3.4 Cultural Resources

3.4.1 Introduction

This section presents and discusses the cultural resources located within the project area. Included in this section are the environmental and regulatory settings, the significance criteria used for determining environmental impacts, potential impacts associated with the project, and, where applicable, mitigation measures that would reduce those impacts to a less-than-significant level.

3.4.2 Scoping Comments

Comments related to cultural resources impacts were received during the public scoping process. These comments and the location where they are addressed in the cultural resources EIR analysis are provided in Table 3.4-1.

Agency/Entity	Comment	Location in Cultural Resources Section that Comment is Addressed
California State Lands Commission	The Draft EIR should also mention that the title to all abandoned archaeological sites and historic or cultural resources on or in the submerged lands of California is vested in the state and under the jurisdiction of the Commission (Pub. Resources Code, § 6313). Commission staff requests that the District consult with Staff Attorney Jamie Garrett, should any cultural resources on State lands be discovered during construction of the proposed Project. In addition, Commission staff requests that the following statement be included in the EIR's Mitigation and Monitoring Plan: "The final disposition of archaeological, historical, and paleontological resources recovered on state lands under the jurisdiction of the California State Lands Commission must be approved by the Commission."	3.4.5 Impact Assessment Methodology
Garril Page	I combine these two headings [Cultural Resources/Tribal Cultural Resources] as I have commented extensively on these subjects in prior EIR, and EIR/EIS opportunities. Having been told the USACE and County have collected such materials for inclusion in the current EIR, I herewith incorporate those Comments by reference. If, in fact, the current consultants have found and read my prior Comments, they have been advised regarding historical, cultural and tribal resources in Ross from 1960-2018. I assume the Town of Ross has mentioned relevant reports and resources for which Ross has contracted separately.	3.4.3 Environmental Setting, Project Setting, Record Search
Garril Page	I will add that the FAP Riparian Corridor proposes excavation and land disturbance in areas of early tribal settlements. The Project lead agency must exercise extreme diligence in honoring artifacts uncovered in the project area.	3.4.6 Impact Discussion (see also 3.14 Tribal Cultural Resources, 3.14.4 Regulatory Setting, Regional and Local Regulations)

Table 3.4-1 Cultural Resources Scoping Comments

3.4.3 Environmental Setting

Regional Setting

Human modification of the natural landscape in Marin County has changed the composition of the plant communities, habitats, and wildlife that use them. The most prominent activities are agriculture, livestock grazing, timber operations, road building, and urban and suburban development, all of which began in the nineteenth century and, with the exception of timber operations, persist into the present day. Urban and suburban development have contributed to considerable fragmentation of the natural areas. Within the project area, specifically, Corte Madera Creek was channelized in the 1970s, particularly at the downstream end of the project footprint. Furthermore, portions of the creek channel were lined with concrete.

Prehistoric Context

Information included in this prehistoric context is largely derived from Corte Madera Creek Flood Risk Management Project Draft EIS/EIR (USACE, 2018).

While there has been less archaeological research in Marin County as compared to other portions of the San Francisco Bay Region, research conducted in nearby areas (primarily Sonoma County) is germane to the prehistoric setting of the project area. This chronology is taken primarily from Basgall, et al. (Basgall, et al., 2006, in USACE, 2010) with other reference material cited as appropriate.

The Paleo-Indian Occupation dates from approximately 10,000 to 8000 B.C. There is scant evidence of this time period in areas surrounding Marin County, and none in Marin County itself. The cultural system in place during this time period is uncertain, but it has been suggested that the economic focus was on hunting with minimal to no reliance on vegetal resources (Fredrickson, 1984, in USACE, 2010).

The Lower Archaic Period follows the Paleo-Indian Occupation, lasting from approximately 8000 to 3000 B.C. There is little evidence of human occupation in Marin County for this time period. Evidence in the form of artifacts common to this time period have been found in nearby areas, such as at Duncan's Landing and Bodega Bay. Further south of Marin County, there are indications of millingstone-dominant archaeological assemblages starting circa 4500 B.C., which implies that a more diversified subsistence pattern including various vegetal resources had replaced the earlier focus on hunting. The scarcity of sites dating to this period along bayshore margins may be attributable to rising sea levels and inundation. The earliest radiometric dates of artifacts found in Marin County fall near the end of this time period, around 3500 B.C. This date was obtained at archaeological site CA-MRN-17, located at De Silva Island.

The Early Period, the next interval in the chronology, dates from approximately 3000 to 350 B.C. Occupational intensity increased during this period, with larger numbers of archaeological components identified at a greater number of locations. During the early part of this period, there was an emphasis on gathering food resources from marshes and seed-rich grasslands. Millingstones and handstones were common during this period, indicating that a more generalized gathering subsistence pattern, which began during the Lower Archaic Period,

continued during the Early Period. Other artifacts that are associated with this time period include large, concave-base dart points, lanceolate bifaces, perforated charmstones, mortars and pestles, grooved and notched netweights, and a variety of distinctive bead and ornament types. Burials during this period tend to be in flexed position with no apparent concern for orientation. Across the region, archaeological components dating to this period tend to be artifactually diverse and temporally disjunctive, implying that there may have been multiple cultural traditions and adaptive strategies in place across the landscape. One of the better-analyzed sites in the County is CA-MRN-152, the Pacheco site, located in the northeastern portion of the County.

The Middle Period followed the Early Period and lasted from approximately 350 B.C. to A.D. 800. A proliferation of sites dating to this period implies growing populations and increased attention to new habitat types (Hylkema, 2002, in USACE, 2010). Major semipermanent villages appeared in several marsh/lacustrine areas in the region, including San Francisco, San Pablo, and Bodega Bays and Laguna de Santa Rosa. Archaeobotanical studies indicate that the range of exploited food resources expanded even further from previous periods. This finding implies that the gathering of a variety of resources intensified to keep up with a growing population. Artifacts associated with this period include round-bottom mortars, shaped pestles, numerous crude stone sinkers, net mesh gauges, heavy projectile points, finely made stone drills, quartz crystals with pitch, and a large variety of bone artifacts such as tubes, head scratchers, needles, awls, chisels, and daggers. An increased number of mortars and pestles indicate that acoms became a very important food resource. Burials consist of primary interment, usually with high numbers of grave-associated artifacts and beds of red ochre. There are several archaeological sites with components dating to this period in Marin County along the coast of San Pablo Bay, including CA-MRN-115, CA-MRN-168, CA-MRN-254, CA-MRN-524, and CA-MRN-601. Other sites dating to this period include CA-MRN-27 (near Tiburon), CA-MRN-26, and CA-MRN-255/H.

The final interval in the cultural chronology is the Late Period, dating from A.D. 800 to 1800. This period is characterized by even greater resource intensification than earlier periods, greater sedentism, and increased social elaboration. Other changes include a population shift away from lakes and estuaries to riparian contexts in the oak woodlands. In woodland areas, populations could focus on collecting and storing acorns, which during this period became the primary subsistence resource. Hinterlands were visited more often, and hunting of terrestrial mammals became more important as the economic focus shifted away from baysides to uphill settings. An increase in social complexity is evidenced by an increased number of non-utilitarian artifacts. All these changes are generally seen as indicative of the entrance of Coast Miwok groups into the area. The early part of this period is characterized by flat-based show mortars, shaped pestles, and small triangular-bodied, serrated obsidian projectile points. Bone artifacts include hairpins, awls, and needles, though fewer than in previous periods. Cremations are introduced, but primary inhumations are also still found; burials are often accompanied by "killed" mortars. The latter part of this period occurs just before European contact. Characteristic artifacts of the latter part of the period include flanged pestles, small

serrated and non-serrated obsidian arrow points, banjo and triangular-shaped shell pendants, and tubular bird bone artifacts including pyro-incised tubes, whistles, and beads. Cremations with grave-associated artifacts became the common burial form. Near the terminal portion of this period, historic-period artifacts include spikes, porcelain trade beads, and glass. Several sites with archaeological components dating to this period have been identified along San Antonio Creek, including CA-MRN-196, CA-MRN-371, and CA-MRN-374. In addition, six sites have been documented in the Gallinas Valley, and two sites near the city of Novato, CA-MRN-502 and CA-MRN-530.

Geoarchaeological Context

As a result of the dynamic nature of California's landscape, archaeological sites deposited over the last circa (ca.) 13,500 years (roughly the time that humans are known to have lived in California) have been subject to numerous geomorphic processes that have either buried, destroyed, or left these resources intact on the surface of the ground. These geomorphic processes can include alluvial fan deposition, fluctuating river courses, and related floodplain deposition. In general, most Pleistocene Age landforms have little potential for harboring buried archaeological resources as they developed prior to human migration into North America (ca. 13,000 years before the present [B.P.]). However, Late Pleistocene surfaces buried below younger Holocene deposits do have a potential for containing archaeological deposits. Holocene alluvial deposits may contain buried soils (paleosols) that represent periods of landform stability before renewed deposition. The identification of paleosols within Holocene Age landforms is of particular interest because they represent formerly stable surfaces that have a potential for preserving archaeological deposits.

Ethnographic Context

Information included in this Ethnographic Context is largely derived from Corte Madera Creek Flood Risk Management Project Draft EIS/EIR (USACE, 2018).

The project area lies within the traditional territory of the Coast Miwok people. Miwok is a Penutian language with three groups within California: the Lake Miwok, located to the south of Clear Lake; the Eastern Miwok, located in the Sierra Nevada foothills; and the Coast Miwok, located on the North Bay and adjacent to the coast. The Coast Miwok, in turn, have been divided into two major dialect groups: the western, or Bodega, and the southern, or Marin (Kelly, 1978, in USACE, 2010). The project area lies more specifically within the territory of the Habasto group, the nearest ethnographic village of which was named *Awani-wi*, which was located near Mission San Rafael (Milliken, 1995, in USACE, 2010).

The Coast Miwok lived in an area with diverse terrain and varied food resources. Some animal foods such as deer and crab were available year-round, but in general, subsistence practices followed an annual cycle. During the spring, food resources included small fish, greens, pinole seeds, blue dick bulbs, and other marsh and bay resources. The economic focus shifted to upland areas for hunting and gathering various vegetal resources, especially seeds and buckeye, during the summer. Acorns and hazelnuts were collected in the fall and stored for the

winter. Salmon and trout were gathered during the winter runs. Other winter resources included geese, mud hens, and stored foods.

Conical grass-covered dwellings with slightly excavated central hearths were the most common type of housing. Tule or sedge mats were used to cover the floor. Each dwelling accommodated from six to ten nuclear or extended family members. During most of the year, the Coast Miwok appear to have resided in small camps close to resource gathering sites. As winter approached, they would return inland to the winter village, which was commonly located next to a stream and acorn supply (Basgall, et al., 2006, in USACE, 2010). This village usually consisted of a maximum of ten houses and contained more substantial structures, such as a large earth oven, a dance house, and one or possibly two sweathouses. Both the sweathouse and the dance house were semi-subterranean pole-and-stick structures covered in brush, grass, and earth (Kelly, 1978, in USACE, 2010).

Coast Miwok groups lived in small autonomous political entities comprised of intermarried families of some two to four hundred people (Milliken, 1995, in USACE, 2010). These groups were often led by a male headman, called a *capitán* by the Spanish. This tribal leader's role was limited, and the office was not necessarily inherited; the tribal leader acted as more of an advisor and coordinator, settling internal disputes and organizing labor for communal ceremonies and hunts. Women also held important leadership roles, organizing and overseeing numerous activities, particularly ceremonial festivals such as the Acorn Dance, *sünwele* dance, and certain aspects of the Bird Cult (Kelly, 1978, in USACE, 2010). Local groups interacted with neighboring groups through trade, feasts, seasonal ceremonial dances, and marriage. Both sexes acted as doctors.

The material culture of the Coast Miwok reflects a balance between what was locally available and what could be obtained through trade. As common to most California groups, basketry was a well-developed art among the Coast Miwok, and baskets were used for multiple functions. Twined baskets were most often used for cooking, storage, and seed processing, as burden baskets, and for other utilitarian functions. Coiled baskets, produced with the aid of bone awls, were more often used for decorative and ceremonial functions, commonly being adorned with woodpecker and duck feathers, abalone, and clamshell pendants. Other textiles included nets for fishing and rabbit skin blankets or capes. Ground stone-milling equipment was essential for processing the multitude of plant and seed resources utilized by the Coast Miwok. Obsidian, obtained through trade, was a preferred source for arrow-sized projectile points and butchering knives, while green chalcedony was preferred for general utility knives (Basgall, et al., 2006, in USACE, 2010; Kelly, 1978, in USACE, 2010). Animal bone was used to make various implements from hide scrapers, fishhooks, and needles to labrets and bird bone whistles. Olivella and abalone shell was most often used to make beads and pendants, while clamshell was used to make disk-shaped beads to be used as currency throughout Central California in later times.

The Coast Miwok were visited by Sir Francis Drake in 1579 and by Sebastian Rodriquez Cermeno in 1595. Exploration of the Petaluma River again brought Europeans into Coast

Miwok territory in 1775; however, extended encounters with European settlers did not occur until the following year, with the establishment of the Presidio of San Francisco and Mission San Francisco de Asís (Hoover, et al., 2002, in USACE, 2010). In 1817, Mission San Raphael Arcángel was established within Marin County, and the local Native Americans began to be recruited there. By the 1820s, a large percentage of Coast Miwok were associated with the missions. European-carried diseases had taken their toll on Native American populations since contact, but an outbreak of smallpox in 1837 was particularly severe for the Native Americans in Marin, Sonoma, Napa, and Solano counties. This outbreak, originating from Fort Ross, caused the death of an estimated 60,000 to 70,000 Native Americans (Basgall, et al., 2006, in USACE, 2010).

Historic Background

Information included in this Historic Context is largely derived from Corte Madera Creek Flood Risk Management Project Draft EIS/EIR (USACE, 2018). The Town of Ross is in what was once the 8,877-acre Mexican land grant Rancho Punta de Quentin Canada de San Anselmo. This grant was given to Captain Juan B. R. Cooper in 1840 and later sold to James Ross in 1857 (Town of Ross, 2007). James Ross, for whom the Town of Ross is named, was a Scotsman from Australia who made his fortune in the wholesale liquor business (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). After purchasing the lands for \$50,000, he moved there with his wife, Annie Ross, and their three children. Their home was located at 111 Redwood Drive (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). Ross sold timber from his lands and established a trading post at the mouth of Corte Madera Creek named Ross Landing (now Kentfield Corners), which is located at the intersection of Sir Francis Drake Boulevard and College Avenue. From the trading post, packet schooners made runs to and from San Francisco three times a week. In 1862, James Ross died, and his wife was forced to sell a portion of the land holdings. The remaining 297 acres she retained are in the jurisdictional boundary of the Town of Ross today.

In 1863, Annie Ross, James Ross's eldest daughter named for her mother, married George Austin Worn. The following year, the couple created an estate they named Sunnyside. The first building constructed on the estate was the Octagon House, which is today home to the Jose Moya del Pino Library and the Ross Historical Society (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). The Worns were also interested in horticulture. Many of the plants they brought back from their travels around the world form the foundation of the gardens at the current Marin Art and Garden Center, which was established on the Sunnyside grounds in 1945. The magnolia tree that stands in the middle of the Center's lawn was also planted by the Worns in the 1860s.

In 1873, the North Pacific Railroad acquired a right-of-way to run a steam railroad through Ross Valley, and in 1882, Annie Ross, James Ross's widow, deeded 1.4 acres of land to the railroad with the stipulation that the station they built be named in the memory of her husband and son (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). Soon after, the first post office was opened in the area, in 1887. Now that the valley had an established route of transportation and communication, many prosperous families from San Francisco began to set up country estates

in the area. In 1908, the first Ross firehouse was erected, and the Town of Ross was incorporated.

One of the first actions of the new town was to improve transportation routes throughout the city by paving streets and erecting streetlights. One of the first ordinances passed was a provision that trees could not be cut down without prior town approval (Town of Ross, 2007). Other civic improvements included the construction of five reinforced concrete bridges. These bridges were built by John Buck Leonard, a civil engineer and pioneer of reinforced concrete bridge construction. Today, they are the only remaining cluster of Leonard's work in the State of California (Ross Property Owners' Association, 2008). The Lagunitas Road Bridge is probably the most famous example of these bridges. In 1986, all five bridges were found eligible for nomination to the National Register of Historic Places (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). Other Town of Ross landmarks from the early twentieth century include the Lagunitas Country Club, founded in 1903; the St. Anselmo Catholic Church, dedicated in 1908; St. John's Episcopal Church, constructed in 1911; Ross Grammar School, erected in 1911; and Ross Common, given to the Town of Ross in 1911 by Annie Ross Worn (Jose Moya de Pino Library, et al., 2009, in USACE, 2010). In the 1920s, the Town of Ross voted to spend \$100,000 to purchase the Shotwell estate. Upon this land the town built the present Ross Town Hall and Fire Station in 1927 (Town of Ross, 2007).

With the completion of the Golden Gate Bridge in 1937, Marin County became more accessible, and the population of the Town of Ross began to increase. However, low-density development, environmental, and historical ordinances allowed the town to preserve most of its historic, rural characteristic. Today, the Town of Ross is still primarily a residential center comprised of landscaped streets and gardens, resting under a leafy canopy, and would not have been possible without the foresight and an environmental proclivity of the Town's founding leaders (Town of Ross, 2007).

Project Setting

According to the U.S. Army Corps of Engineers (USACE) 2018 consultation letter to the State Historic Preservation Officer (SHPO), the USACE has been active along this stretch of Corte Madera Creek since the 1960s (Beech, 2018), likely since modern channelization was first implemented. The USACE conducted record searches in 1978, 1998, 2003, and 2010. A pedestrian archaeological survey of the current project area was first conducted in 1978, and a survey of the built environment resources was completed in 1979 (Beech, 2018). Because details of these earlier studies are not available, information provided herein is limited to the USACE's most recent involvement with the project, as reported in their 2018 Draft EIS/EIR and the 2018 SHPO consultation letter.

Record Search

Two record searches have recently been conducted for the project by the Northwest Information Center (NWIC) of the California Historical Resources Information System at Sonoma State University. The USACE conducted a record search in January 2017 (NWIC File No.: 16-0601), and a second record search was conducted during July 2020 (NWIC File No.: 19-2242) for the

current project. The second record search requested new information since 2017 to augment the USACE's search; it was not an entirely new search of the project area.

The USACE record search identified two previously recorded resources within the project area and eight within a 500-foot search buffer, as measured from the centerline of the creek channel. The two in the project area include a bridge and a prehistoric site that was determined to consist of redeposited material through site investigations. Four of the eight resources within the 500-foot search buffer were Native American sites, and four were built environment resources. The 2020 record search did not identify any additional previously recorded resources within the project footprint, but one built environment resource had been recorded within the 500-foot search buffer. Resources identified by the record searches are listed in Table 3.4-2.

Resource Primary Number/Trinomial	Resource Name or Description	In Project APE/Buffer
USACE January 2017 Record Search (NWIC File No.: 16-0601)		
P-21-0101/CA-MRN-71	Prehistoric midden site	Buffer
P-21-0102/CA-MRN-72	Prehistoric midden site	Buffer
P-21-0294/CA-MRN-311	Prehistoric midden site	Buffer
P-21-0544/CA-MRN-406	Prehistoric midden site	Buffer
P-21-1327	Lagunitas Road Bridge over San Anselmo Creek*	APE
P-21-1329	Shady Lane Bridge over Ross Creek	Buffer
P-21-1330Sir Francis Drake Boulevard Bridge over San Anselmo CreekP-21-1331Winship Bridge over Corte Madera Creek		Buffer
		Buffer
P-21-2635	Ross Town Hall, Ross Fire House, and Ross Public Works building	Buffer
P-21-2794 Redeposited prehistoric midden material		APE
Horizon July 2020 Record Search (NWIC File No.: 19-2242)		
P-21-2918 Kentfield Fire Protection District Station No. 17 Buffer		Buffer

Table 3.4-2 NWIC Records Search Results – Resources

^a Although the record for the bridge identifies the creek crossing as San Anselmo Creek, the NWIC map clearly shows it as crossing Corte Madera Creek.

Sources: (NWIC, 2017; NWIC, 2020)

The USACE record search identified nine cultural resources studies within the USACE project area of potential effects, which aligned closely with the current project area. These included archaeological and architectural reports on earlier studies by the USACE of their Unit 4 project and other archaeological studies clustered around the College of Marin. Another 15 studies had

been conducted within the 500-foot record-search buffer. By July 2020, one additional archaeological study had been conducted within the project footprint. The search also identified four additional studies in the 500-foot search buffer and three regional overviews that include the project area. Studies conducted within the project area are listed in Table 3.4-3.

Report Number	Author (Date)	Report Title	
USACE January 2017 Record Search (NWIC File No.: 16-0601)			
S-001025	T. L. Jackson (1976)	Archaeological Testing Program at the site of the proposed planetarium on the College of Marin Campus (letter report)	
S-001184	E. Kandler (1978)	Cultural Resource Reconnaissance of the Corte Madera Creek Unit 4 Flood Control Project, Township of Ross, Marin County, California	
S-006424	C. Desgrandchamp and D. Chavez (1984)	Archaeological Resources Evaluation for the Central Marin Sanitation Wastewater Transportation Facilities Improvement Project – Phase II, Marin County, California (EPA Project No. C- 06-2467-21)	
S-012944	R. Cartier, B. Bocek, and J. Whitlow (1979)	Archeological Testing Program of Corte Madera Creek Flood Control Project – Unit 4	
S-015982	B. Goerke, et al. (1994)	Uncovering the Past at College of Marin	
S-016949	W. Roop (1991)	A Cultural Resources Evaluation of a Proposed Reclaimed Water Pipeline in the San Quentin Point, Corte Madera, Larkspur, Kentfield and San Rafael Areas	
S-036271	URS (2008)	Historic Property Survey Report, Lagunitas Road Bridge (27C- 71) at Corte Madera Creek Replacement Project, BRLS 5176(003), Town of Ross, California	
S-036937	B. Brewster (2010)	Archival Documentation Report, Dickson Hall – College of Marin	
S-047475	L. D. Stables, III (1979)	Historical/Architectural Assessment of Buildings and Grounds Along Corte Madera Creek in Ross, California	
Horizon July 2020 Record Search (NWIC File No.: 19-2242)		ecord Search (NWIC File No.: 19-2242)	
S-050061	Archeo-Tec, Inc. (2017)	Phase I Cultural Resources Evaluation for the Ross Valley Sanitary District Large Diameter Gravity Sewer Rehabilitation Project II-3, Marin County, California	

Table 3.4-3	NWIC Records Search Results – Studies in the APE
-------------	---

Sources: (NWIC, 2017; NWIC, 2020)

Archaeological Survey

According to the USACE 2018 Draft EIS/EIR (USACE 2018:4.7-9):

A pedestrian survey was conducted of the study area on 5 and 6 April 2010¹ along both the east and west banks of Corte Madera Creek. For areas of possible ground disturbance, the inspection generally extended from either creek bank for 30 meters; however, heavy residential development, in some areas of the study area required a decreased inspection area. Vegetation cover was dense in most areas, with vines and grasses severely limiting ground visibility; in other areas, imported gravels on a bike path also limited ground visibility. Prehistoric artifacts, features, or middens were not observed during the pedestrian survey. Shell fragments were observed near the fence line adjacent to the College of Marin near site CA-MRN-406...

Horizon confirmed the area of survey coverage in a conversation on August 21, 2020, with Kathleen Ungvarsky, the USACE archaeologist who conducted the survey (Ungvarsky, 2020). Ms. Ungvarsky noted that the only areas that were inaccessible within the project footprint were two private properties just downstream of the Lagunitas RoadBridge, on the left side of Corte Madera Creek.

An archaeological survey was conducted of the current project area on July 28, 2020, by a qualified Horizon archaeologist who meets the U.S. Secretary of Interior's professional standards (Horizon Water and Environment, 2020). Because the entirety of the project area had previously been surveyed by the USACE (Beech, 2018; USACE, 2018) for the previous project, the present survey focused on the proposed locations of staging areas and the creekbanks in the backyards of 21, 23, 25, 27, and 29 Sir Francis Drake Boulevard, where widening of the channel and/or channel bank stabilization activities are proposed. The proposed location of the stormwater pump station and channel access ramp, as well as portions of the project near previously recorded archaeological sites, were also inspected. Most of the surveyed areas were limited in size, and informal transects were spaced between 10 and 30 feet apart. Ground-surface visibility was partially restricted in many places due to vegetation, and most of the staging areas were in paved parking lots. Representative photographs were taken of the project area as well as the houses at 21, 23, 25, 27, and 29 Sir Francis Drake Boulevard. No archaeological resources were identified by the field survey.

Geoarchaeology

No intact archaeological sites were identified in the archaeological inventory of the project area during earlier studies by the USACE (USACE, 2018) or more recently for the present project (Horizon Water and Environment, 2020); however, archaeological sites may be buried, with no

¹ A letter to the SHPO from K. Ungvarsky (2018) says that a survey was conducted in March 2015. Efforts to clarify this discrepancy with the USACE were unsuccessful.

surface manifestation. A review of geologic reconstructions of the subsurface geologic layers underlying the project area indicates that most of the area is underlain by Holocene Age soils that have the potential to contain buried archaeological remains (Witter, et al., 2006; Meyer & Rosenthal, 2007). However, sea levels rose dramatically during the Middle Holocene (ca. 7,000 to 4,000 B.P.), deeply burying any existing archaeological deposits from that time along the margins of the San Francisco Bay and upstream channels that flowed into the bay. This activity is applicable to the southwest extent of the APE, which was historically under bay waters (pre--1800s). However, more recently, landscape changes brought about by early Spanish settlement, as well as changes in upstream channel vegetation brought about by cattle raising and other activities, made many of these channels, such as Corte Madera Creek, much more susceptible to erosion. As a result, many of the lower terraces along the margins of the bay tend to contain historic-period sediments (Meyer & Rosenthal, 2007) that could have eroded and/or covered archaeological deposits. Moreover, rapid urban development along stream channels and areas along the bay margins have had further deleterious effects on buried deposits with the introduction of artificial fill and concrete channelization. These factors suggest that areas of the project area that fall within the former limits of the bay are not considered sensitive for buried archaeological deposits.

In addition, despite the higher potential to encounter Holocene Age deposits in the areas of the project area east of the former limits of the bay, the considerable channelization and alteration of the existing stream channel over the last 50 years—which includes massive concrete channels and stabilizing infrastructure along the banks of the creek—would indicate that any buried deposits within this corridor would likely have been destroyed. Further, the high-energy flood events along this corridor would also diminish the probability of intact deposits, particularly along the narrow band of the channel itself, which, in turn, would not have been a location favorable for long-term prehistoric settlement. Because the proposed actions are taking place within the footprint of the existing infrastructure or previously disturbed areas, the probability of encountering buried deposits in these areas is considered low.

Native American Consultation

An email request was made to the Native American Heritage Commission (NAHC) on June 15, 2020, to review its files for the presence of recorded sacred sites on the project area. The NAHC responded on June 16, 2020, stating that the records search did not identify significant resources in the project vicinity.

Marin County Department of Public Works sent project notification letters to the Federated Indians of Graton Rancheria (FIGR) and the Ione Band of Miwok Indians for the purpose of consultation as required by PRC Section 21080.3.1 (also known as Assembly Bill 52). The letters were sent via U.S. Certified Mail, with a return receipt sent on June 23, 2020. Follow-up emails were sent on August 5, 2020. FIGR requested formal consultation on the project in an emailed letter dated August 6, 2020. Requested record search information was provided to the tribe on August 21, 2020. Tribal consultation is discussed in Section 3.14 Tribal Cultural Resources.

Architectural Survey and Evaluation

The USACE Draft EIS/EIR identified five built environment resources adjacent to the project APE, as listed in Table 3.4-4, and described below. All the resource descriptions are taken directly from the USACE 2018 EIS/EIR.

Resource Primary Number	Resource Name or Description	Date of Construction	NRHP/CRHR Eligibility
P-21-1327	Lagunitas Road Bridge over San Anselmo Creek ª	1909; reconstructed 2010	Eligible by consensus
P-21-1329	Shady Lane Bridge over Ross Creek	1909	Eligible by consensus
P-21-1330	Sir Francis Drake Boulevard Bridge over San Anselmo Creek	1909	Eligible by consensus
P-21-1331	Winship Bridge over Corte Madera Creek	1912	Not evaluated
P-21-2635	Ross Town Hall, Ross Fire House, and Ross Public Works building	1927	Eligible

Notes:

^a Although the record for the bridge identifies the creek crossing as San Anselmo Creek, the NWIC map clearly shows it as crossing Corte Madera Creek.

- ^b CRHR = California Register of Historical Resources
- ^c NRHP = National Register of Historic Places.

Source: (USACE, 2018)

P-21-1327 is the Lagunitas Road Bridge, one of the first concrete bridges designed strictly on the cantilever principal, making possible a shallow depth in the carry girders. The bridge is carried by five haunched, continuous reinforced concrete T-beams on solid wall piers and end-diaphragm abutments. It has three spans, with a total length of 77.5 feet and width of 27.8 feet. It was one of five bridges built by the Town of Ross in 1909 and designed by John B. Leonard and is within the project area. The Lagunitas Road Bridge was reconstructed in 2010 and would not be altered by the project.

P-21-1329 is the Shady Lane Bridge over Ross Creek. It has a deck arch construction with a timber sidewalk added to the left side of the deck. The three spans create a 42.8-foot-long by 20-foot-wide roadway. This was the third of the five bridges built by the Town of Ross in 1909 and designed by John B. Leonard; this bridge is outside, but adjacent to, the project area.

P-21-1330 is the Sir Francis Drake Boulevard Bridge over San Anselmo Creek. It is a reinforced concrete deck arch span with a total length of 63 feet, with Toddlike rails of concrete. This was the second of the five bridges built by the Town of Ross in 1909 and designed by John B. Leonard. The site crosses Corte Madera Creek approximately 700 feet northwest of the project improvements, outside of the project area.

P-21-1331 is the Winship Bridge and carries Winship Road over Corte Madera Creek. It is an earth-filled, reinforced concrete bridge, 91 feet long, composed of two arches with spans of 40 feet and 28 feet. Rails are reinforced concrete planters. Four metal light standards at the corners are embossed with the Westinghouse logo. This was built after the five Leonard bridges in Ross. The Winship tract was a development being represented, in 1912, by Chadwick & Sykes, Contracting Engineers. At that time, they were trying to get the Town of Ross to accept their roadways as "public highways." The Winship Bridge no doubt dates from this general period. The site crosses Corte Madera Creek more than 1,000 feet north of proposed project improvements, outside of the project area.

P-21-2635 is the site of the Ross Town Hall, Ross Fire House, and Ross Public Works building. The Town Hall and Fire House were built in 1927 and designed by John White, one of the Bay Area's preeminent architects, after the city appropriated funds for the land. The Town Hall and Fire House were designed in the Spanish/Mission Revival style, with smooth stucco-faced exterior walls and appropriate design elements. The Town Hall and Fire House appear eligible for listing on the National Register of Historic Places (NRHP) under Criteria A and C for their association with city planning and municipal government and for their architecture. The Ross Town Hall and Firehouse are located near the northern end of the project area but are situated just outside of it, to the west.

In addition to the buildings evaluated by the USACE, five houses at 21, 23, 25, 27, and 29 Sir Francis Drake Boulevard were evaluated for NRHP/CRHR eligibility by a qualified architectural historian/historian (Horizon Water and Environment, 2020) The lots containing the homes are directly adjacent the transition element in Unit 4 of the project. As a result, the properties could be impacted by widening of the channel and/or channel bank stabilization actions. The five properties are listed in Table 3.4-5. None of these built environment resources appear to be eligible for listing in the NRHP/CRHR.

Building Address	Date of Construction	NRHP/CRHR Eligibility
21 Sir Francis Drake Boulevard	c1951	Not eligible
23 Sir Francis Drake Boulevard	c1948	Not eligible
25 Sir Francis Drake Boulevard	c1951	Not eligible
27 Sir Francis Drake Boulevard	c1948	Not eligible
29 Sir Francis Drake Boulevard	c1948	Not eligible
Notes: CRHR = California Register of Historical Resources; NRHP = National Register of Historic Places		

Table 3.4-5 Built Environment Resources Evaluated for the Current Project

Source: (Horizon Water and Environment, 2020)

3.4.4 Regulatory Setting

The following laws, statutes, regulations, codes, and policies would apply to the project and are defined as standard conditions for the project.

Federal Regulations

National Historic Preservation Act of 1966 (as amended)

Effects of federal undertakings on historical and archaeological resources are considered through the National Historic Preservation Act (NHPA) of 1966, as amended (54 United States Code 306108), and its implementing regulations. Before an undertaking (e.g., federal funding or issuance of a federal permit) is implemented, Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. Under the NHPA, a property is considered significant if it meets the National Register listing criteria A through D, at 36 Code of Federal Regulations 60.4, as follows:

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

- a. Are associated with events that have made a significant contribution to the broad patterns of our history, or
- b. Are associated with the lives of persons significant in our past, or
- c. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
- d. Have yielded, or may be likely to yield, information important in prehistory or history.

For a resource to be eligible for the National Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. Resources that are less than 50 years old are generally not considered eligible for the National Register.

Federal review of the effects of undertakings on significant cultural resources is carried out under Section 106 of the NHPA and is often referred to as the Section 106 review. This process is the responsibility of the federal lead agency. The Section 106 review typically involves a four-step procedure, which is described in detail in the implementing regulations of the NHPA:

- 1. Define the Area of Potential Effects in which an undertaking could directly or indirectly affect historic properties.
- 2. Identify historic properties in consultation with the State Historic Preservation Officer (SHPO) and interested parties.

- 3. Assess the significance of effects of the undertaking on historic properties.
- 4. Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation and proceed with the project according to the conditions of the agreement.

State Regulations

The State of California consults on implementation of the NHPA of 1966, as amended, and also oversees statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation, as an office of the California Department of Parks and Recreation, implements the policies of the NHPA statewide. The Office of Historic Preservation also maintains the California Historical Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the state's jurisdictions.

California Environmental Quality Act

The California Environmental Quality Act, as codified in PRC Section 21000 *et seq.*, is the principal statute governing the environmental review of projects in the state. CEQA requires lead agencies to determine if a project would have a significant effect on historical resources, including archaeological resources. The State CEQA Guidelines define a historical resource as: (1) a resource in the California Register; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to determine if a project would have a significant effect on important archaeological resources, either historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Section 21084.1 would apply, and State CEQA Guidelines Sections 15064.5(c) and 15126.4 and the limits in PRC Section 21083.2 would not apply. If a lead agency determines that an archaeological site is an historical resource, the provisions of PRC Section 15064.5 would apply. If an archaeological site does not meet the State CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. A unique archaeological resource is:

an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person" (PRC Section 21083.2 [g]).

The State CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5[c][4]).

Assembly Bill 52

In September 2014, the California Legislature passed AB 52, which added provisions to the PRC regarding the evaluation of impacts on tribal cultural resources under CEQA and consultation requirements with California Native American tribes. In particular, AB 52 now requires lead agencies to analyze project impacts on tribal cultural resources separately from archaeological resources (PRC Sections 21074, 21083.09). The Bill defines tribal cultural resources in a new section of the PRC (Section 21074). AB 52 also requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Section 21080.3.1, 21080.3.2, 21082.3).

Specially, PRC Section 21084.3 states:

a) Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.

b) If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:

1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

2) Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

A. Protecting the cultural character and integrity of the resource.

- B. Protecting the traditional use of the resource.
- C. Protecting the confidentiality of the resource.

3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

4) Protecting the resource.

In addition, the Office of Planning and Research updated Appendix G of the State CEQA Guidelines to provide sample questions regarding impacts on tribal cultural resources (PRC Section 21083.09).

California Register of Historical Resources

The California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The criteria for eligibility are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register, an historical resource must be significant at the local, state, and/or federal level under one or more of the following criteria:

- 1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- 2. Is associated with the lives of persons important in our past.
- 3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

California Public Resources Code and Health Safety Code

Several sections of the PRC protect cultural resources. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor. Section 5097.98 states that if Native American remains are identified within a project area, the lead agency must work with the appropriate Native Americans as identified by

the NAHC and develop a plan for the treatment or disposition of, with appropriate dignity, the human remains, and any items associated with Native American burials. These procedures are also addressed in Section 15064.5 of the State CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

Title 14, Sections 4307 and 4308, of the California Code of Regulations also prohibit any person from removing, inuring, defacing, or destroying any object of paleontological, archaeological, or historical interest or value.

Regional and Local Regulations

Marin Countywide Plan

The following goals and policies in the Marin Countywide Plan (Marin County, 2007, as amended) are relevant to the project (Marin County , 2007).

HAR-1.1: Preserve Historical and Archaeological Resources. Identify archaeological and historical resource sites.

HAR-1.2: Document Historical Information. Provide documents, photographs, and other historical information whenever possible to be catalogued in the Anne T. Kent California Room in the Marin County Free Library.

HAR-1.3: Avoid Impacts to Historical and Archaeological Resources. Ensure that human activity avoids damaging cultural resources, where feasible.

Implementing programs associated with these policies ensures that significant cultural resources will be identified and protected, when feasible, and that Native American tribes will be consulted, when applicable.

Marin County Development Code

Marin County has the following code to ensure that the construction of new development and the establishment of new and modified uses contribute to the maintenance of a stable and healthy environment, that new development is harmonious in character with existing and future development, and that the use and enjoyment of neighboring properties are protected, as established in the Countywide Plan.

22.20.040: *Archaeological and Historic Resources*. In the event that archaeological or historic resources are discovered during any construction, construction activities shall cease, and the Agency shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may occur in compliance with State and Federal law. The disturbance of an Indian midden may require the issuance of an Excavation Permit by the Department of Public Works, in compliance with Chapter 5.32 (Excavating Indian Middens) of the County Code.

Town of Ross General Plan

The following policies of the Ross General Plan related to cultural resources are applicable to the project (Town of Ross, 2007).

Goal 1. An Abundance of Green and Healthy Natural Systems

1.1 Protection of Environmental Resources. Protect environmental resources, such as hillsides, ridgelines, creeks, drainage ways, trees and tree groves, threatened and endangered species habitat, riparian vegetation, cultural places, and other resources. These resources are unique in the planning area because of their scarcity, scientific value, aesthetic quality and cultural significance.

Goal 4. Protecting Historic Places and Resources

4.1 Historic Heritage. Maintain the historic feel of Ross by preserving and maintaining historic buildings, resources and areas with recognized historic or aesthetic value that serve as significant reminders of the past.

4.5 Archaeological Resources. Implement measures to preserve and protect archaeological resources. Whenever possible, identify archaeological resources and potential impacts on such resources. Provide information and direction to property owners in order to make them aware of these resources. Require archaeological surveys, conducted by an archaeologist who appears on the Northwest Information Center's list of archaeologists qualified to do historic preservation fieldwork in Marin County, in areas of documented archaeological sensitivity. Develop design review standards for projects that may potentially impact cultural resources.

3.4.5 Impact Assessment Methodology

Significance Criteria

Consistent with State CEQA Guidelines Appendix G (Environmental Checklist) and Marin County Environmental Review Guidelines, the project would have a significant impact if it would:

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;
- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; and
- c. Disturb any human remains, including those interred outside of formal cemeteries.

Approach to Impact Analysis

The following analysis discusses the potential significant impacts of the project related to changes in cultural resources or other cultural resource impacts in the project area. This section includes an analysis of potential short-term (construction) impacts of the project and permanent long-term (operation and maintenance impacts). Impact evaluations are assessed based on the

existing conditions described earlier in this section. Mitigation measures are identified, as necessary, to reduce significant impacts.

3.4.6 Impact Discussion

Impacts Analyzed		
	Significance Determination	
Impact 3.4-1: The project would not cause a substantial adverse change in the significance of a historical resource pursuant to	Construction: No Impact	
Section 15064.5.	Operation and Maintenance: No Impact	

Construction

Background research has identified five built environment resources close to the project area as historical resources pursuant to PRC Section 15064.5; that is, they are eligible for listing in the CRHR. Background research and field studies identified four additional buildings within the project area, which were evaluated but do not appear to qualify as historical resources pursuant to PRC Section 15064.5. Because the known historical resources are outside of the project area, they would not be affected by the project. No archaeological resources that are historical resources are known to exist within the APE. The project would have no impact on any known historical resources pursuant to Section 15064.5.

Operation and Maintenance

Operations and maintenance of the proposed project would be similar to operation and maintenance of the existing flood control channel. No ground disturbance would be required in operation and maintenance other than sediment removal from the fish pools and erosion control. Operation and maintenance of the project would have no impact on historical resources because no historic resources pursuant to Section 15064.5 are located in proximity to the project and operation and maintenance project will not involve any ground disturbance.

Mitigation: None required.

	Significance Determination	
Impact 3.4-2: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section	Construction: Less than Significant with Mitigation	
15064.5.	Operation and Maintenance: No Impact	

Construction

Based on the results of the background research and pedestrian survey, there are no intact archaeological resources in the project area. Despite the effort to identify archaeological resources, the inadvertent discovery of unknown archaeological resources during construction from ground-disturbing activities including excavation is possible. in the event that archaeological resources are uncovered during project-related ground disturbing activities within the unincorporated County area of the project, compliance with Marin Development Code Section 22.20.040 (D) (outlined above in Section 4.6.2.3 Local Regulations) is required.

Under Marin Development Code Section 22.20.040 (D), if archaeological materials are discovered during construction, construction activities shall cease, and the remains shall be recorded by a qualified archaeologist and treated according to state law. While the Marin Development Code provides some protection for archaeological resources within the unincorporated County area of the project, the code does not specify the distance at which work shall halt, and without proper investigation of the resource by an archaeologist and/or appropriate Native Americans, if appropriate, the resource could be damaged due to work in the vicinity of the find. The damage to a resource prior to proper investigation or improper handling of the resource would be a significant impact. In addition, portions of the project area below Stadium Way, where the project proposes floodplain expansion and partial concrete channel wall removal, are under the jurisdiction of the California State Lands Commission. As a result, treatment of discovered archaeological sites during construction would not be covered by Marin Development Code Section 22.20.040 (D), and impacts to archaeological resources within this portion of the project area would be significant.

The Town of Ross municipal code does not address the inadvertent discovery of archaeological resources during construction. Therefore, impacts to archaeological resources that are historical resources within portions of the project area under the Town's jurisdiction would be significant.

The District would implement **Mitigation Measure 3.4-2: Inadvertent Discoveries of Archaeological Resources** to avoid significant impacts on archaeological resources encountered during construction activities. Mitigation Measure 3.4-2 requires that work is halted within 50 feet of a find and that finds are protected until examined by a qualified archaeologist. The measure also defines requirements for contacting a Native American representative, and specific requirements for any discoveries of archaeological resources within the California State Lands Commission jurisdiction. By following the procedures in Mitigation Measure 3.4-2, the District would avoid substantial adverse changes in the significance of an archaeological resource and the impact on archaeological resources would be less than significant with mitigation.

Operation and Maintenance

Operations and maintenance of the proposed project would be similar to operation and maintenance of the existing flood control channel. Operation and maintenance does not involve excavation or ground disturbing activities that could encounter significant archaeological resources; therefore, operation and maintenance of the project would not have impacts to archaeological resources.

Mitigation: Implement Mitigation Measure 3.4-2.

Mitigation Measure 3.4-2: Inadvertent Discoveries of Archaeological Resources.

If evidence of any subsurface archaeological features or deposits are discovered during construction-related earth-moving activities, all ground-disturbing activity in the area of the discovery shall be halted within 50 feet of the find, and the finds shall be protected until they are examined by a qualified archaeologist. Prehistoric archaeological materials

might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heataffected rocks, artifacts, or shellfish remains; stone-milling equipment (e.g., mortars, pestles, handstones, milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls and deposits of metal, glass, and/or ceramic refuse. The District shall retain a qualified archaeologist who meets the U.S. Secretary of the Interiors professional qualifications in archaeology to assess the significance of the find and make recommendations for further evaluation and treatment as necessary. A Native American representative from a traditionally and culturally affiliated tribe will be notified and invited to assess the find if the artifacts are of Native American ancestry and determined to be more than an isolated find. If the discovery is in an area below Stadium Way and on lands under the jurisdiction of California State Lands Commission, that agency shall be notified. Any treatments and disposition of any artifacts uncovered under the jurisdiction of the California State Lands Commission must be approved by the California State Lands Commission before the treatment is implemented. If, after evaluation, a resource is considered a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5), or a tribal cultural resource (as defined in PRC Section 21074), all preservation options shall be considered as required by CEQA (see CEQA Guidelines Section 15126.4 and PRC 21084.3), including possible capping, data recovery, mapping, or avoidance of the resource. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil. Work in the area may resume, at the direction of the District, upon completion of treatment. An Unanticipated Discoveries Evaluation and Treatment Plan shall be prepared before construction that details the procedures for dealing with unanticipated discoveries, including procedures that would be implemented for such discoveries that cannot be protected in place. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.

Significance after Mitigation: Mitigation Measure 3.4-2 specifies procedures to avoid adverse effects to archaeological resources by stopping work when archaeological materials are discovered, evaluating the significance of the find, and developing appropriate treatment to protect the site or mitigate impacts. By applying Section 15126.4 of the CEQA Guidelines and/or PRC 21084.3, avoidance and preservation in place would be the preferred option, followed by other measures such as capping and, lastly, data recovery, thus assuring that all options for minimizing impacts to the archaeological resource are considered and carried out. As a result, the impact on archaeological resources would be less than significant with mitigation.

		Significance Determination	
	Impact 3 4-3 [.] The project could disturb any human remains, including	Construction: Less than Significant	
those interred outside of formal cemeteries.		Operation and Maintenance: No Impact	

Construction

Both prehistoric and historic archaeological resources may contain human burials. Based on the background research, surface survey, and subsurface survey conducted during earlier studies by the USACE, there is no indication that the project area has been used for human burial purposes. The project includes excavation into undisturbed soils and could encounter human remains, including those interred outside of formal cemeteries. Compliance with Marin Development Code Section 22.20.040 (D), PRC Section 5097.98, and Health and Safety Code Section 7050.5 (outlined above in Section 4.6.2.3 Local Regulations) would require that work be stopped in the vicinity of any discovered human remains and that the County coroner be notified of the finds. The coroner would determine the nature of the remains and contact the NAHC if the remains are of Native American ancestry. In turn, the NAHC would contact the most likely descendent of remains, who would assess the finds and work with the County to determine final treatment and disposition of the remains. PRC Section 5097.98 and Health and Safety Code Section 7050.5 are also applicable to any discovery of human remains on property under the jurisdiction of the Town of Ross or the California State Lands Commission; therefore, the same protocols would be followed. Compliance with State and County requirements to address any discovery of human burials during construction would avoid disturbance of any human remains. The impact on human remains would be less than significant.

Operation and Maintenance

Operations and maintenance of the project would not require excavation into any undisturbed soils that could expose human remains. No impact would occur.

Mitigation: None required.

3.4.7 References

Basgall, et al., 2006. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report.

Beech, T. E. (2018, September 24). Letter to Ms. Julianne Polanco, State Historic Preservation Officer, regarding continued consultation pursuant to Section 106of the National Historic Preservation Act for the 2018 Carte Madera Creek Flood Risk Management Environmental Impact Statement.

Fredrickson, 1984. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report.

Hoover, et al., 2002. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report .

- Horizon Water and Environment. (2020). Cultural Resources Assessment for the Corte Madera Creek Flood Risk Management Project, Phase 1.
- Hylkema, 2002. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report .
- Jose Moya de Pino Library, et al., 2009. (in USACE, 2010). Corte Madera Creek Flood Control Study .
- Kelly, 1978. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report.
- Marin County . (2007, November 6). Marin Countywide Plan.
- Marin County. (1994). Environmental Impact Review Guidelines.
- Marin County. (1994, May 17). Environmental Impact Review Guidelines (EIR Guidelines). Policy and Procedures for Implementation of the California Environmental Quality Act (CEQA).
- Meyer, J., & Rosenthal, a. J. (2007). Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4. Far Western Anthropological Research Group Prepared for the California Department of Transportation, District 4, Oakland, CA.
- Milliken, 1995. (in USACE, 2010). Corte Madera Creek Flood Control Study Baseline Report.
- NWIC. (2017). Record search results (NWIC File No.:16-0601) for the Corte Madera Flood Control and Environmental Restoration Project.
- NWIC. (2020). Record search results (NWIC File No.:19-2242) for the Corte Madera Flood Risk Management Project.
- Ross Property Owners' Association. (2008, Early Fall). Ross Property Owners' Association Newsletter.
- Town of Ross. (2007, June). Town of Ross General Plan.
- Ungvarsky, K. (2020, August 19). Janis Offermann, Horizon Water and Environment, telephone communication with Kathleen Ungvarsky, U.S. Army Corps of Engineers, about previous USACE cultural resources studies within the Corte Madera Flood Risk Management Project footprint. . (J. Offermann, Interviewer)
- USACE. (2018, October). Corte Madera Creek Flood Risk Management Project Environmental Impact Statement/Environmental Impact Report.
- Witter, R., Knudsen, K., Sowers, J., Wentworth, C., Koehler, R., Randolph, C. E., . . . and, G. K. (2006). Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region, California. USGS.