmitted electricity over 14 miles in Pomona (JRP 2007). In 1895 the Folsom power plant, designed by James Lighthipe of General Electric, produced and transmitted power to Sacramento approximately 22 miles away (JRP 2007). By the end of the 1890s, several cities in California began to use AC systems in their power plants because of the capability to transmit electricity across longer distances. Another new invention in electrical transmission and distribution was the "converter,"

also called the transformer. Transformers are designed to reduce high electrical voltages passing along transmission lines to lower voltages to be safely distributed to residences or businesses (Adams 2010).

Electric transmission lines throughout California continued to grow in length significantly into the twentieth century. In 1899, the Edison Electric Company, predecessor of Southern California Edison, used glazed porcelain insulators to hold the conductor wire, which allowed construction of an 83-mile-long electric transmission line from the Santa Ana River to Los Angeles, the longest line at the time (Adams 2010). The length of electric transmission lines continued to increase over the next decade. In 1901, the Bay Counties Power Company constructed a 142-mile-long electric transmission line from the Colgate Powerhouse in the Sierra Nevada to Oakland. John Debo Galloway was the engineer who designed the 142-mile-long transmission line, which is given credit for being the longest in the world at the time. Galloway was a major pioneer in the design of electric transmission lines in California (Adams 2010).

The Pacific Gas and Electric Company (PG&E) is one of the oldest electric utility companies in California. The California Electric Light Company was originally founded in 1879 by George Roe. The California Electric Company later opened the Folsom Powerhouse to develop hydroelectric power and distribute it to the area. This event was significant because it required the transmission of electricity over a long distance; a range only achieved by a few facilities at the time. At this time, several electric utility companies were springing up throughout California, all competing in the electricity sales market. The Folsom Powerhouse and long-distance electric transmission capabilities of the California Electric Light Company gave them a significant advantage over competitors. Eventually, PG&E was formed in 1905 as a merger of the San Francisco Gas and Electric Company and the California Gas and Electric Corporation. Since formation, the company has expanded operations throughout the U.S. Currently, PG&E operates thousands of miles of electric transmission systems in California powering millions of homes (PG&E 2014).

# 4.0 METHODS

## 4.1 Personnel Qualifications

Registered Professional Archaeologist (RPA) Brian S. Marks, Ph.D. who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology, supervised this cultural resource investigation. Staff Archaeologist Christa Westphal, Staff Archaeologist Arik Bord, Associate Archaeologist Shannon Joy, Associate Archaeologist Erica Ramirez, and Assistant Architectural Historian Jessica Rebollo conducted the fieldwork. Nathan Hallam, Ph.D. provided oversight for Ms. Rebollo, who assisted in preparing the architectural portion of the technical study. Ms. Westphal prepared the technical report. Lisa Westwood, RPA provided technical report review and quality assurance.

Dr. Marks is the Principal Investigator and has been an archaeologist since 1997. He has been working in cultural resources management in California since 2010 following eight years of archaeological work in the southeast U.S. Dr. Marks holds a Ph.D. and an M.S. in Anthropology. He has participated in or supervised more than 200 survey, testing, and data recovery excavations and has recorded and mapped a multitude of pre-contact and historical sites, including Civil War battlefields, Gold Rush boom towns, submerged pre-contact sites, and others. He has conducted evaluations of cultural resources for eligibility

to the NRHP and CRHR and is well versed in impact assessment and development of mitigation measures for CEQA and Section 106 (NHPA) projects.

Nathan Hallam, Ph.D. is a Senior Architectural Historian with 17 years of experience in historic preservation, cultural resources management, and academic teaching and scholarship. Dr. Hallam has extensive experience preparing historic contexts, conducting field surveys, and using NRHP criteria to evaluate historic properties. He holds a Ph.D. in History, an M.A. in Public History, and a B.A. in History.

Christa Westphal, RPA is a Staff Archaeologist and Field Director with more than 10 years of experience in California cultural resources management. She has experience in many aspects of archaeological fieldwork, laboratory, and reporting. These include archaeological survey, excavation, monitoring, artifact analysis, artifact collections management, graphics production, Geographic Information System analysis, CHRIS records searches, Native American Heritage Commission (NAHC) requests, preparation of Department of Parks and Recreation (DPR) forms and author and contributor of technical reports. She holds a B.A. and M.A. in Anthropology.

Arik J. K. Bord, RPA is a Staff Archaeologist with more than 10 years of experience in Anthropology and Archaeology, particularly in the Caribbean, Florida Gulf, California, and Great Basin regions. He has experience in most aspects of archaeological laboratory and fieldwork, including curation and conservation of archaeological and cultural materials, survey, excavation, data recovery, mapping, analysis, development of field and laboratory methods, public outreach, academic scholarship, and teaching. He holds an A.A. in Social and Behavioral Sciences, B.A. and M.A. in Anthropology, and is currently completing his Ph.D.

Shannon Joy is an Associate Archaeologist with more than 1 year of archaeological fieldwork experience and more than 3 years of experience in cultural resources management in California. She holds a B.A. in Anthropology (Archaeology) and has assisted in all aspects of archaeological fieldwork including survey, test excavation, data recovery, construction monitoring, archaeological laboratory and artifact curation experience, CHRIS records searches, NAHC requests, and preparation of DPR forms. She has authored and contributed to numerous cultural resources technical reports.

Erica Ramirez is an Associate Archaeologist with 4 years of experience in California cultural resources management. She has experience in many aspects of archaeological fieldwork, laboratory, and reporting. These include archaeological survey, monitoring, artifact collection management, artifact analysis, CHRIS record searches, preparation of California Department of Parks and Recreation (DPR forms), and ground penetrating radar. She holds a B.A. in History and M.A. in Cultural Resources Management.

Jessica Rebollo is an Assistant Architectural Historian with one year of experience in historic preservation and historic research. She is experienced in preparing historic contexts, conducting field surveys, and using NRHP criteria to evaluate historic properties. She holds an M.A. and B.A. in History.

Lisa Westwood, RPA has 28 years of experience and meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historical archaeology. She holds a B.A. in Anthropology and an M.A. in Anthropology (Archaeology). She is the Director of Cultural Resources for ECORP.

## 4.2 Records Search Methods

ECORP requested a records search for the Project Area at the Northwest Information Center (NWIC) of the CHRIS at Sonoma State University on June 15, 2023 (NWIC File No.: 22-1961; Appendix A). The purpose of the records search was to determine the extent of previous surveys within a 1-mile radius of the Proposed Project Area north of the Contra Consta Canal and a 0.5-mile radius south of the Contra Costa Canal, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within this area. NWIC staff completed and returned the records search to ECORP on July 12, 2023.

In addition to the official records and maps for archaeological sites and surveys in Contra Costa County, the following references were also reviewed: Built Environment Resource Directory (BERD; OHP 2023a); the National Register Information System (National Park Service [NPS] 2023); Office of Historic Preservation, California Historical Landmarks (CHL; OHP 2023b); CHL (OHP 1996 and updates); California Points of Historical Interest (OHP 1992 and updates); Caltrans Local Bridge Survey (California Department of Transportation [Caltrans] 2019); Caltrans State Bridge Survey (Caltrans 2018); and *Historic Spots in California* (Kyle 2002).

Other references examined include a RealQuest Property Search and General Land Office (GLO) land patent records (Bureau of Land Management [BLM] 2023). ECORP reviewed the following maps:

- 1870 BLM GLO Plat map for Township 2 North, Range 1 West;
- 1870 BLM GLO Plat map for Township 2 North, Range 1 East;
- 1907, 1908, 1914, 1936, 1943, and 1951 USGS Antioch, California topographic maps (1:62,500 scale);
- 1918 Honker Bay, California topographic map (1:31,680 scale);
- 1948 USGS Sacramento, California topographic map (1:250,000 scale);
- 1955, 1966, 1969, 1972, and 1981 USGS Honker Bay, California topographic maps (1:24,000 scale); and
- 1966 USGS Sacramento, California topographic map (1:250,000 scale).

ECORP reviewed aerial photographs taken in 1939, 1957, 1958, 1959, 1965, 1966, 1972, 1979, and 1993 and between 1993 and 2023 for any indications of property usage and built environment (FrameFinder 2023; Nationwide Environmental Title Research Online 2023).

ECORP conducted a search for a local historical registry and completed a search for tribal cultural resources and/or pre-contact villages within a 1-mile radius of the Project Area.

## 4.3 Sacred Lands File Coordination Methods

In addition to the records search, ECORP contacted the California Native American Heritage Commission (NAHC) on June 15, 2023 to request a search of the Sacred Lands File for the Project Area (Appendix B).

This search determines whether the California Native American tribes within the Project Area have recorded Sacred Lands, because the Sacred Lands File is populated by members of the Native American community with knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, ECORP solicited information from the Native American community regarding TCRs, but the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable state and federal laws. The lead agencies do not delegate government-to-government authority to any private entity to conduct tribal consultation.

## 4.4 Other Interested Party Consultation Methods

ECORP sent letters to the Contra Costa County Historical Society and Pittsburg Historical Museum on June 15, 2023 to solicit comments or obtain historical information that the repositories might have regarding events, people, or resources of historical significance in the area (Appendix A).

## 4.5 Archaeological and Architectural History Field Methods

ECORP subjected the Project Area to an intensive pedestrian survey on September 26, 2023 under the guidance of the *Secretary of the Interior's Standards for the Identification of Historic Properties* (NPS 1983) using 15-meter-spaced transects (Figure 3). ECORP expended five person-days in the field. At the time, ECORP examined the ground surface for indications of surface or subsurface cultural resources and inspected the general morphological characteristics of the ground surface for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, ECORP examined the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances for artifacts or for indications of buried deposits. ECORP archaeologists did not conduct subsurface investigations or artifact collections during the pedestrian survey.

Standard professional practice requires that all cultural resources encountered during the survey be recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California OHP. The resources are usually photographed, mapped using a handheld Global Positioning System receiver, and sketched as necessary to document their presence using appropriate DPR forms.

## 4.6 Historic Landscape Research Methods

Golf courses are identified in NPS guidance as a type of designed historic landscape. To qualify for the NRHP, the designed historic landscape must have enough significance as a golf course to meet NRHP criteria, and retain sufficient integrity of location, design intent, setting, materials, workmanship, feeling, and association to convey that significance. As informed by the Bulletin 18, the NRHP portion of this evaluation was accomplished with six steps to determine if the Golf Course is an exemplary representative of historic golf course landscape. The information for the NRHP evaluation was used to inform an evaluation for the CRHR, in concurrence with the landscape evaluation. The steps used to evaluate a landscape for the NRHP are as follows:


Location: N:\2023\2023-127 Pittsburg Technology Park\MAPS\Cultural_Resources\PTP Cultural Resources.aprx - PTP Survey Coverage 20231214 (lgalvez - 1/24/2024)

Map Date: 1/24/2024

*Sources: Contra Costa County, ESRI, Maxar (2022)*

**Figure 3. Survey Coverage**

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2023-127 Pittsburg Technology Park

1. Obtaining information about the golf course planning and design through documentation of its history, plans, and photographs, and conduct a site visit to identify the historic characteristics of the design intent.
2. Identification of the appropriate type of designed landscape within which it should be evaluated - in this case, a golf course.
3. Analysis of the characteristic features that the landscape should possess to be a good representation of golf courses.
4. Evaluation of significance of the golf course using NRHP and CRHR criteria.
5. Evaluation of the integrity of each landscape characteristic and list the features that the landscape should retain to possess integrity.
6. Determination of whether any aspects of the golf course's history or present condition might place it in a category of properties generally considered ineligible for the NRHP, therefore requiring special justification.

### 4.6.1 Landscape

The Project Area includes portions of the Delta View Golf Course, which is classified as a historic-period landscape. According to the *Guide to Preparing Cultural Landscape Reports* (Page et al. 1998), landscape characteristics include both tangible and intangible aspects of an historic-period landscape that individually give the landscape its historic character and aide in the understanding of cultural importance. They range from large-scale patterns to site details and materials, and individual features of the landscape which can be grouped under these categories. Individual features and groups of features of a landscape generally fit within the landscape characteristics categories (adopted from Page et al. 1998) below:

- Natural Systems and Features: Natural aspects that influence the development and resultant form of a landscape.
- Spatial Organization: Arrangement of elements creating the ground vertical, and overhead planes that define and create spaces.
- Land Use: Organization, form, and shape of the landscape in response to land use.
- Cultural Traditions: Practices that influence land use, patterns of division, building forms, and the use of materials.
- Cluster Arrangement: The location of buildings and structures on the landscape.
- Circulation: Spaces, features, and materials that constitute a system of movement.
- Topography: Three-dimensional configuration of the landscape surface characterized by features and organization.
- Vegetation: Indigenous or introduced trees, shrubs, vines, ground covers, and herbaceous materials

- Buildings and Structures: Three-dimensional constructs such as houses, barns, garages, stables, bridges, and memorials
- View and Vistas: Features that create or allow a range of vision that can be natural or designed and controlled.
- Constructed Water Features: The built features and elements that utilize water for aesthetic or utilitarian functions.
- Small-scale features: Elements that provide detail and diversity combined with function and aesthetics.
- Archaeological Sites: Sites containing surface and subsurface remnants related to historic or prehistoric land use.

These landscape categories were used to describe and characterize the golf course landscape to assist in determining if it was eligible for the NRHP and CRHR.

# 5.0 RESULTS

## 5.1 Records Search

The records search consisted of a review of previous research and literature, records on file with the NWIC for previously recorded resources, and aerial photographs and maps of the vicinity.

### 5.1.1 Previous Research

Thirty-five previous cultural resource studies have been conducted within 1-mile of the Project Area north of Contra Costa canal and within 0.5-mile of the Project Area south of the canal, covering approximately 30 percent of the total area within the records search radius (Appendix A). Of the 35 studies, eight were conducted within the Project Area (Table 2). Appendix A lists all of the reports of surveys located within 1-mile of the Project Area north of the canal and within 0.5-mile south of the canal. These studies revealed the presence of railroads, the Concord Naval Weapons Station, a natural gas pipeline, electric utility towers, residences, National Guard Armory, a Fort Knox Storage building, Canal Road Bridge, Contra Costa and Clayton canals, transmission lines, and Parkside Elementary School. The previous studies were conducted between 1976 and 2016.

The client provided one additional cultural resources study. The study addressed a portion of the Delta View Golf Course. The portion addressed is located southwest of the current Project Area (Ludwig and Coleman 2023). Combined with the results of the NWIC, a total of nine previous cultural resource studies included portions of the Project Area (Table 2).

The results of the records search indicate that approximately 15 percent of the Project Area has been previously surveyed for cultural resources. Therefore, ECORP conducted a pedestrian survey of the Project Area under current protocols.

**Table 2. Previous Cultural Studies within or Adjacent to the Project Area**

| Report Number S- | Author(s) | Report Title | Year |
|---|---|---|---|
| 18440 | G. James West and P. Welch | Class II Archaeological Survey of the Contra Costa Canal, Contra Costa County, California | 1996 |
| 21142 | S. A. Guedon and C. I. Busby | Archaeological Survey Report, Delta De Anza Trail located between Loftus Road/State Highway 4 to Railroad Avenue, City of Pittsburg, Contra Costa County, California | 1996 |
| 29583 | W. Self | Archaeological Survey and Cultural Resources Assessment of the Proposed Alternative 3A Route for the City of Pittsburg Recycled Water Project, Pittsburg, Contra Costa County, California (letter report) | 2004 |
| 30785 | C. Losee | Collocation ("CO") Submission Packet FCC Form 621, 2222 Gold Club Road, Pittsburg, Contra Costa County, California. | 2005 |
| 34093; 34093a | K. Kearney, D. Buckley, A. Estes, J. Allan, and W. Self; S. K. Strattor and S. M. Fry | Cultural Resource Assessment, Delta Diablo Sanitation District and the City of Pittsburg, Recycled Water Pipeline Extension Project, Pittsburg, Contra Costa County, California; BUR0704016A: Delta Diablo Sanitation District and City of Pittsburgh Recycled Water Pipeline Extension Project, Contra Costa County, California (Project #07-SCAO-174) | 2006; 2007 |
| 35796 | B. Siskin, C. DeBaker, and J. Lang | Cultural Resources Investigation and Architectural Evaluation of the Pittsburg-Tesla Transmission Line, Contra Costa and Alameda Counties, California | 2009 |
| 38082; 38082a | Peak and Associates, Inc.; S. Straton, and A. Leigh | Determination of Effect for the Installation of a Water Pipeline over the Contra Costa Canal, Pittsburg, Contra Costa, California; BUR110610B: MP-153, ENV-3.00; Redundant Emergency Water Delivery Line for the City of Pittsburg, California (Tracking #11-SCAO-095) | 2011; 2011 |
| 49678 | Aimee Arrigoni | Historic Property Survey Report for the SR-4/Bailey Road Interchange Pedestrian & Bicycle Improvement Project, Bay Point, Contra Costa, California. | 2016 |
| – | B. Ludwig and J. Coleman 2023 | Cultural Resources Inventory and Evaluation Report Pittsburg Premier Fields Project, City of Pittsburg, Contra Costa County, California | 2023 |

The records search results, in addition to the client-provided report, determined that 20 previously recorded historic-era cultural resources are located within 1 mile of the Project Area north of the Contra Costa Canal and within 0.5 mile south of the canal (Table 3). All 20 resources are historic-era sites that are associated with the following: the Atcheson, Topeka and Santa Fe Railroad; Southern Pacific Railroad; Delta View Golf Course; Concord Naval Weapons Station; a natural gas pipeline; electric utility towers; residences; National Guard Armory; a Fort Knox Storage building; Canal Road Bridge; Contra Costa and Clayton canals; transmission lines; and Parkside Elementary School.

One previously recorded cultural resource is located within the Project Area: P-7-2956 (Pittsburg-Tesla Transmission Line). Ludwig and Coleman (2023) recorded and evaluated a portion of the Delta Golf Course adjacent to the western boundary of the Project Area. An unrecorded portion of the Delta View Golf Course is present within the Project Area. A segment of P-7-2695 (Contra Costa Canal) bisects the Project Area, but is outside of the Project Area's boundaries.

**Table 3. Previously Recorded Cultural Resources within 1 Mile of the Project Area North of the Contra Costa Canal and within 0.5 Mile South of the Contra Costa Canal**

| Site Number CA-CCO- | Primary Number P-7- | Recorder and Year | Age/ Period | Site Description | Within Project Area? |
|---|---|---|---|---|---|
| – | 2695 | JRP Historical Consulting Services 1993; Ric Windmiller 2010 | Historic | Contra Costa Canal | No |
| – | 2956 | Jennifer Lang 2008; Dana E. Supernowicz 2017 | Historic | Pittsburg-Tesla Transmission Line | **Yes** |
| – | 504 | Hatoff et al. 1994 | Historic | Southern Pacific Railroad-Northern Contra Costa Route | No |
| 732H | 806 | Hatoff and Clyde 1994; Polly S. Allen 2016 | Historic | Atchison, Topeka and Santa Fe Railroad | No |
| 733H | 813 | Hatoff et al. 1994; Ric Windmiller 2014 | Historic | Southern Pacific Railroad Spur Line | No |
| – | 1920 | Laurence H. Shoup and Ward Hill 1995 | Historic | Shell Chemical Electric Utility Tower | No |
| – | 2501 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2502 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2503 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2504 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2505 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2506 | Janice Calpo 2000 | Historic | Single Family Property | No |
| – | 2507 | Janice Calpo 2000 | Historic | Multiple Family Property | No |
| – | 2508 | Janice Calpo 2000 | Historic | Multiple Family Property | No |
| – | 2509 | Janice Calpo 2000 | Historic | Multiple Family Property | No |
| – | 2510 | S. Lassell 1999; Janice Calpo 2000 | Historic | National Guard Armory | No |
| – | 2573 | Loma Billat 2003 | Historic | Fort Knox Storage | No |

**Table 3. Previously Recorded Cultural Resources within 1 Mile of the Project Area North of the Contra Costa Canal and within 0.5 Mile South of the Contra Costa Canal**

| Site Number CA-CCO- | Primary Number P-7- | Recorder and Year | Age/ Period | Site Description | Within Project Area? |
|---|---|---|---|---|---|
| – | 2648 | Neal Kaptain 2004; Jeremy Adams 2014 | Historic | Contra Costa Canal Road Bridge | No |
| – | 4702 | Aisha Fike 2014 | Historic | Parkside Elementary School | No |
| – | – | Ludwig and Coleman 2023 | Historic | Delta View Golf Course | No* |

*The portion of the Delta View Golf Course recorded is outside the current Project Area.

### 5.1.2 Records

The OHP's BERD for Contra Costa County (dated March 3, 2023) lists the Contra Costa Canal as *2s2, individually determined eligible for the National Register by consensus through the Section 106 process*.

The National Register Information System (NPS 2023) failed to reveal any eligible or listed properties within the Project Area. The nearest National Register properties are located in the City of Antioch, approximately 3 miles southeast of the Project Area. The NPS does not list the Contra Costa Canal, therefore, it might not be up to date.

The Office of Historic Preservation identifies numerous historic districts throughout the City. The nearest district is the New York Landing Historic District, which is along Railroad Avenue, approximately 2 miles northeast of the Project Area (OHP 2023b).

ECORP reviewed resources listed as *California Historical Landmarks* (OHP 1996) by the OHP (2023b) on October 12, 2023. The nearest listed landmark is No. 932 Mount Diabo Coal Field; its plaque is located 3 miles southeast of the Project Area.

*Historic Spots in California* (Kyle 2002) mentions the Rancho Los Medanos, which was purchased by Colonel Jonathan D. Stevenson from Jose Antonio Mesa and Jose Miguel Garcia. Colonel Stevenson brought the *1st Regiment of New York Volunteers* to California via the sea. He hoped that the town, which he laid out on his ranch and called *New York of the Pacific*, would become a "large and prosperous seaport" (Kyle 2002:65). The town initially had short-lived prosperity due to inferior coal from Mount Diablo. In the 20th century, the town became a manufacturing center and expanded. In 1911, the town became known as Pittsburg.

The Caltrans Bridge Local and State Inventories (Caltrans 2018, 2019) list one historic bridge within 1 mile of the Project Area: Local Bridge 28C0468, which carries West Leland Road over the Contra Costa Canal. The bridge was constructed in 1976 and was evaluated by Caltrans as ineligible for the NRHP.

The *Handbook of North American Indians* does not identify a pre-contact or ethnographic villages within 5 miles of the Project Area (Levy 1978).

A review of the local historical registry revealed that Camp Stoneman is located approximately 1 mile west of the Project Area. Black Diamond Mine and Rose Hill Cemetery are located approximately 4.5 miles southeast of the Project Area. The east–west-oriented Pittsburg-Antioch Highway is located approximately 1 mile north of the Project Area. The Vincent A. Davi Library, Congregational Church, Santa Fe Railroad Depot, York Street, Black Diamond Old Grammar School, Pittsburg Seventh Day Adventist Church, St. Peter Martyr Church, and Johns Manville Corporation are located between 1 and 1.5 miles north of the Project Area. Buchannan Park and Oak Springs Community are 1.5 miles southeast of the Project Area. Military Chapel Stoneman Park is located approximately 1 mile to the east (City of Pittsburg 2019).

### 5.1.3 Map Review and Aerial Photographs

The review of aerial photographs and maps of the Project Area provides information on the past land uses of the Project Area and potential for buried archaeological sites. This information shows that the Project Area was initially vacant land before being developed into a golf course. Following is a summary of the review of maps and photographs.

- The 1870 BLM GLO Plat for Township 2 North, Range 1 West map depicts Section 24 as vacant land. A deep canyon is oriented north–south in the southwestern portion of the section. It crosses Section 24's southern boundary into Section 25. Two trails are oriented east–west in the northeastern portion of the section.
- The 1870 BLM GLO Plat map for Township 2 North, Range 1 East depicts the Project Area as vacant land.
- The 1907 USGS Antioch, California topographic map (1:62,500 scale) depicts the Project Area as low-elevation foothills, approximately 2 miles south of the intertidal zone of Honker Bay and its intersection with the Sacramento River and San Joaquin River. Three unimproved roads intersect at the northeastern corner of the Project Area. Ephemeral streams, which incise the low-elevation hills, flow northward into Honker Bay.
- The 1908 and 1914 USGS Antioch, California topographic maps (1:62,500 scale) and 1918 Honker Bay, California topographic map (1:31,680 scale) do not depict any changes compared to the 1907 USGS Antioch, California topographic map (1:62,500).
- The 1936, 1943, and 1951 USGS Antioch, California topographic maps (1:62,500 scale) do not depict any changes compared to the 1907, 1908 and 1914 USGS Antioch, California topographic map (1:62,500).
- A 1939 aerial photograph shows that the Project Area is undeveloped and appears to be covered in dense grasses. The Contra Costa Canal bisects the Project Area. West Leland Road is oriented east–west, north of the Project Area.
- The 1948 USGS Sacramento, California topographic map (1:250,000 scale) depicts a "CAMP" to the west of the Project Area.
- The 1951 USGS Antioch, California topographic map (1:50,000 scale) depicts the boundary of the "CAMP STONEMAN MILITARY RESERVATION" west and south of the Contra Costa Canal. The

Contra Costa Canal is oriented roughly east–west through the center of the Project Area. The golf course has expanded south of the canal and into the easternmost portion of Camp Stoneman. The portion of the golf course within Camp Stoneman is outside the Project Area.

- The 1955 USGS Honker Bay, California topographic map (1:24,000 scale) depicts the Project Area in much the same condition compared to the 1951 USGS Antioch, California topographic map (1:50,000 scale). However, a filtration plant and reservoir are present to the east and southeast of the Project Area, respectively. Residential and commercial development is depicted west of the Project Area. A road parallels the Contra Costa Canal along its northern side. The intersection of roads is no longer depicted at the northeastern corner of the Project Area.
- The 1957, 1958, and 1959 aerial photographs show the golf course north of the canal. A large building and parking lot are shown in the middle of the northern portion of the Project Area; a small building is shown to the west of the large building. A building is shown immediately north of the Contra Costa Canal. Transmission lines are oriented north–south along the eastern boundary of the Project Area.
- The 1965 and 1966 aerial photographs show the Delta View Golf Course present in the Project Area. Three buildings and a large parking lot are present in the northern portion of the Project Area. Mature trees are scattered throughout the Project Area. Golf course fairways are present to the west of the buildings. A small building is present north of the Contra Costa Canal. The 1966 aerial photograph also shows a half-circle of trees north of the Contra Costa Canal, in the eastern portion of the Project Area.
- The 1966 USGS Sacramento, California topographic map (1:250,000 scale) depicts the Mokelumne Aqueduct as oriented east–west near the northern boundary of the Project Area. Camp Stoneman is depicted to the west of the Project Area.
- The 1969 USGS Honker Bay, California topographic map (1:24,000 scale) depicts commercial and residential development to the east of the Project Area.
- The 1972 USGS Honker Bay, California topographic map (1:24,000 scale) depicts numerous transmission lines oriented north–south along the eastern boundary of the Project Area. Increased residential and commercial development is also depicted east of the Project Area.
- A 1979 aerial photograph shows the Project Area in the same condition as the 1972 aerial photograph. Residential housing is present east of the Project Area.
- The 1981 USGS Honker Bay, California topographic map (1:24,000 scale) depicts increased residential and commercial development to the east of the Project Area. An ephemeral stream flows southward and borders the eastern Project Area boundary. A small pond is evident south of the Contra Costa Canal, adjacent to the eastern boundary of the Project Area. Camp Stoneman is no longer depicted.

- A 1993 aerial photograph shows that the Project Area is mostly unchanged compared to the 1979 aerial photograph. Two large ponds, which are part of the golf course, are present to the west of the buildings shown in the 1957, 1958 and 1959 aerial photographs.
- A 2009 aerial photograph shows a large water tank in the central portion of the Project Area, north of the Contra Costa Canal.
- All other aerial photographs taken between 2009 and 2023 show the Project Area in its current state.

In sum, the Project Area was undeveloped and vacant until approximately 1951, when the Delta View Golf Course was established. Significant residential and commercial growth in the surrounding vicinity began by the 1970s.

## 5.2 Sacred Lands File Results

A search of the Sacred Lands File by the NAHC failed to indicate the presence of Native American cultural resources in the Project Area. A record of all correspondence is provided in Appendix B.

## 5.3 Other Interested Party Consultation Results

ECORP has not received any responses to the letters sent to the Contra Costa Historical Society and Pittsburg Historical Museum as of the date of the preparation of this document.

## 5.4 Field Survey Results

ECORP surveyed the entire Project Area for cultural resources on September 26, 2023 (Figures 4, 5, and 6). ECORP observed the remains of the Delta View Golf Course throughout the Project Area, which included a large net that was used for a driving range, a paved parking lot, sand traps, golf cart paths, and the foundations of prior buildings. Visibility of the ground surface ranged from 0 to 100 percent; portions of the Project Area were paved over, while other portions were covered with tall dense grasses. A herd of goats had recently grazed through the Project Area, as evidenced by the presence of droppings, which increased visibility of the ground surface in many areas.

**Figure 4. Overview of the Project Area (view south; September 26, 2023).**

**Figure 5. Overview of the Project Area (view north; September 26, 2023).**

**Figure 6. Overview of the Project Area (view northeast, September 26, 2023).**

### 5.4.1 Cultural Resources

ECORP archaeologists visited all previously recorded resources within the Project Area. As a result of previous investigations by other firms, one historic-period resource was recorded within the Project Area: P-7-2956 (Pittsburg-Tesla PG&E transmission line). As a result of the 2023 survey, ECORP identified two new cultural resources within the Project Area: PT-01 (Delta View Golf Course) and PT-02 (telephone line). A portion of the Delta View Golf Course was previously recorded immediately adjacent to, but outside of, the Project Area's western boundary.

The records search revealed that P-7-2695 (Contra Costa Canal) was previously recorded and bisects (but is outside of) the Project Area. Site descriptions of the previously recorded resources follow, and confidential DPR site records are provided in Appendix D. Brief descriptions and a map depicting the resources identified during the record search are also provided.

#### *5.4.1.1 Resources Within the Project Area*

**P-7-2956, Pittsburg-Tesla PG&E Electrical Distribution Lines**

Resource P-7-2956 (also known as P-1-10947 in Alameda County) consists of an approximately 31-mile-long 230kV electrical distribution and transmission line that passes through the City of Pittsburg. The transmission line begins in Antioch and separates into two lines southeast of Pittsburg. One line continues westward to Moraga—the other line continues northward and becomes the Pittsburg-Tesla transmission line. This line parallels the southeastern portion of the Project Area, south of the Contra Costa Canal and north of the Canal if enters the Project Area for approximately 650 feet, then parallels the Project Area's western boundary. The portion within the Project Area was constructed between 1959 and 1960, which is

after the initial line's construction. Lang (2008) originally recorded and evaluated the resource within the Project Area and determined it to be ineligible for inclusion in the NRHP/CRHR.

In 2017, Supernowicz (2017) revisited the segment of the line just south of the Project Area, which connects to the segment that passes through the Project Area. This portion was constructed between 1920 and 1955 and was determined to be individually ineligible for the NRHP/CRHR but could be a contributing element to early power distribution systems in Northern California. SHPO concurred with the evaluation and the resource is listed as *Appears eligible for NR (National Register) as a contributor to a NR eligible multi-component resource through survey evaluation* (3D). The resource is considered eligible under Criteria A/1 and C/3.

Approximately 650 feet of length and only one tower of the Pittsburg-Tesla PG&E transmission line is within the Project Area. The vast majority of the transmission line is well outside of the Project Area. The Project proposes to rezone the land to install a data center which may utilize power from the adjacent transmission line system. Utilizing the transmission line for its intended use, with minimal physical impacts to the line itself, will not cause adverse effect or significant impact to the resource. The construction of the proposed data center will have minimal visual impact to the setting of the transmission line. Further, the Proposed Project will have no impact or adverse effect to the feeling or historical association of early electric transmission for the resource, which is what makes the transmission line historically significant. The project will not physically alter significant portions of the transmission lines materials, workmanship, and will not alter its current route or location along the landscape. As such, the proposed project will have no adverse effect to P-7-2956 as an Historic Property and no significant impact as an Historical Resource.

ECORP revisited the transmission line on September 26, 2023 and found the resource to be the same as previously recorded (Figure 7).

**Figure 7. Overview of the Transmission Lines (view north; September 26, 2023).**

## PT-01, The Delta View Golf Course

Ludwig and Coleman (2023) recorded a portion of the Delta View Golf Course located southwest of the Project Area and south of the Contra Costa Canal. The recorded portion was built in 1991. At the time of the recording, the area did not look like a golf course, with the exception of the paved golf cart paths. An evaluation of this portion of the golf course determined it to be ineligible for the NRHP or CRHR (Ludwig and Coleman 2023). The course is not associated with a specific historic event; therefore, it is ineligible for the NRHP/CRHR under Criterion A/1. Some references identify Alister MacKenzie as the designer of the golf course, however, MacKenzie passed away before the golf course was constructed. Additional research revealed that Robert Muir Graves designed the golf course. Although Graves is a noted golf course architect, construction of a golf course is not a significant achievement. The golf course is not eligible for the NRHP/CRHR under Criterion B/2. The Delta View Golf Course does not retain any unusual or unique characteristics; therefore, it is not eligible for the NRHP/CRHR under Criterion C/3. Additional research will not likely reveal information that will make it eligible for the NRHP or CRHR; therefore, it is ineligible for the NRHP/CRHR under Criterion D/4.

The Delta View Golf Course is situated on rolling hills and borders residential neighborhoods to the north, east, and west (Figure 8). The Contra Costa Canal is oriented east–west and bisects the golf course when it was expanded in 1991. Steep hillsides along the golf course give sweeping overviews of the surrounding delta area.

**Figure 8. Overview of the Delta View Golf Course (view west; September 26, 2023).**

The Delta View Golf Course was an approximately 6,317-acre golf course that included turf areas, maintenance spaces, and a clubhouse area. Historically, the golf course included tees, fairways and rough, putting greens, sand bunkers, ponds and connecting ditches, gravel roads, and golf cart paths. It also had a maintenance facility, open space, a driving range/practice area, and a clubhouse. Each of these major features complement each other to comprise one or more of the major landscape characteristics (as defined in Section 1.3.4 of this report) of the Golf Course.

The Delta View Golf Course has been closed since 2018. As of its closing, the entirety of the former golf course is not actively mowed or irrigated. Due to lack of irrigation, the former water features have reverted to dry pits. The cart paths remain paved. No information was available in the archival record to specifically show the evolution of the course or its alterations over time. Descriptive information of each feature and its changes were taken from a review of aerial images. Other than some alterations by PG&E in c. 1950, when they built the distribution line (P-7-2956) along the eastern edge, the design of the golf course did not substantially change until they added the additional nine holes in 1991.

***Tees, Fairways, and Rough***

The tees, fairways, and roughs compose the majority of the active portions of the Golf Course. Photographs of the Golf Course's individual holes and grass features were not available during archival research to draw comparisons to present day condition or historical appearance. However, generally, the grass for tees were cut very short to allow maximum mobility of the ball hit off the tee. Fairways were generally cut short, though not as short as the tees, to provide a visibly playable course as seen from the tee, with ball mobility and aesthetic flow along the landscape. The rough was generally cut longer so that the ball would settle in the higher grasses, making its removal from the rough more difficult.

These areas are overgrown with ruderal vegetation and are indiscernible as individual features. The original grass was not maintained or mowed. Fairways, which originally provided a distinguishable element of the spatial organization and topography of the course, were no longer clearly discernable. They did not express the organization, form, or shape of the landscape in their current condition. Thus, the condition of the spatial organization and topographic characteristics of these features of the overall course were poor. The characteristics of the vegetation no longer provide the feeling of a golf course, as the area was overrun with invasive weeds and other shrubs.

***Putting Greens***

Putting greens are small areas where the sloping ground surface culminates in a hole, identified by a flag. Grasses were cut extremely short to allow maximum mobility of the ball. The topography of the greens was intentionally designed to include slopes and angles to challenge golfers. The original historical topographic design of the putting greens, as planned by John Fleming and Graves. Each hole in the Delta View Golf Course is not known or documented in the archival record and therefore not discussed herein. Further, historical photographs showing the Golf Course's individual putting greens were not available during archival research for which to draw comparisons to present day condition or historical appearance.

These features were comprised of overgrown vegetation and were indiscernible as the features they were during the historic period or any time they were in use. The original grass was no longer present and overrun with weeds. The vegetation, spatial organization, and topographic characteristics of these features of the course overall were poor.

***Sand Bunkers***

Sand bunkers are raised areas of sand traps that were originally designed to create hazards and make the course more difficult. Generally, sand traps are either set below the grade of the fairway, or above the grade of the fairway, and spread through each fairway in varying sizes. The depth, composition, slope of

the trap walls, and location of each trap are generally planned by the course designer with intent to challenge the golfer as they progress through the course. The original historical topographic design and intent, as imagined by John Fleming and Robert Muir Graves, and material makeup of each sand trap is not documented in the archival record. Further, historical photographs of the Golf Course's individual sand traps were not available during archival research for which to draw comparisons to present day condition or historical appearance.

The sand bunkers were indiscernible and the berms along the sand bunkers are overgrown, with no areas of exposed sand. Extremely impacted by vegetation overgrowth, they are no longer characteristic of the topography of the golf course.

***Ponds and Connecting Ditches***

Ponds and connecting ditches were part of the original golf course design. The ditches in the Delta View Golf Course were placed in their locations with intent for collecting natural drainage water to remove from the property. Ponds were included in the original design to challenge golfers. The original historical intent for the placement, massing, and design of the ponds and ditches, as imagined by John Fleming and Robert Muir Graves, is not documented in the archival record. Further, historical photographs of the Golf Course's individual water features were not available during archival research for which to draw comparisons to present day condition or historical appearance.

The original ponds were indiscernible during the visit due to an overgrowth of weeds. The ditches were overgrown and dry. The ponds and ditches are in poor condition.

***Cart Paths***

Non-contiguous cart paths allowed access throughout the course to maneuver between holes; most were historically comprised of concrete. Cart paths were built to facilitate the flow and movement of golfers through the course and are directly linked to the design intent and circulation of the course. Despite the path's significance to the flow and movement of the course, the original historical intent for the design and flow, as imagined by Flemming and Muir Graves, of the cart path is not documented in the archival record. Further, historical photographs show the cart paths as being barely visible. No detail is shown for which to draw comparisons to present day condition or historical appearance.

The majority of paved cart paths observed during the field visit were overgrown with grasses. The graveled dirt and covered portions of the cart paths were overgrown, but their routes were visible. Their condition is fair to poor. Despite being overgrown with vegetation, the paths still visibly represent the circulation and movement through the course in their current condition.

***Buildings***

A fire decimated all buildings on the Delta View Golf Course. The original buildings are gone, but their footprints remain. Despite the significance of these buildings to the function of the golf course, their original historical intent is unknown and is not documented in the archival record. It is presumed that the buildings consisted of the major components of a golf course, including a clubhouse and maintenance facility.

***Driving Range/Practice Area***

Historically, the course contained one netted driving range and a practice green for short-term practice. The driving range and practice range were indiscernible at the time of the field visit due to an overgrowth of weeds. However, the net is still present.

***Evaluation of The Delta View Golf Course***

The Delta View Golf Course is evaluated herein as a historic district with buildings and landscape features for both the NRHP and CRHR. The golf course landscape was evaluated as a whole resource, with buildings and landscape features included. The evaluation was informed by National Register Bulletin 18: How to Evaluate and Nominate Designed Historic Landscapes (Keller et al. n.d.), and a *Guide to Cultural Landscape Reports: Content, Process and Technique* (Page et al. 1998). A Designed Historic Landscape is a landscape that has significance as a design or work of art, was consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principal, or an owner or other amateur using a recognized style or tradition; has an historical association with a significant person, trend, event, in landscape gardening or landscape architecture; or has a significant relationship to the theory or practice of landscape architecture.

*NRHP/CRHR Criterion A/1*

According to archival research, the original Delta View Golf Course was completed in c. 1949. The golf course was constructed and incorporated into the Pittsburg community as a recreational focal point for the City. Pittsburg became a thriving industrial center that grew in size and population during the second half of the 20th century. Though the Delta View Golf Course was built to serve as recreation for the burgeoning community of Pittsburg at the time, it was not a centerpiece to the master plan of the community as envisioned by city developers. Further, the Delta View Golf Course is not associated with any historical events in golfing, practice or concepts in golfing, or other related context. Therefore, the Delta View Golf Course is not individually related to the broad patterns of history associated with Pittsburg and Contra Costa County; it is not eligible under Criterion A/1.

*NRHP/CRHR Criterion B/2*

The archival research for the Delta View Golf Course revealed that it is not significantly associated with any important person who contributed to local, state, or national history. The archival record does not show any names or individual owners from the period of its construction who gained historical significance as a result of the Delta View Golf Course. Its existence is not associated with any Master Plan designers and is not associated or representative of the life of any significant golfer. Therefore, the Delta View Golf Course does not have an important association with the lives of persons significant in the past; it is not eligible under Criterion B/2.

*NRHP/CRHR Criterion C/3*

The Delta View Golf Course was designed as an executive golf course by master course designers John Fleming and Muir Graves. The layout possesses the typical aspects of a golf course, including the fairway, dunes, greens, ponds, and waterways. It was built to be integrated with open space areas and the

surrounding environments. It contains fairways, open space, and built features such as the cart paths that encourage circulation along the course. The Delta View Golf Course is situated to balance the scenic tranquility of the area and the challenge and fluidity of the game itself. The features of the course were similar to other golf courses of the period and particularly those by Fleming; this golf course was a modest example of nine-hole courses and his work. Though the course was designed by Fleming, it does not appear to exhibit any of his artistic touches that helped his most famous courses gain notoriety or maintain relevancy in the changing environments of golf. Though it was designed with balance among the adjoining open space, it was not known to be an extravagant or beautiful example of a golf course. Fleming built many golf courses in Northern California, but he did not gain notoriety from the design of the Delta View Golf Course. His best works—Sierra View, Sharon Heights, Boulder Creek, and Adams Springs—are still well-known and used today. Overall, his master craftsmanship in the planning of golf course design and contributions to course construction techniques are not apparent in this course.

The Delta View Golf Course, as a historic district comprising a landscape, does not embody the distinctive characteristics of design or construction techniques of John Fleming and does not provide a good representation of his artistic embellishments or philosophy in course design, as described in the historic context. The golf course, as an historic district comprising buildings and a landscape, including the landscape characteristics, is not eligible under Criterion C/3.

*NRHP/CRHR Criterion D/4*

The Delta View Golf Course does not have the potential to yield information important in prehistory or history. Archival research potential for the golf course has been exhausted, and the property's history is well documented in the archival record. The Delta View Golf Course cannot provide additional historically important information, and there is no potential for the property to provide additional information that is not already represented in the archival record. As a result, the Delta View Golf Course is not eligible under Criterion D/4.

*Integrity*

The landscape characteristics of the Golf Course were identified and composed by the individual features of the course. The individual features of the Delta View Golf Course that would need to remain for the golf course to retain integrity of its landscape characteristics are the ones that display spatial organization, circulation, topography, vegetation, buildings and structures, and water features. Each landscape characteristic was analyzed based on what was present historically and its current condition.

Historic integrity is determined by the extent to which the general character of the historic period is evident and the degree to which incompatible elements obscuring that character can be reversed. The historic integrity and significance of each landscape characteristic and associated features are herein evaluated in the context of the landscape as a whole.

The Delta View Golf Course ceased operation in 2018 and is now in an overall state of dereliction. The integrity of the individual features that make up the course (i.e., tees, fairways, and rough; putting greens; sand bunkers; ponds and connecting ditches; cart paths; and driving range/practice area) are greatly compromised. The majority of the course features are significantly overgrown; many are barely

discernable on the landscape, with most features not discernable at all. The original circulation of the course is not apparent as golf cart paths, which denote the immediate course of travel, and the location of tees and putting greens, which denote start and stop locations for holes, are not discernable and their unique vegetation is completely missing. Further, the topography of the fairways and sand bunkers are not apparent because natural erosion and dense grasses have replaced mounds and berms. In addition, new paths of travel from animals and pedestrians have obscured the circulation, topography, and spatial arrangement of the original course.

The Delta View Golf Course does not retain integrity of association. It remains loosely associated with recreation in the development of Pittsburg, but that association is not significant to the community. It is also associated with master golf course designers John Fleming and Robert Muir Graves, but that association is not significant in comparison to their other works and style, as described in the historic context. Its physical presence on the landscape does not convey either association in a significant way. It retains integrity of location; it has not been moved, nor have its holes or buildings been relocated. Although it was never moved, it received regular maintenance while it was in operation. It does not retain integrity of setting or feeling. Much of the surrounding land has changed from open rolling hills to residential subdivisions. It does not retain integrity of materials because the physical elements that were combined during its opening in 1949 no longer exist in the same pattern, and the clubhouse and maintenance buildings are no longer intact structurally. The critically important grasses that make up the tees, fairway, and putting greens are overwhelmed by natural weeds and grasses. Furthermore, erosion has manipulated much of the landscape, making the spatial arrangement between natural and modified areas and the specific topography of each hole, as well as the distinction between the tees, fairway, putting greens, rough, and traps, very difficult to discern or non-existent in many areas.

Regardless of integrity, the Delta View Golf Course, as a district composed of buildings and a landscape, with landscape characteristics, is not eligible for the NRHP or CRHR.

Finally, no aspects of the golf course's history or present condition might place it in a category of properties generally considered not eligible for the NRHP; therefore, it does not require special justification. ECORP concurs with the prior evaluation of the Delta View Golf Course completed by Ludwig and Coleman (2023).

### PT-02, Telephone Line

ECORP recorded a telephone line (PT-02), which, according to aerial photographs, was built prior to 1973. PT-02 includes an approximately 0.5-mile-long segment of telephone line that parallels the residences on their western side, as well as the northern side of a gravel road, and turns to the west to enter the Project Area (Figure 9). The telephone line consists of wooden poles that contain crossarms with distribution wires spanning the poles from the crossarms. ECORP recorded PT-02 on September 26, 2023.

**Figure 9. Overview of P-7-2956 (foreground) and PT-02 (background) (view southeast; September 26, 2023).**

***Evaluation of PT-02***

*NRHP/CRHR Criterion A/1*

PT-02 provided telephone service to local landowners. However, as a simple telephone line, it did not transmit enough electrical signal to shape the development of the region. There is nothing in the archival record to suggest that PT-02 is associated with events that have made a significant contribution to the broad patterns of Contra Costa County's history. It is not eligible for the NRHP/CRHR under Criterion A/1.

*NRHP/CRHR Criterion B/2*

Local utility crews built and maintained PT-02. However, there is nothing in the archival record to suggest that it is associated with the lives of persons significant in Contra Costa County's past. It is not eligible for the NRHP/CRHR under Criterion B/2.

*NRHP/CRHR Criterion C/3*

As a conventional telephone line, indistinguishable from multiple similar telephone lines in Contra Costa County, PT-02 lacks any character-defining features. It does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. It is not eligible for the NRHP/CRHR under Criterion C/3.

*NRHP/CRHR Criterion D/4*

The information potential of PT-02 is expressed in its built form, alignment, and in the historical record. It has not yielded, nor is it likely to yield, information important in history or prehistory. It is not eligible for the NRHP/CRHR under Criterion D/4.

*Integrity of PT-02*

Resource PT-02, a 0.47-mile-long segment of telephone line, possesses integrity of location, setting, design, workmanship, feeling, and association. It remains a telephone line in Contra Costa County in a suburban setting. PT-02 still conveys the overall aesthetic of a 20th-century telephone line in Contra Costa County that provided telephone service to local landowners.

Regardless of integrity, due to lack of historical significance, PT-02 does not meet NRHP or CRHR eligibility criteria as an individual resource or as part of any known or suspected historic district; the resource is not listed on any Certified Local Government historic property register.

#### *5.4.1.2 Resources Outside of the Project Area*

**P-7-2695, Contra Costa Canal**

Resource P-7-2695 (Contra Costa Canal) bisects the Project Area into northern and southern portions, but is outside of the Project Area's boundaries. This canal is above-ground and concrete-lined in the western portion of the Project Area and flows underground at the easternmost portion. JRP Historical Consulting, Inc. recorded and evaluated the easternmost portion of the canal in 1993 (JRP 1993); the canal was piped underground at the location of recording. JRP (1993) determined that the segment of the canal that flows underground was ineligible for the NRHP. Through research, JRP determined that the Contra Costa Canal is part of a much larger system, the Central Valley Project, which should be considered during evaluation.

Herbert (2002) completed a recording and evaluation of the entire 40-mile-long canal and found it to be eligible for the NRHP under Criterion A; with a period of significance from 1937 until the 1950s. The canal is of State historic importance because of its contribution "to the economic and industrial development of eastern Contra Costa County" (Herbert 2003:15). SHPO concurred with the determination of eligibility in September 2003 (Polanco 2015).

In 2008, C. DeBaker and K. Frank revisited the underground portion of the canal that was recorded by JRP in 1993 (DeBaker and Frank 2008). The canal was found to be in the same condition as the 1993 recording. ECORP revisited the canal on September 26, 2023 and found it to be in the same condition as the 2008 revisit (Figure 10). During the survey, ECORP observed that the entire portion of the canal bisects the Project Area. ECORP concurs that the portion of the canal recorded by JRP (1993), which flows underground in the eastern portion, no longer retains integrity. Due to the loss of integrity, any proposed future improvements to that portion of the canal, including reconstruction to support new road access or other structural stability, has no potential to cause a significant impact or adverse effect to the historical significance, aspects of integrity, or character-defining features of the canal. Any proposed improvements, as a result of the Specific Plan, to the previously underground portion of the canal within the study area will cause no adverse effect to a Historic Property under Section 106 of the NHPA, nor will it have a significant impact to a Historical Resource under CEQA.

The portion of the canal which maintains integrity is depicted in Figure 11 and is not proposed for any future improvements under the Specific Plan.


**Figure 10. Overview of the Contra Costa Canal (view west; September 26, 2023).**

# 6.0 MANAGEMENT CONSIDERATIONS

## 6.1 Conclusions

The records search and the 2023 field survey identified one previously recorded resource and two newly recorded resources within the Project Area. ECORP identified two newly recorded resources PT-01 (Delta View Golf Course) and PT-02 (telephone line) within the Project Area. Resource PT-01 (Delta View Golf Course) has been evaluated for the NRHP and CRHR and was determined ineligible for the NRHP and CRHR. Resource PT-02 (telephone line) has also been determined ineligible for the NRHP and CRHR. Previously recorded resource P-7-2956 (Pittsburg-Tesla Transmission Line) was previously evaluated and was determined to be eligible, with SHPO concurrence, for the NRHP and CRHR as a contributing element to early power systems in Northern California.

The Project, as proposed, will have no adverse effect to P-7-2956 as an Historic Property and cause no significant impact as an Historical Resource. Resource P-7-2695 (Contra Costa Canal) is located outside of the Project Area, but bisects it into northern and southern portions. The portion of the canal which flows underground does not maintain integrity. As such, any proposed improvements, as a result of the Specific Plan, to the previously underground portion of the canal within the study area will cause no adverse effect to a Historic Property under Section 106 of the NHPA, nor will it have a significant impact to a Historical Resource under CEQA. Until the lead agencies concur with the identification and evaluation of eligibility of cultural resources, no Project activity should occur.


Location: N:\2023\2023-127 Pittsburg Technology Park\MAPS\Preserve_Impact\Pittsburg Impacts.aprx - Pittsburg Impacts (jgalvez - 4/11/2024)

**Figure 11. P-7-2695 Contra Costa Canal**

2023-127 Pittsburg Specific Plan

## 6.2 Likelihood for Subsurface Cultural Resources

The underlying geology of the Project Area consists of Pliocene-Pleistocene-aged deposits of sandstone, shale, and gravel (Jennings et al. 1977). The Pliocene-Pleistocene era spans from 5.3 million to 11,700 years ago, and it is generally accepted that humans were present in North America as many as 20,000 years ago. Therefore, the northern portion of the Project Area has a low-to-moderate potential for containing intact buried deposits. This potential increases to moderate in areas within 200 feet of the unnamed seasonal streams that flow through the Project Area. The potential along streams is moderate due to the fact that pre-contact resources are generally located closer to natural waterways and alluvium, which is located along streams. The hillsides within the Project Area have a low potential for buried pre-contact archaeological sites.

## 6.3 Recommendations

### 6.3.1 Contractor Awareness Training

Contractors do not typically have the necessary training or experience to recognize cultural resources upon discovery during ground disturbing activities. Therefore, ECORP recommends that all workers, regardless of location, receive contractor awareness cultural resources sensitivity training prior to construction. The training program should be developed by an archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards for archaeology and include relevant information regarding sensitive cultural resources and tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating state laws and regulations. It should also describe appropriate avoidance and impact minimization measures for cultural resources and tribal cultural resources that may be located at the Project locations and provide guidance on procedures to follow if any cultural resources or TCRs are encountered.

### 6.3.2 Archaeological Monitoring

All ground-disturbing activities associated with the Project within 200 feet of the unnamed creek shall be monitored by a qualified professional archaeologist who meets or works under the direct supervision of someone who meets the Secretary of the Interior's Professional Qualifications Standards for prehistoric and historic archaeology. In the event that cultural resources are observed, all work must stop within the immediate vicinity of the find, and the monitor will direct the implementation of the post-review discovery procedures.

### 6.3.3 Post-Review Discoveries

There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources that are more than 200 feet from the creek. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, ECORP recommends the following procedures within the Project Area.

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional

archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a Historic Property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find represents a Native American or potentially Native American resource that does not include human remains, then they shall further notify the appropriate tribes. The agencies shall consult with the tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.
- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Contra Costa County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-

work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

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