

3.4 CULTURAL RESOURCES

This section describes the historical setting and existing physical and regulatory setting related to archaeological and historic resources and addresses the potential effects of the EA Alternatives on such resources.

3.4.1 Regulatory Framework

Section 106 of the National Historic Preservation Act of 1966

Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (Title 36 of the Code of Federal Regulations [CFR], Part 800 [36 CFR 800]) require that Federal agencies take into account the effects of their actions (referred to as “undertakings” under Section 106) on properties that may be eligible for or listed in the National Register of Historic Places (NRHP), and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment. To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (i.e., archaeological, historical, and architectural properties) that could be affected by the undertaking must be inventoried and evaluated for inclusion in the NRHP.

Consistent with 36 CFR 800.3(a)(1), VA and the Navy have determined that the proposed Fed-to-Fed transfer of property from Navy to VA—as a transfer of property from one Federal agency to another, with the property remaining in Federal ownership—is not an undertaking that has the potential to affect historic properties. Therefore, the following analysis focuses on the potential impacts of VA’s project: the construction and operation of the VHA OPC, VBA Outreach Office, Conservation and Management Office, NCA Cemetery, off-site utility/road corridor, and associated infrastructure.

The regulations implementing Section 106 require consultation with the State Historic Preservation Officer (SHPO), tribal governments, and interested members of the public throughout the process. The four principal steps are:

1. Initiate the Section 106 process, including a plan for public involvement (36 CFR 800.3);
2. Identify historic properties, consisting of those resources within an Area of Potential Effect (APE) that are eligible for inclusion in the NRHP (36 CFR 800.4);
3. Assess the effects of the undertaking on historic properties in the APE (36 CFR 800.5); and
4. Resolve adverse effects (36 CFR Part 800.6).

Adverse effects on historic properties may be resolved through preparation of a memorandum of agreement or a programmatic agreement developed in consultation between the lead Federal agency, the SHPO, tribal governments, and interested members of the public. The ACHP is also invited to participate.

National Register of Historic Places Evaluation Criteria

The NRHP is a register of districts, sites, buildings, structures, and objects of significance in American history, architecture, archaeology, engineering, and culture. The NRHP is maintained by the Secretary of the Interior. A property may be listed in the NRHP if it meets criteria for evaluation defined in 36 CFR 60.4:

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 are associated with events that have made a significant contribution to the broad patterns of our history; or
- That are associated with the lives of persons significant in our past; or
- 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
- That have yielded, or may be likely to yield, information important in prehistory or history.

Under Section 106 of the NHPA, only cultural resources that have been determined to be eligible for listing in the NRHP or that are listed in the NRHP need to be considered when evaluating an action's effects on cultural resources.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 U.S. Code 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or tribal lands. The purpose of ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and tribal lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

3.4.2 Affected Environment

Background Research Efforts

Existing conditions were identified through pre-field research at and a review of existing information for the former NAS Alameda. Research efforts included a request to the Northwest Information Center (NWIC) of the California Historical Resources Information System to conduct a records and literature search of the VA Transfer Parcel and a surrounding one-quarter-mile area. The NWIC responded with comments on March 26, 2012 (NWIC File No. 11-1036). The search identified no known historic properties within the VA Transfer Parcel or within the surrounding one-quarter-mile area. The records search report compiled by the NWIC included several historic-era maps: the maps of the 1871 San Antonio Ranch Plat, the 1895 San Francisco 15-minute Quadrangle, the 1899 San Francisco 15-minute Quadrangle, the 1915 San Francisco Quadrangle, and the 1942 San Francisco 15-minute

Quadrangle. The maps indicate that no portion of the land later occupied by former NAS Alameda existed before 1871. By 1895 the Southern Pacific Railroad (narrow gauge), consisting of a narrow finger of filled land, had been constructed north of the present-day VA Transfer Parcel. The 1915 San Francisco 15-minute Quadrangle map indicates that additional landfill work had been done north and east of the VA Transfer Parcel, and that a deep-water channel leading to Oakland's inner harbor had been constructed. Other sources reviewed (cited as appropriate in the text below) include previous studies conducted by the Navy for NAS Alameda, documentation of prior Section 106 consultations conducted by the Navy, and overviews of previous archaeological research in the region. The results of the investigation are summarized later in this section.

Previous Studies and Documentation

Two previous Navy studies have analyzed the low potential of encountering archaeological resources at the former NAS Alameda. In 1996, an archaeological evaluation of the former Fleet Industrial Supply Center – Alameda Annex and Family Housing Areas was prepared for the Navy (PAR, 1996). Evaluation of that project area, located to the east of the present project area and Main Street, included a pedestrian survey and analysis of historic maps. The report concluded that the project area had been an undeveloped natural marshland before 1918, when it was filled. The map analysis also demonstrates that the majority of the former NAS Alameda (and all of the VA Transfer Parcel) was built on artificial fill, filled in multiple phases between 1892 and 1960 (PAR, 1996).

In 1999, the Navy prepared an Environmental Impact Statement (EIS) concerning the disposal and reuse of the former NAS Alameda, which also analyzed the potential for archaeological resources at the former NAS Alameda (Navy *et al.*, 2009). Based upon the fill history of the former NAS Alameda and the manner in which the fill was placed during construction of the installation, the EIS concluded that the potential for buried cultural resources, either prehistoric or historic, is considered to be extremely low. The EIS examined the possibility of historic-period archaeological resources beneath the Navy's fill. These potential resources included remnants of historic land uses of portions of the property that would become the NAS Alameda, such as the former South Pacific Coast Railroad Terminal, Alameda Municipal Airport, Pan Am airline facilities, Alameda Yacht Basin, ship hulls used in land creation, and the Army's Benton Field (see the Historic Context section below). However, the EIS concluded that the potential to encounter these remnants or historic period archaeological resources is considered low due to the manner in which the Navy's artificial fill was placed. The EIS states that the Twelfth Naval District was reportedly responsible for the acquisition, dredging, filling, and construction of NAS Alameda. Prior to infilling, construction debris (e.g., concrete, asphalt, and building rubble) was removed, and scarification of the area occurred. By removing all pilings and submerged objects from the water before fill was introduced, the fill material was allowed to settle more evenly and to prevent potential future construction obstructions (Navy, 1999; PAR 1996).

Additional studies and Section 106 consultation address the known historic properties identified at the former NAS Alameda. The NAS Alameda Historic District is located immediately adjacent and to the east of the VA Transfer Parcel Area. Based on the study *Historic Architectural Resources Inventory for Naval Air Station, Alameda* (Woodbridge, 1992), the Navy determined in 1992 that the historic district was eligible for listing in the NRHP. That same year, the SHPO concurred with the Navy's conclusion. The NAS Alameda Historic District was determined eligible for the NRHP under Criterion A for its significance as a World War II-era naval air station (1938 to 1945) under the contextual theme of the development of Navy bases in the San Francisco Bay Area in World War II; and under Criterion C because of its master planning and architecture in the Moderne style.

The NAS Alameda Historic District initially included 85 resources. The number of district contributors was increased to 87 through the Navy's consultation with the SHPO, but subsequently was reduced to 86 contributing resources after a fire damaged one building.

In 1997, the *Guide to Preserving the Character of the Naval Air Station Alameda Historic District* was prepared for the Navy to identify character-defining elements of the NAS Alameda Historic District (JRP, 1997). The study also defined significant vistas, viewsheds, open spaces, streetscapes, and landscape elements that contributed to the historic district.

In 1999, the Navy entered into a Section 106 Memorandum of Agreement (MOA) titled *Memorandum of Agreement Among the United States Navy, the Advisory Council on Historic Preservation and the California State Historic Preservation Regarding the Layaway, Caretaker Maintenance, Leasing, and Disposal of Historic Properties on the Former Naval Air Station, Alameda, California*. The MOA identified the NAS Alameda Historic District and the south jetty of the "Oakland Inner Harbor Jetties and Federal Channel Historic District" (Alameda Training Wall) as historic properties. The Alameda Training Wall is located outside the project area. The 1999 MOA did not identify any archaeological sites eligible for the NRHP (Navy et al., 1999). To support transfer of portions of the former NAS Alameda to the City of Alameda, the Navy prepared additional evaluation reports and a NRHP Nomination for the NAS Alameda Historic District in 2011 and 2012. These reports (a) completed the identification of historic properties on NAS Alameda through the evaluation of buildings and structures constructed before 1989; and (b) nominated the NAS Alameda Historic District to the NRHP. Two evaluation reports were prepared: the *Combined Specific Buildings Survey and Evaluation Report/Cold War Era Historic Resources Survey and Evaluation Report* (Combined Evaluation Report) (JRP, 2011) and *Cultural Landscape Report of Naval Air Station Alameda* (CLR) (JRP and PGA, 2012).

The Combined Evaluation Report concluded that no buildings and/or structures at the former NAS Alameda met the criteria for listing in the NRHP or the California Register of Historical Resources individually under World War II or Cold War-era contexts. The report found no Cold War-era buildings eligible for NRHP listing. The report also identified 13 additional contributing elements to the NAS Historic District (JRP, 2011).

In 2012, the CLR identified a historic-designed landscape as a contributing element of the NAS Alameda Historic District. The CLR concluded that no NRHP-eligible cultural landscapes or landscape features occur outside the boundary of the historic district (JRP and PGA, 2012).

The SHPO concurred with the findings of the Combined Evaluation Report in 2011 (OHP, 2011) and with the findings of the CLR in 2012 (OHP, 2012a).

The Navy has also prepared a NRHP nomination for the NAS Alameda Historic District. This nomination was submitted to the Keeper of the National Register in December 2012. The NAS Alameda Historic District is expected to be listed on the NRHP in early 2013.

Cultural and Historical Contexts

Prehistoric Archaeological Context

There is no archaeological context specific to the VA Development Area or VA Transfer Parcel, because the area was built on fill and no resources have been identified. As discussed above and as discussed in more detail below in the Historic Context section below, the majority of the former NAS Alameda was built on artificial fill and filled in multiple phases between 1892 and 1960. Therefore, the culture history discussed here focuses on the original Alameda Peninsula (to the southeast of the current project area) and the San Francisco Bay Area as a whole.

The earliest well-documented entry and spread of native peoples into the San Francisco region occurred at the beginning of the Paleo-Indian Period (12,000–8000 years Before Present [B.P.]¹). Social units are thought to have been small and highly mobile. Known sites have been identified in the contexts of ancient pluvial lakeshores and coastlines, as evidenced by such characteristic hunting implements as fluted projectile points and flaked stone crescent forms. Prehistoric adaptations over the ensuing centuries have been identified in the archaeological record by numerous researchers working in the Bay Area since the early 1900s, as summarized by Fredrickson (1974) and Moratto (1984).

Few archaeological sites have been found in the Bay Area that date to the Paleo-Indian Period or the subsequent Lower Archaic (8000–5000 B.P.) time period, probably because of high sedimentation rates and sea level rise. Archaeologists have, however, recovered a great deal of information from sites occupied during the Middle Archaic Period (5000–2500 B.P.). By this time, broad regional subsistence patterns gave way to more intensive procurement practices. Economies were more diversified, possibly including the introduction of acorn-processing technology. Populations were growing and occupying more diverse settings. Permanent villages that were occupied throughout the year were established, primarily along major waterways. The onset of status distinctions and other indicators of growing sociopolitical complexity mark the Upper Archaic Period (2500–1300 B.P.). Exchange systems became more complex and formalized, and evidence of regular sustained trade between groups began to appear.

Several technological and social changes characterized the Emergent Period (1300–200 B.P.). Territorial boundaries between groups became well established. It became increasingly common for distinctions in an individual's social status to be linked to acquired wealth. In the latter portion of this period (500–200 B.P.), exchange relations became highly regularized and sophisticated. The clamshell disk bead became a monetary unit, and specialists arose to govern various aspects of production and material exchange.

The Middle Archaic, Upper Archaic, and Emergent Periods can be broken down further according to additional cultural manifestations that are well represented in archaeological assemblages in the Bay Area:

- *Windmill Pattern* (5000–1500 B.P.) peoples placed an increased emphasis on acorn use and on a continuation of hunting and fishing activities. Ground and polished charmstones, twined basketry, baked-clay

¹ By convention, “present” is defined as 1950 A.D. The year 1950 A.D. is the baseline date from which age of certain materials are calculated when using carbon-14 dating techniques. “A.D.” refers to the number of years after the death of Jesus Christ.

artifacts, and worked shell and bone were hallmarks of Windmill culture. Widely ranging trade patterns brought goods in from the Coast Ranges and trans-Sierran sources as well as closer trading partners.

- The *Berkeley Pattern* (2200–1300 B.P.) exhibited an increase in the use of acorns as a food source compared to what was seen previously in the archaeological record. Distinctive stone and shell artifacts differentiated this period from earlier or later cultural expressions. Burials were most often placed in a tightly flexed position and frequently included red ochre.
- The *Augustine Pattern* (1300–200 B.P.) reflected increasing populations resulting from more intensive food procurement strategies, as well as a marked change in burial practices and increased trade activities. Intensive fishing, hunting and gathering, complex exchange systems, and a wider variety in mortuary patterns were all hallmarks of this period.

Before European contact, the original Alameda Peninsula (to the southeast of the project area) was occupied by a small Penutian-speaking group that was part of the larger Ohlone cultural affiliation. Members of this tribelet were largely dependent on the resources (waterfowl, fish, and shellfish) derived from the bayshore areas and from streams, creeks, and tributaries (Navy, 1999; Page and Turnbull, 2005; PAR, 1996). Examples of such Archaic Period sites were excavated in the early part of the 20th century. In the early 1900s, Captain Clark, an amateur archaeologist, excavated a prehistoric midden known as Sather Mound where flaked stone tools and a reported 450 burials were identified. The mound site closest to the project area, however, was the Emeryville Shellmound, excavated in 1902. It extended to approximately 30 feet in depth and contained 700 flexed burials and a large number of associated artifacts (PAR, 1996). An additional five Ohlone village sites have been reported within the city of Alameda. These mounds and sites were located on the high ground of the Alameda Encinal area on the original Alameda Peninsula, approximately 4 miles to the southeast of the project area (Navy, 1999; Page and Turnbull, 2005; PAR, 1996). The arrival of Spanish settlers, however, negatively impacted the traditional Ohlone cultural system, and exposure to European-borne diseases, a declining birth rate, and the enforced mission system resulted in the near-eradication of Ohlone peoples in the vicinity.

Historic Context

The earliest documented Euro-American expeditions into the San Francisco Bay region occurred in 1776 with the settlement of the Mission San Francisco de Asis and the Presidio of San Francisco. In August 1820, Governor Pablo Vicente de Solá² issued the Rancho San Antonio land grant to Luís María Peralta. This large land grant encompassed the city of Alameda, among other cities. The rancho became the first permanent settlement after Mission San Jose, which was established in 1797 (Kyle et al., 1990). In 1850, California became a state and portions of the rancho known as Bolsa de Encinal were sold off and eventually developed into agricultural land. Later, a commercial center (present-day Alameda) was established (Alameda, 1980).

Alameda continued to grow and prosper, particularly after 1864 when the San Francisco & Oakland Railroad built the first alignment from eastern Alameda to the Alameda Point area.³ During that same period, a ferry system was established, providing citizens the means to live in Alameda and commute to work in San Francisco. The City of Alameda was incorporated in 1872 and became a charter city in 1884. Between the 1880s and early 1900s, the City of Alameda witnessed a steady population increase associated with industrial and commercial enterprises.

² Colonial governor (1815–1822) of Spanish Alta California, which was a province and territory in the Viceroyalty of New Spain and later a territory in independent Mexico.

³ “Alameda Point” is used here as the historic name of the western end of the Alameda Peninsula.

The City continued to prosper through the 1940s with World War II and the creation of the former NAS Alameda (Alameda, 1980).

Development of the Alameda Point area began in the 1880s with oil refinery operations in a small area known as Woodstock, a community bounded by today's Lincoln Avenue, Third Street, San Francisco Bay, and Atlantic Avenue. It occupied what would become the southeastern section of NAS Alameda. Woodstock was absorbed into the City of Alameda in 1872. Railroad development returned to Alameda Point; and a kerosene refinery was located at the intersection of Pacific Avenue and Main Street, along the southeastern border of former NAS Alameda. Industrial development of Alameda Point area remained confined to this small area and continued into the early 1900s (Page and Turnbull, 2005).

During World War I, the Alameda Point area became a focal point for the aviation industry after a military study determined that the area would be advantageous to the military's efforts. While Congress delayed approval of a Navy base, development efforts moved forward by the City of Alameda, private groups, and the Army. The Alameda Municipal Airport opened in 1929, as did the San Francisco Bay Aerodrome. That same year, the Army started construction of its own airfield (Benton Field) between the San Francisco Bay Aerodrome and the municipal airport.

The former NAS Alameda consists almost entirely of engineered, artificial fill that was installed on marshlands or shallow waters within San Francisco Bay. The first documented filling occurred in the 1890s to construct a mole, or bermed railroad track, by the Southern Pacific Railroad. By the late 1920s, the northern part of what is now the former NAS Alameda had been filled by the Alameda Municipal Airport and Benton Field. The Navy acquired Benton Field and the Alameda Municipal Airport in 1936. Then, in 1938, the Navy began construction of former NAS Alameda focusing on erecting buildings on the eastern half of the installation and filling the southern and western parts of the facility for the bulk of the runway areas (Navy, 1999; JRP, 2011).

Completed under the direction of the Navy's Bureau of Yards and Docks, the original design for NAS Alameda was part of a master-planning approach that improved efficiency and functions for naval operations. With the start of U.S. involvement in World War II, former NAS Alameda was enhanced to accommodate increased military demands during wartime. Throughout World War II, former NAS Alameda played a critical role in the U.S.'s naval success with its primary mission of aircraft assembly and repair (JRP, 2011).

After World War II, former NAS Alameda witnessed a reduction in workforce as the Navy consolidated its efforts. The contributions of former NAS Alameda changed starting in 1950, with the onset of the Korean War. Operations at former NAS Alameda expanded and the number of military and civilian personnel peaked in 1951, making former NAS Alameda the largest naval air station in the U.S (JRP, 2011).

Former NAS Alameda served a critical role in Navy operations during the Korean War. The base grew and altered its existing facilities to accommodate changes in military technology. Former NAS Alameda was used to perform aircraft assembly, overhaul, and repair which continued into the 1960s as the U.S. entered the Vietnam War (JRP, 2011).

Historically, the VA Transfer Parcel and VA Development Area were used by former NAS Alameda as its airfield. Runways were completed in 1942, and after World War II, they were heavily altered to accommodate jet

aircraft. Support structures and buildings, including some for magazine and ordnance storage, were constructed to support the operation of the runways and the overall functions of the fleet during the Cold War era (JRP, 2011).

At the end of the Vietnam War in the 1970s, a reduction at former NAS Alameda took place. During the 1970s and 1980s, former NAS Alameda accommodated the changes in the Navy's fleet and remained open. By 1985, former NAS Alameda was identified for possible closure. The base remained in operation until 1997, when it officially closed after 57 years of continued operation (JRP, 2011).

Known Cultural Resources

Archaeological Resources

No archaeological resources have been identified within in the VA Transfer Parcel, including the VA Development Area (for either Alternative 1 or 2). No archaeological resources have been identified within the proposed off-site road/utility corridor.

Historic Resources

VA Development Area

No historic resources have been identified within the VA Transfer Parcel, including the VA Development Area (for either Alternative 1 or 2). Under each alternative, the VA Transfer Parcel is located on a portion of the former NAS Alameda airfield and contains former ammunition storage bunkers, former runways, and other infrastructure built to support airfield operations. The Navy previously evaluated the airfield and related structures and SHPO has concurred that they are not eligible for the National Register. As discussed in the Navy's Combined Evaluation Report, the built resources in the VA Transfer Parcel do not qualify as contributing resources to the NAS Alameda Historic District because previous alterations to the former airfield generally impacted the airfield's ability to convey any historical significance associated with World War II (JRP, 2011; OHP, 2011). Further, the Combined Evaluation Report concluded and SHPO has concurred that the airfield area and its structures are not eligible for the National Register based upon associations with the Cold War (JRP, 2011; OHP, 2011). Therefore, the VA Transfer Parcel, including the VA Development Area does not contain historic resources.

Off-site Utility/Road Corridor

No historic resources have been identified within the proposed off-site utility/road corridor. The off-site utility/road corridor would be constructed within a corridor along West Redline Avenue and Main Street, which runs directly adjacent to the northern boundary of the NAS Alameda Historic District. The two roads are not contributing resources to the historic district. Therefore, no historic resources are located within this corridor.

NAS Alameda Historic District

The NAS Alameda Historic District is located immediately adjacent to and east of the VA Transfer Parcel. This historic district is eligible under NRHP Criterion A for its association with the strategic development of naval air stations in the 1930s, development of naval facilities in the Bay Area during World War II and the Navy's role in

Pacific theater naval operations during World War II. The NAS Alameda Historic District also is eligible under Criterion C for its distinctive characteristics of type, period, and method of construction (Moderne style) in its design and planning.

The NAS Alameda Historic District was identified as eligible for listing in the NRHP in 1992. In 2011, the historic district was reassessed, and its boundary was expanded to include 13 additional contributing resources. In 2012, a historic designed landscape was also identified as a contributing element of the NAS Alameda Historic District (JRP, 2011; JRP and PGA, 2012; OHP, 2011; OHP, 2012b). Presently, the NAS Alameda Historic District contains 100 contributing resources: 99 buildings and structures, and 1 site (the historic designed landscape) and 57 noncontributing buildings/structures with a period of significance of 1938 to 1945.

No NRHP-eligible historic properties are present within the VA Transfer Parcel or the off-site utility/road corridor; however, construction activities proposed in these areas have the potential to affect the setting of the adjacent NAS Alameda Historic District, which is eligible for listing in the NRHP.

3.4.3 Environmental Consequences

Assessment Methods

This section assesses effects on cultural resources that meet the eligibility criteria for listing in the NRHP. When evaluating the significance of project impacts under NEPA, the following analysis applies the NHPA Section 106 criteria for adverse effect. 36 CFR Part 800.5 defines an undertaking (action) as having an adverse effect on historic properties if the effect would alter the characteristics that qualify a property for inclusion in the NRHP. Examples of adverse effects include:

- Physical destruction of or damage to all or part of the property;
- Alteration of the property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (36 CFR 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change in the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's character-defining features;
- Neglect of the property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Native American tribe or Native Hawaiian organization; or
- Transfer, lease, or sale of the property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

The following analysis considers the potential effects resulting from the construction and operation of the VHA OPC, VBA Outreach Office, Conservation Management Office, NCA Cemetery, and associated infrastructure

within the VA Development Area and the off-site utility/road corridor. No development would occur within the remaining portion of the VA Transfer Parcel, which would remain undeveloped open space.

Alternative 1

Construction

Archaeological Resources

No known archaeological resources would be directly or indirectly affected by construction, because no such resources are located within the boundary of the VA Transfer Parcel for Alternative 1 or within the off-site road/utility corridor. In addition, the likelihood of encountering unknown archaeological resources within the VA Development Area or the off-site road/utility corridor is very low because of the fill history and destructive nature of the construction efforts (dredging, scarification, and filling) used during the construction of former NAS Alameda (Navy, 1999). No development would occur within the remaining VA Transfer Parcel.

In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, will occur and the following management measure will be followed.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the Proposed Action, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the evaluation criteria of the NHPA and will develop appropriate mitigation. If human remains are encountered, the Alameda County Coroner will be notified immediately upon their discovery. If the coroner determines that the remains are of Native American origin, the provisions of NAGPRA will apply.

Implementation of this management measure would reduce potentially adverse impacts of Alternative 1 resulting from inadvertent damage or destruction of presently undocumented archaeological resources and human remains during construction. Therefore, no significant adverse impact from construction impacts on archaeological resources would be expected.

Historic Resources

VA Transfer Parcel

No known historic resources would be directly affected by construction within the VA Development Area because no such resources are present in that area. No development would occur within the remaining VA Transfer Parcel. Therefore, Alternative 1 would not have a direct significant adverse impact on historic resources.

Indirect impacts on historic districts have the potential to occur if changes to the visual setting, atmospheric intrusions, or other features of a proposed action outside the historic district's boundaries would diminish the district's ability to convey its significance. The proposed development includes the construction of buildings and

structures for the VHA OPC, VBA Outreach Office, Conservation Management Office, NCA Cemetery, associated infrastructure, and some new landscaping on a portion of the VA Development Area, all of which would introduce subtle new visual elements to the setting of the NAS Alameda Historic District. Proposed buildings would be approximately one to two stories tall and between 40 and 54 feet in height, and planned landscaping would be a maximum 20 feet in height. This development would be visible from certain locations within the boundary of the NAS Alameda Historic District and from more distant locations with views of the overall historic district (see Figure 3.5-8 in Section 3.5 [Visual Resources]). However, the planned construction would occur nearly one half mile from the boundary of the historic district; this distance would allow it to become part of the light industrial setting that already exists to the northwest. The planned construction would not obstruct current views directly to the west or to the southwest, because construction would take place at the north end of the former runway area. Views from within the NAS Alameda Historic District would remain similar to current views, with the minor difference that some low buildings would be added to the middle ground in front of the port's industrial structures in the background. Likewise, external views of the row of hangar buildings along the western boundary of the NAS Alameda Historic District would not be obscured or diminished by the proposed development. The scale of the construction planned under Alternative 1 is roughly similar to the scale of buildings/structures currently on the site, and the existing scale and character of the historic district would not change. The proposed development would not detract from location, design, character, setting, materials, workmanship, and feeling of the NAS Alameda Historic District, and the historic district would still be able to convey its significance as a naval station dating to the 1930s and World War II designed in the Moderne style. Therefore, there would be no significant, indirect impacts on the NAS Alameda Historic District as a result of the visual introduction of the Proposed Action.

Construction-related activities for the proposed undertaking would introduce groundborne vibration, and would result in noise effects on the surrounding area, including the adjacent NAS Alameda Historic District. However, because of the distance between the proposed development and the historic district (nearly one half mile), the potential for these activities to cause structural and cosmetic damage to the historic district and its contributing resources through vibration would be negligible. Any construction-related sounds would be temporary and would dissipate over the distance between the VA Development Area and the NAS Alameda Historic District; thus, noise effects on the historic district would be minimal. Therefore, there would be no significant, indirect impacts on the NAS Alameda Historic District associated with vibration or noise. More information on the projected levels of construction noise and vibration is provided in Section 3.12 (Noise).

Offsite Utility/Road Corridor

No known historic resources would be directly affected by construction within the off-site utility/road corridor because no such resources are present in that area.

Planned infrastructure for the VA facilities would be constructed within a utility corridor along West Redline Avenue and Main Street that would tie into existing infrastructure lines east of the VA Transfer Parcel. The new infrastructure line would be located directly north of the NAS Alameda Historic District; however, because the existing roadway would be paved over the new line once installed, the proposed infrastructure would not alter the viewshed of the historic district, the district's character-defining features, or its ability to convey its significance. Any construction-related sounds or vibrations in the offsite road/utility corridor would be temporary and are not anticipated to be at levels that could cause damage to the NAS Alameda Historic District (See Section 3.12

[Noise]). Therefore, the construction of planned infrastructure in the off-site utility/road corridor would not have significant, indirect impacts on historic resources.

NAS Alameda Historic District

The Proposed Action would take place adjacent to and outside the boundary of the NAS Alameda Historic District, which is eligible for the NRHP. Because the planned construction would take place outside the boundary of the historic district, no direct construction-related impacts on historic properties would occur. Potential indirect effects from construction within the VA Development Area have been addressed above. There would be no significant, indirect impacts on the NAS Alameda Historic District.

Operation

Archaeological Resources

Operation of the proposed VA facilities would not involve ground disturbance or vibration, and no known archaeological resources are located within the boundary of the VA Transfer Parcel or within the off-site road/utility corridor. Therefore, no significant operational impacts on archaeological resources would occur under Alternative 1.

Historic Resources

VA Transfer Parcel

Proposed operational activities would not cause direct impacts on known historic resources within the VA Transfer Parcel because no such resources are present in that area and the proposed operational activities would not have a significant impact on the NAS Alameda Historic District.

Off-site Road/Utility Corridor

Proposed operational activities would not cause direct impacts on known historic resources within the offsite road/utility corridor because no such resources are present in that area and the proposed operational activities in the corridor would not have a significant impact on the NAS Alameda Historic District.

NAS Alameda Historic District

As discussed above, proposed operational activities (outside of the NAS Alameda Historic District) would not have a significant impact on the NAS Alameda Historic District.

In summary, the construction and operational activities described in Alternative 1 would not have significant impact on cultural resources.

Alternative 2 (Preferred Alternative)

Construction

Archaeological Resources

No known archaeological resources would be directly or indirectly affected by construction, because no such resources are located within the boundary of the VA Transfer Parcel for Alternative 2 or within the off-site road/utility corridor. In addition, similar to Alternative 1, the likelihood of encountering unknown archaeological resources within the VA Development Area or the off-site road/utility corridor is very low because of the fill history and destructive nature of the construction efforts (dredging, scarification, and filling) used during the construction of former NAS Alameda (Navy, 1999). No development would occur within the remaining VA Transfer Parcel. In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, will occur and the following management measure will be followed.

If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the Proposed Action, ground disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the evaluation criteria of the NHPA and will develop appropriate mitigation. If human remains are encountered, the Alameda County Coroner will be notified immediately upon their discovery. If the coroner determines that the remains are of Native American origin, the provisions of NAGPRA will apply.

Implementation of this management measure would reduce potentially adverse impacts of Alternative 2 resulting from inadvertent damage or destruction of presently undocumented archaeological resources and human remains during construction. Therefore, no significant adverse construction impacts on archaeological resources would occur.

Historic Resources

Alternative 2 would involve development similar to that of Alternative 1, except that the proposed construction and the VA Development Area would be located farther north. Therefore, the construction-related impacts of Alternative 2 on historic resources would be similar to those discussed for Alternative 1. No known historic resources would be directly affected by construction within the VA Development Area because no such resources are present in that area. No development would occur within the remaining VA Transfer Parcel.

As with Alternative 1, views from within the NAS Alameda Historic District would remain similar to current views, with the minor difference that some low buildings would be added to the middle ground in front of the port's industrial structures in the background (see Figure 3.5-8 in Section 3.5 [Visual Resources]). The proposed development would not detract from location, design, character, setting, materials, workmanship, and feeling of the NAS Alameda Historic District, and the historic district would still be able to convey its significance as a naval station dating to the 1930s and World War II designed in the Moderne style.

No significant adverse construction-related impact on historic resources would occur under Alternative 2. Any construction-related sounds would be temporary and would dissipate over the distance between the VA Development Area and the NAS Alameda Historic District; thus, noise effects on the historic district would be minimal. Therefore, there would be no significant impact on the NAS Alameda Historic District associated with vibration or noise. More information on the projected levels of construction noise and vibration is provided in Section 3.12 (Noise).

Operation

Archaeological Resources

Operation of the VA facilities proposed under Alternative 2 would be similar to that under Alternative 1. No significant operational impacts on archaeological resources would occur under Alternative 2. Therefore, no significant adverse operational impacts on archaeological resources would occur.

Historic Resources

Operation of the VA facilities proposed under Alternative 2 would be similar to that under Alternative 1. Therefore, no significant operational impacts on historic resources would occur under Alternative 2. In summary, the construction and operational activities described in Alternative 2 would not have a significant impact on cultural resources. No historic properties are located in the VA Development Area or the off-site road/utility corridor. The proposed development and its construction-related and operational activities would have no adverse effects on the adjacent NAS Alameda Historic District and the district would still be able to convey its historical significance.

In accordance with NHPA requirements, VA has initiated consultation under Section 106 of the NHPA with the California SHPO on the proposed action with a letter dated August 13, 2012 that identified the Area of Effect (AOE) and proposed plan for public involvement. SHPO concurred with the APE and plan for public involvement in a letter dated August 23, 2012 (Donaldson, 2012). In April 2013, the VA submitted a Finding of Effect (FOE) that determined that proposed undertaking would have no adverse effect on historic properties. In a letter dated May 17, 2013, SHPO concurred that the proposed action would not adversely affect historic properties (Roland-Nawi, 2013).

Copies of the Section 106 consultation letters, including documents supporting the analysis of potential effects on cultural resources and the FOE are located in Appendix E (Cultural Resources Supporting Information).

No Action Alternative

Construction

Under the No Action Alternative, the Fed-to-Fed transfer would not take place and the proposed development (e.g., VHA OPC, VBA Outreach Office, NCA Cemetery, etc.) would not be built. Therefore, no significant construction impacts on cultural resources would occur.

Operation

Under the No Action Alternative, the Fed-to-Fed transfer would not take place and the proposed development and operations (e.g., VHA OPC, VBA Outreach Office, NCA Cemetery, etc.) would not occur. Therefore, no significant operational impacts on cultural resources would occur.

3.4.4 References

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