

4.2 Analysis

This report concludes that there is a historic designed landscape present on NAS Alameda that is historically significant and retains sufficient historic integrity to convey its important association with the strategic development of naval air stations in the 1930s, development of naval facilities in the San Francisco Bay Area during World War II, and important associations with the Navy's role in Pacific Theater naval operations during World War II. As noted, the historic designed landscape is a contributing element to the NAS Alameda Historic District, which has a period of significance of 1938-1945. This historic designed landscape is not individually significant, but rather is similar to other buildings and structures that are contributors to the historic district. The district, as discussed in the Combined Specific Buildings and Cold War Evaluation Report, is a historically significant and distinguishable entity whose components lack individual distinction, but which comprise an important concentration and continuity of buildings, structures, objects, and landscape features that are united historically and aesthetically by overall plan and physical development.

This section provides analysis regarding the significance of elements of the historic designed landscape within the historic district and identifies, through comparison of data presented in the historic context (Section 3) and the description of existing conditions (Section 4.1), which existing elements of the historic designed landscape are its character-defining features. This section also discusses existing vegetation that is appropriate to the historic designed landscape and its original design intent, but that is not part of the character-defining features because the specific extant elements were not either not present during the period of significance, or there is insufficient evidence to illustrate their presence during the period of significance.

All character-defining features of the historic designed landscape within the NAS Alameda Historic District are either implementations of, or adaptations made during World War II to, the original 1939 station plan and/or the station's 1941 planting plan during the initial phase of construction and/or during World War II. The categories of landscape elements discussed herein are: spatial organization; views and vistas; topography; vegetation; circulation; water features; and structures, furnishings, and objects.

4.2.1 Spatial Organization

The spatial organization within the NAS Alameda Historic District is a prominent and distinctive aspect of the historic designed landscape and has retained a high level of historic integrity to the district's period of significance. This section analyzes the significance of the elements of the historic designed landscape and identifies which elements of the spatial organization laid out on NAS Alameda by the end of World War II are character-defining features of the historic designed landscape.

The 1939 station plan established the fundamental elements of spatial organization of the station; intersecting axes, an orthogonal pattern of streets and functions, the Officers' Housing separated and in a different configuration from the rest of the station, wide open spaces in the center of the station, and long views down some of the main thoroughfares. The plan also included areas that secondary spaces and that were intended for future expansion. The plan used bilaterally symmetrical spaces and sight-lines visually tying spaces to one another. Spatial borders were delineated by the placement of buildings, the alignment of streets, and arrangement of vegetation. Within the axial layout of the station plan, distinct areas of the station also had distinctive spatial organization. The station plan allowed the Navy to devise an efficient and orderly system that placed functional areas in logical relationship to one another. Although the plan evolved and was adapted to suit the needs of various Navy bureaus during the planning phase for the station, and again during wartime mobilization, the most fundamental elements of the spatial organization remained authentic to the original plan.

Administrative Core

The layout of the station is organized in relation to the designed axes that intersect in the Administrative Core. Different functional areas – administrative, shops, operations, residential, MWR – are sited in relation to the main axes, and in relationship to one another. The main north-south axis was elaborated with a bilaterally symmetrical open space stretching from Building 31 to Building 1. From the sentry house at Building 31, this space created a sightline visually connecting the entry to the primary administrative building at the center of the station, Building 1. By placing the Administrative Core along at the center of the station plan, it was easily accessible from the main working and living areas. The east-west axis that had been elevated to a primary axis in the design, stretching from West Essex Drive to Building 3, also bisected a bilaterally symmetrical space. From Pan Am Way to Saratoga Street, West Essex Drive bisects two blocks of equal dimensions. The axis then continues on to bisect the entry mall, the BEQ quadrangle, and Buildings 3 and 21 (see **Photograph 2**). The axial layout in the Administrative Core created long views / vistas north and south down Lexington and Saratoga streets (see **Photograph 67**), between Building 1 and Building 31 (see **Photograph 64**), and east-west views from Building 3 across the BEQ quadrangle (see **Photograph 66**), entry mall, and along the centerline of West Essex Drive (see **Photograph 65**). The north-south views / vistas along Lexington and Saratoga streets physically and visually tie the station entry and the Administrative Core to the Seaplane Lagoon, one of the primary station features related to the station's World War II mission in support of Navy aviation. The Navy's appropriation of valuable land created with fill to wide open formal spaces at the center of the station designed to make a visual impact upon entry reflects both the investment and pride in the station. Similarly, the deep – and uniform – setback of buildings from the street reflected both order and uniformity, and also value placed on spatial arrangements of buildings in a manner that preserved open spaces around the buildings. After World War II, these primary features of the

spatial organization of the Administrative Core remained intact, and they are character-defining features of the historic designed landscape (see **Photograph 148** and **Photograph 149**).

Housing areas for bachelor enlisted and bachelor officers were organized in relationship to the main axes and in relationship to the main working area of the station. The BEQs and the BOQs were sited on opposite sides of the primary north-south axis and separated by the entry mall, a reflection of separation of rank and military hierarchy. They also flanked the east-west axis that runs from Building 3 across the entry mall and down West Essex Drive. While both were located within the Administrative Core, and by the layout of the buildings were visually tied to the Administrative Core, they were also adjacent to the Shops Area, one of the main working areas on station, and they were adjacent respective recreational areas at the north edge of the station on either side of the Main Gate separated by rank.

In the Administrative Core of the station, buildings and structures constructed or modified after World War II were built in a manner that was generally responsive to the extant spatial organization (see **Photograph 19** and **Photograph 57**). Few changes within the area of the station's original plan diminished the spatial organization and land use pattern qualities of the landscape established by the end of the war, and the axes, orthogonal layout and functional / land use patterns generally remained, as seen in the Land Use Diagram (**Appendix A2**). Neither new construction, nor demolition of World War II-era buildings / structures, in this portion of the station diminished the strong qualities of the station's axes or orthogonal layout. New construction included Building 525, Building 585, and Building 7, all of which were built in a scale respectful of the extant buildings.

Demolition in the Administrative Core included much of the enlisted personnel recreational facilities north of the BEQ when the Navy modified the Airfield for jet aircraft in the 1950s and removal, by the 1970s, of four of the temporary style barracks built as BOQs north of West Essex Drive. The alterations to the enlisted personnel recreational facilities and the almost complete reorganization of that area of the station have diminished the integrity of that portion of the landscape and therefore the area north of West Red Line Avenue west of the Main Gate is excluded from the historic district boundaries. The block on which the BOQ temporary barracks sat has two of the original six buildings and the block retains its overall orthogonal form, but much of the space within planted edges of that block, east of Building 137 and south of Buildings 135 and 137, have no specific character-defining features and are non-contributing spaces within the historic district. Similarly, the area north of Building 75, where the Officers' family pool was located and the landscape features (including plantings) at Building 7 also contains no character-defining features and are non-contributing spaces within the historic district.



Photograph 148: Administrative Core in 1946.¹⁹⁴



Photograph 149: Administrative Core in 2005.¹⁹⁵

¹⁹⁴United States Geological Survey, *Alameda County*, Aerial Photographs, USGS: Washington: 1946.

¹⁹⁵ 2005 Alameda County Aerial, State of California's GIS website page "CAL-ATLAS GEOSPATIAL CLEARINGHOUSE" at www.atlas.ca.gov.

Some changes to the functional layout occurred within the Administrative Core during the latter half of the twentieth century. This included changes in use of the former BOQ barracks north of West Essex Drive, and expansion of MWR facilities on the station that supplemented or replaced those functions that been housed in buildings within the Administrative Core. Building 525, for example, was constructed in 1970 as a bowling facility adjacent to the station theater (Building 18), both of which were MWR facilities centrally located and opened to all ranks and to civilian personnel. The new bowling alley building was also sited with a more modest setback to the street than the original buildings of the Administrative Core. Building 585, constructed in 1976, has a larger setback than the original buildings of the Administrative Core (with vegetation at variance with the rest of the Administrative Core). Building 585 and Building 7, constructed in 1986, both illustrate some inconsistency with the station's original functional layout design. The CPO Club in Building 585 was placed in an area that had been for officer housing, but that purpose had shifted to other more general functions by the 1970s. Placement of the new CPO club in relationship to the Officer's Club in Building 60, however, imitated the relationship of CPO Housing to Officers' Housing on the east side of the station and was in keeping with MWR functions in the Administrative Core. Likewise, the material engineering laboratory constructed in Building 7 extended functions related to the Shops into the Administrative Core, but this overlap of function was similar to the World War II training functions that occurred in Building 101 (originally situated east of Building 114 and destroyed by fire in 2003) and in buildings adjacent to the new laboratory in Building 7. The functional use changes that occurred in the Administrative Core that are within the boundaries of the historic district, however, do not diminish one's comprehension of the concept and original layout of the functional areas established within the station's Administrative Core by the end of World War II.

Shops Area

As shown on the Land Use Diagram (**Appendix A2**), the Shops Area of the station is divided into three sub-areas. The first two are almost completely within the station's original orthogonal layout and had functions related to A&R (later O&R / NARF) and Storage / Supply / Public Works. The other sub-area includes portions of the station that were supportive or additional to A&R functions and not within the orthogonal layout of the station's original plan. The historic district boundary is drawn to account for portions of the Shops Area that retain the station's distinct elements of spatial organization and views / vistas from the period of significance and to exclude those portions of the Shops Area that contain buildings, structures, and landscape features built or developed after the period of significance or that are areas of the station that do not retain sufficient historic integrity to the period of significance.

Within the orthogonal layout situated immediately south of the Administrative Core, the primary north-south axis that stretches from the sentry house (Building 31) continues through seaplane hangar Building 39 and then bisects the Seaplane Lagoon, just as it has since the 1939 iteration

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of the station plan (see **Illustration 4** and **Photograph 4**). World War II construction in this area further defined the orthogonal layout of streets and paths and the result was congruent with the original station plan, creating a symmetrical space along the north-south axis. Southern views along all of the north-south streets traversing the area – Monarch Street, Lexington Street, Saratoga Street, and Pan Am Way – visually connected the Shops Area to the Seaplane Lagoon. Lexington Street divided the space functionally with A&R to the west and storage / supply / public works to the east. West Tower Avenue was the division between the Shops Area and the Operations Area to the south. Landplane hangar Building 22 is the visual termination at the west end of West Midway Avenue.

Similar to changes in the Administrative Core, buildings and structures built or modified after World War II in the Shops area within the orthogonal layout were constructed in a manner that was generally responsive to the extant spatial organization. Few changes within the area of the station's original plan diminished the spatial organization and land use pattern qualities of the landscape established by the end of the war, and the axes, orthogonal layout and functional / land use patterns generally remained. Neither new construction, nor demolition of World War II-era buildings / structures, in this portion of the station diminished the strong qualities of the station's axes or orthogonal layout. There were also only modest shifts in functional layout to the Shops Area within the orthogonal layout that affected the integrity of the functional area and its ability to convey its significance relevant to the station's period of significance.

Shops Area buildings and structures built since the historic district's period of significance, and their landscape elements that differ from or that do not contribute to the elements of the landscape from the period of significance, include portions of the station around Buildings 25 and 29 on the western end of the station, as well as portions of the station around Buildings 410, 530, and 360 on the east side of the station.

Changes in the Shops Area within the boundary of the historic district since the end of World War II resulted in some shifts in functional use and spatial layout of the area. Building 62 did not continue to serve exclusively as the civilian cafeteria as it had during the war. In the 1950s and 1960s the Training Division, Public Works, and Industrial Relations each occupied the building at various points. Also in the 1950s, a credit union moved into the building and eventually the building was used as a data processing center in the 1980s. Even though the building was added onto, it retained its original deep setback with lawn and foundation shrubs along the east side of the building. The hybrid use of the building, however, was appropriate for the location on edge of the Administrative Core, adjacent to the main north-south axis. New construction and demolition of World War II-era buildings also impacted the layout of the Shops Area. Building 32, a modern addition on the west half of the block south of Building 1, filled in an open space historically used for parking. In addition, the building was sited with a narrower setback than other buildings in the area. The loss of Building 101 to fire in 2003 created a new

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open space between Building 114 and Building 73B. Other changes in this portion of the Shops Area included Building 607, which was constructed in 1980 and the more recent addition of the child care center north of Building 607. The addition of Buildings 32 and 607, as well as the loss of Building 101, do not significantly affect the primary elements of the historic designed landscape – axial plan, orthogonal layout of roads, sightlines – to a degree that the Shops Area no longer retains integrity to the period of significance. Similarly, the addition of small ancillary buildings west and south of Building 5 does not significantly disrupt the overall layout of the area (see **Photograph 91**). However, the spaces within the planted edges of the block where Building 101 was located and where Building 607 sits do not include character-defining features and are considered to be non-contributing spaces within the historic district.

Other portions of the Shops Area outside the orthogonal layout include buildings and structures that have some association to the station's period of significance, but those areas do not retain sufficient historic integrity to convey significance related to the station's initial development or the adaptations of the station for its contributions during World War II. As noted, the original station plan included areas intended for future development or that were secondary spaces for additional functions outside the primary functional areas within the station's orthogonal layout. This included the portion of the Shops Area east of Pan Am Way and Ferry Point Road on the east side of the station around Buildings 86, 117, 13, 112, 66, 162, and 14. This eastern portion of the station was adapted and developed with facilities that were additive to functions on the station or that require siting away from the main functional areas of the station, such as the engine test cells in Building 14 that were both too noisy and dangerous to be placed adjacent the main A&R facility in Building 5. The southeastern corner of the station that was largely open and used for aircraft storage during the war was infilled with multiple buildings and other facilities during the latter half of the twentieth century. This portion of the station evolved with a utilitarian layout, responsive to the extant railroad track and later infill of land, and did not reflect the station's axial layout, nor extend its symmetry and orthogonal pattern (see **Photograph 91**). Still this area's possible contribution to the historic district could have been its illustration of the station's evolution during World War II to adapt to the enormous demands placed on NAS Alameda during that conflict. This portion of the Shops Area, however, includes World War II-era buildings that have been altered or moved, and many newer buildings were constructed in this area of the station. Also, World War II-era buildings and other elements of the landscape have been removed from this area, including railroad track, loading platforms, and above ground tanks. Furthermore, changes to the landscape that reduce this area's ability to convey significance related to World War II include the redesign of the landscape island by East Gate (around the plane on pedestal – Building 71) and the redesign of the former railroad tracks that extended from Atlantic Avenue to the piers into a pedestrian trail.

Residential / MWR Area

Spatial organization in the residential portions of the station, particularly the Officers' Housing, is a distinct aspect of the layout of the station plan. The Officers' Housing area shown in the 1939 plan is much smaller than what was executed in the first phase of construction, however, the general design concept was maintained (see **Illustration 4**). Offset from the rest of the station at the intersections with Pan Am Way, and sited with curvilinear roads in an egg-shaped area, rather than an orthogonal pattern, this part of the station reflected the hierarchical distinction between officers and the rest of the station (see **Illustration 15**). Further underscoring this distinction, the Officers' houses were sited facing northeast, away from the center of the station. Not only did the layout of the Officers' Housing reinforce hierarchical rank, it also expressed uniformity and order. Each house was set back from the road a uniform distance, and evenly spaced from one another. No fences were used to delineate the space between the houses, and limited internal views contributed to the sense that this was a private space, apart from the rest of the station. The Commanding Officers' house was physically separated from the rest of the Officers' Housing by a wedge shaped area and lawn adjacent the house's semi-driveway. Another observance of rank built into the spatial layout was separation of the Officers' Housing from the CPO Housing by a park and open space south of West Essex Drive (see **Photograph 60**). Unlike the Officers' Housing, the CPO Housing was sited in relation to the axial grid that organized the station core (see **Photograph 103**). There are also not the same limited views within this area, as are present in the Officers' Housing area; the houses and their surroundings are laid out in a linear / grid pattern. Building 178, at the center of the two northernmost rows of CPO houses aligns with the centerline of Building 17 to the west. The historic district boundary was drawn to encompass the original Officers' Housing and CPO Housing that reflect the original spatial organization and views / vistas of the station. The northwest side of the Officers' Housing was reshaped under the housing program in the 1960s, and does not continue, reflect, or adhere to the original design or design intent of the station's plan.

The World War II temporary barracks built on the east side of the station were sited in originally unplanned, secondary spaces, adjacent to the Officers' Housing, CPO Housing, and Shops Area. These additional residential units were built east and south of the Officers' Housing and CPO Housing southward to Tower Avenue. Barracks in this area were accompanied by buildings that housed support functions for personnel stationed on Alameda. The Navy constructed these World War II-era buildings following a separate spatial organization and layout pattern that the originally designed portion of the station. They were built on a utilitarian grid pattern, but not replicating or extending the original station design's symmetry, orthogonal plan, or organizational pattern. Placement of these facilities was an adaptation of the station plan that was followed some of the organizational design intent of functional areas, i.e. housing was built in relationship to one another, however, this secondary portion of the station does not have a

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strong orthogonal or axial relationship to the rest of the station. Almost all of the World War II-era units were replaced with family housing built in the 1960s. The design of the Family Housing area bore little relationship to the station's original orthogonal and axial plan with its modestly curving streets and buildings that did not directly align with the streets that served the area. Similarly, the MWR area added to the southern edge of the station in the 1970s bore little relationship to the station's original plan or functional organization.

Operations Area

The Operations Area (formerly referred to as the Hangars Area in previous reports) covers a large portion of NAS Alameda, including: 1) landplane hangars, Control Tower and Airfield; 2) seaplane hangars and Seaplane Lagoon; and 3) waterfront operations area (See Land Use Diagram in **Appendix A**). Portions of the Operations Area retain the distinct spatial organization that was laid out during the station's design and initial phase of station construction and contributed to the station's important role during World War II. These are at the landplane hangars and Control Tower, as well as the seaplane hangars and Seaplane Lagoon. Other sections of the Operations Area were originally built or established before or during World War II, such as portions of the Airfield and the piers area, but they do not retain sufficient historic integrity to convey their significance to that period. The NAS Alameda Historic District boundary is drawn to account for sections of the Operations Area that do and do not retain historic integrity and includes the immediate space west of the landplane hangar row with the Control Tower at the southernmost end that was part of the working areas around those buildings.

As built, each row of hangars was consistently spaced from one another, and oriented parallel to the areas they served: the Airfield and Seaplane Lagoon. The Control Tower was constructed at the intersection of the north-south and east-west axis of the landplane and seaplane hangars. Not only were the hangars aligned parallel to the areas they served, the station plan also situated them adjacent to the Shops Area, particularly A&R. Building 5, the main A&R building, was placed in the Shops Area with the west side facing the landplane hangars and the south side facing the seaplane hangars. In the 1939 station plan, the seaplane hangars were aligned on the primary north-south axis with the axis bisecting seaplane hangar Building 39 and the landplane hangars were aligned in a U-shape around the west end of the original primary east-west axis (see **Illustration 4**). By placing each group of hangars on one of the primary axes, this design emphasized NAS Alameda's mission in support of naval aviation. When the landplane hangars were realigned parallel with the Airfield before construction began, station planners maintained this design principle by aligning one of the landplane hangars, Building 21, with the emerging primary east-west axis stretching from West Essex Drive to through Building 3 (see **Photograph 2**). When two new runways were added to the Airfield in the 1950s to accommodate jet aircraft, the design of the original Airfield was largely obliterated. It was no longer a compact space

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whose shape and dimensions mirrored symmetrically the shape and dimensions of the core of the station, nor did it reflect the aircraft used by the Navy during the period of significance. For these reasons, the Airfield is not a character-defining feature of the historic designed landscape because of substantial losses of integrity and thus the historic district boundary is drawn to exclude the Airfield.¹⁹⁶

As a prominent and important feature of the station's operations, the Seaplane Lagoon was aligned on the primary north-south axis of the station. The structure remains on that alignment, retains its original shape, and has enough of its original structures (bulkhead, ramps, and rip rap) in the existing conditions to retain integrity and is a character-defining feature of the historic designed landscape (see **Photograph 6** and **Photograph 112**). The Seaplane Lagoon is fully recorded and evaluated in the Combined Specific Buildings Evaluation / Cold War Era Evaluation Report and is included here as a single resource (water feature) that is a character-defining feature of the historic designed landscape.

Similar to changes in the Administrative Core, buildings and structures built or modified after World War II in portions of the Operations area within the orthogonal layout were constructed in a manner that was generally responsive to the extant spatial organization and views / vistas. Few changes within the area of the station's original plan diminished the spatial organization and land use pattern qualities of the landscape established by the end of the war, and the axes, orthogonal layout, views, and functional / land use patterns generally remained. Neither new construction, nor demolition of World War II-era buildings / structures, in this portion of the station diminished the strong qualities of the station's axes or orthogonal layout. The construction of Building 24 between landplane hangar Building 23 and the Control Tower utilizes the same setback as the hangars and is built within the north-south axis. There were also only modest shifts in functional layout to the Operations Area within the orthogonal layout that affected the integrity of the functional area and its ability to convey its significance relevant to the station's period of significance.

The largest functional alterations and modifications to land use patterns within the station's orthogonal layout within the Operations Area were at the seaplane hangars, which were transferred for use by landplane aircraft after the Navy discontinued operating seaplanes from NAS Alameda in the 1960s. The Navy designated the former seaplane apron on the north side of the Seaplane Lagoon as Taxiway H, but did not fundamentally disrupt the spatial relationship between the seaplane hangars and the Seaplane Lagoon. In the 1950s, the Navy also widened the overhaul and repair functions of Buildings 11 and 12 (originally constructed to service seaplanes), situated adjacent to Building 5, when it constructed Building 400 between the

¹⁹⁶ For the full evaluation of the Airfield see the "Airfield" DPR-523 form in Appendix C of the "Combined Specific Building / Cold War Historic Resources Survey and Evaluation Report for NAS Alameda," September 2011.

original two hangars. This continued the functional organization that had been established during the original plan.

Building 77, the located just south of Seaplane Hangar Building 41, was originally constructed for repair of radar and radio equipment and was later renovated in 1960 as an air terminal. Although the exterior of the building was modified when the building's use changed from repairs to flight operations, the building retained its original setback with lawn.

The waterfront operations area, which includes Piers 1 – 3, Wharves 1 and 2, and the buildings immediately adjacent, is not included within the boundary of the historic district and is not part of the historic designed landscape primarily because it has lost substantial integrity to the period of significance. This area of the station has association with the original design and adaptation of the station during World War II, but changes within this area have diminished its ability to convey the significance to the historic district's period of significance. Most notably, Pier 2 was extended 200 feet in length in 1973; however, other modifications and additions to the area also affect integrity of design (see Combined Specific Buildings Evaluation / Cold War Era Evaluation Report for detailed inventory and evaluation of the piers). The area was outside the boundary of the formal planting plan designed by LaVallee and therefore has no significance associated with that aspect of the historic designed landscape.

4.2.2 Views and Vistas

Administrative Core

The axial layout in the Administrative Core created long views / vistas north and south down Lexington and Saratoga streets (see **Photograph 67**), between Building 1 and Building 31 (see **Photograph 64**), and east-west views from Building 3 across the BEQ quadrangle (see **Photograph 66**), entry mall, and along the centerline of West Essex Drive (see **Photograph 65**). The north-south views / vistas along Lexington and Saratoga streets physically and visually tie the station entry and the Administrative Core to the Seaplane Lagoon, one of the primary station features related to the station's World War II mission in support of Navy aviation. Panoramic views from the corner of Red Line Avenue and Monarch Street from the Operations Area across the Airfield are prominent features of the historic designed landscape, partially created by the spatial layout of the Operations area and partially incidental to the layout.

Shops Area

The north-south views / vistas along Lexington and Saratoga streets physically and visually tie the station entry and the Administrative Core to the Seaplane Lagoon, one of the primary station features related to the station's World War II mission in support of Navy aviation. Long views to the west along West Tower Avenue tied the Shops Area visually to the Airfield until 1990 when Building 24 was built and became the visual termination point for that view (see **Photograph 115**).

Residential / MWR Area

Limited internal views contributed to the sense that the Residential Area was a private space, apart from the rest of the station.

Operations Area

Placement of the hangars in orderly rows along the edges of the station (see **Photograph 92** and **Photograph 93**), near the Airfield and the Seaplane Lagoon created many long views from within the Operations Area. Panoramic views across the Airfield from the landplane hangars and across the Seaplane Lagoon (see **Photograph 116**) from the seaplane hangars were prominent features of the historic designed landscape, partially created by the spatial layout of the Operations Area and partially incidental to the layout. Long views to the west along West Tower Avenue tied the Shops Area visually to the Airfield until 1990 when Building 24 was built and became the visual termination point for that view (see **Photograph 115**).

4.2.3 Topography

The topography of the entire station is flat, and most of the land was created with fill for the purposes of building NAS Alameda. There is a gentle slope that is notably situated at the east end of the BEQ quadrangle that flanks the concrete steps and planters. This slope connects the space to the adjacent entry mall. The overall flat topography of the station is significant because it played a role in dictating, or allowing, what type of plan would be developed. Axial, orthogonal plans organized by bilateral symmetry such as the one present on NAS Alameda are particularly well suited for flat locations because the axial lines do not need to curve around natural features as they would in a hilly or mountainous area, a lesson earlier city planners learned through trial and error. The flat land the Navy built at Alameda provided an ideal slate on which to design a plan using geometric shapes with bilateral balance and symmetry. Because the flat land was constructed by the Navy for the development of NAS Alameda, it is part of the built environment and is integral to the station plan; therefore it is a character-defining feature of the historic designed landscape.

4.2.4 Vegetation

Overall, the vegetation on NAS Alameda currently has a formal, designed appearance, particularly in the Administrative Core, and in portions of the Shops Area. In general, the current vegetation on the station is less well manicured than it was during the Navy's use of the facility and during the station's period of significance. Trees and shrubs were added to the landscape over time, which do not reflect the station's original planting plan and that do not enhance other qualities of the historic designed landscape. Changes have occurred over time, especially as damaged or diseased trees were removed and in some cases, new ones planted. Quite often, new trees were planted in new locations rather than at or adjacent the sites of removed trees, altering the design of the station's vegetation. For example, this is very apparent in the Officers' Housing area where, historically, strongly articulated street-trees lined each curvilinear street. Most of those trees have been removed and new ones planted in a much more random pattern, transforming the appearance of the vegetation in this area.

Vegetation elements that are character-defining features of the historic designed landscape are considered to be the prominent or distinctive aspects of the vegetation that contribute significantly to the physical character of the cultural landscape that were either extant during the period of significance, or have design qualities related to the period of significance. Each feature must retain integrity to be considered character-defining, however, aspects of vegetation may be character-defining features even if they are not original materials, but instead are appropriate replacements.¹⁹⁷ For example, a character-defining feature of the historic designed landscape is the use of low ground cover in the entry mall and BEQ quadrangle in the Administrative Core. Historically, during the period of significance, ice plant was used in this area. Subsequently, the area was planted with grass, which is what remains in the existing conditions. Because ice plant and grass have very similar design qualities – low ground covers that do not obstruct sight-lines – the presence of non-original materials does not exclude this aspect of the vegetation from being character defining.

Many, but not all, of the character-defining features of the vegetation are related to the 1941 planting plan. Elements of the vegetation not included in the planting plan may be considered character defining in cases where the Navy deviated from the planting plan during the period of significance. For example, the planting plan indicates single trees planted at the corners of the large quadrangle in the entry mall (see **Illustration 7**), however, as executed in the early 1940s, small clusters of trees were planted instead (see **Photograph 26**).

Not all vegetation that appears in the 1941 planting plan, and remains in the existing conditions, however, has integrity. The atlas cedars present at three of the four corners of the block

¹⁹⁷ National Park Service, *National Register Bulletin 18*, 7.

containing Building 1 appear on the planting plan and have been present since the period of significance. These trees, however, are not character-defining features because currently they read as corner trees, when in fact they are the three remaining trees in lines of street trees along all four sides of the block, therefore they no longer convey the original design intent.

Vegetation that is not character-defining of the historic designed landscape includes the Chinese elms planted in front of Building 3 in the 1970s, the cypress tree planted in the center of the entry mall, trees planted in the Officers' Housing area after the period of significance, the street trees / shrubs lining the triangular entry drive south of the Main Gate, and vegetation around Building 7. The Chinese elms and the cypress tree both obstruct sightlines that were present during the period of significance (see **Photograph 66**). Replacement trees planted in the Officers' Housing did not follow the original design concept of uniformly spaced street trees. In the case of the poplar trees lining the triangular entry drive, trees were present at this location during the period of significance, however they were not poplars. The poplar trees do not share enough characteristics with the historic trees (likely Black Acacia), and they are spaced much closer together than the historic planting plan, therefore these trees are not considered appropriate replacements and are not character defining of the historic designed landscape (see **Photograph 52** and **Photograph 52**). Vegetation around Building 7, constructed in 1986, does not share the distinctive aspects of the historic planting plan and reflects a later period of landscape design that is not associated with the period of significance. The vegetation around this building is less formal and does not correspond with the deep building setback filled with lawn panels, accentuated with foundation shrubbery and street trees that was presented around adjacent buildings during the period of significance. Neither lawn nor street trees are present at this building.

The planting plan – designed and executed a couple of years after the original station plan – along with the station's first phase of construction represents a concerted effort by the Navy to integrate vegetation into the station design in a cohesive manner. Although little is known about Emery LaVallee, the landscape architect subcontracted to design the planting plan for the station, his designs demonstrate a competent comprehension of the landscape architectural style and design trends of the period, particularly as it shaped the integration of buildings and landscape features. Because the station plan was already in place and construction well under way when the planting plan was designed – as opposed to it being an integral part of the station design from the start – LaVallee's plan was formed in response to the established layout of the station. Much of the planting plan successfully complemented, reinforced, and emphasized the fundamental elements of the station design.

Administrative Area

In the Administrative Core, the planting plan called for single trees to accent the corners of the entry mall, emphasizing its symmetry and highlighting it as a formal space. A bi-chromatic arrangement of ice plant was planned to fill the open space of the entry mall and create a dramatic visual impact (see **Illustration 7**). As executed during the war, clusters of trees, rather than single trees, were planted at the corners of the entry mall, and decoratively arranged ice plant was used as the ground cover for the formal space. At war's end, photographs of the mall show ice plant integrated with unkempt grasses, which illustrates that either the planting plan had not been executed in full or that war time demand reduced the attention that would have been required to maintain the planting plan as had been intended (see **Photograph 31**). Following the war, the planting of the entry mall underwent a series of changes. By the late 1940s, the entry mall had parallel lines of low shrubbery running north-south through both quadrangles in the entry mall, additional shrubbery along the perimeter and trees along the southern edge (see **Photograph 40**). By the mid 1950s, and possibly earlier, most of the ice plant in the entry mall had been replaced with turf. During station replanting in the late 1960s and 1970s, the Monterey cypress tree was planted at the center of the entry mall. This tree interrupts the axial sightlines across the mall, both north to south and east to west, that were characteristic sightlines during the period of significance. The remaining portions of the planting plan present in the existing conditions are the Monterey cypress trees at the northeast and southwest corners of the entry mall (see **Photograph 72**). Although the mall was still planted with ice plant at the end of the period of significance, the turf that replaced it retained some of the design intent by utilizing a low ground-cover that would not interrupt the visual sight-lines created by the open spaces (see **Photograph 150** and **Photograph 151**).

In the planting plan for the BEQ quadrangle, LaVallee created a design that mirrored the uniformity of Buildings 2 and 4, and framed the east-west axis at Building 3. The plan called for paired plantings flanking the paths approaching the building entries (see **Photograph 74**), flanking the entries themselves, and rows of Chinese elms lining the pathway around the interior of the BEQ quadrangle (see **Illustration 9** and **Photograph 76**). The plan also provided for plantings in the concrete planters flanking building entries on Buildings 2 and 4 (and elsewhere on the station). All of these elements of the plan created a uniformity and consistency in the plantings that matched the uniformity and consistency of the design of Buildings 2 and 4. In the corners of the west end of the quadrangle, clusters of Monterey pines were slated to frame Building 3, the visual termination of the east-west axis. The plan also placed pairs Monterey pines flanking the entry paths to the east ends of Buildings 2 and 4, which implied a delineation of space; the pairs of trees served as a passageway to the space. The plan depicted grass (Kikuyu) filling in the open space within the quadrangle and foundation shrubbery against Buildings 2, 3, and 4 (see **Illustration 9**). During World War II, much of the planting plan for the BEQ quadrangle was executed according to design (see **Photograph 8**). Between 1944 and

1945, the west end of the quadrangle was converted to a sporting field, but this did not interrupt elements of the planting plan (see **Photograph 36**). Since World War II, the planting plan in the BEQ quadrangle has retained a relatively high level of integrity. The BEQ quadrangle continued to be planted with grass and used for sports fields (football, baseball, and now soccer).

All of the elements listed above – with the exception of the removal of one of the trees flanking the entry to Building 4 and removal of one of the pines at the southwest corner of the BEQ quadrangle – remain part of the existing conditions and are character-defining features of the historic designed landscape. Foundation shrubbery at the BEQ quadrangle is appropriate to the original design, even though the exact species and extant plantings cannot be confirmed through documentation to have been present during the period of significance.

Other prominent elements of the planting plan that remain in the existing conditions are a pair of rusty leaf fig trees on the north side of the BOQ and three multi-trunk trees (myoporum and mayten) on the southwest side of Building 3 (see **Photograph 79** and **Photograph 80**). LaVallee's placement of the rusty leaf fig trees accentuated both the symmetry of the BOQ building and the symmetry of the D-shaped entry drive. As originally designed, the vegetation plan in the space north of Building 17 also echoed the entry mall; each had a bi-chromatic decorative planting of ice plant, which has now been replaced by low ground cover (see **Illustration 8**). Also, placement of the three multi-trunk trees on the southwest side of Building 3 followed the curve of the drive on that side of the building, and is an example of the planting plan integrating with the siting of the station plan.

Some of the other changes to vegetation in the Administrative Core have been in conjunction with construction that occurred after the period of significance. The planting plan around Building 585, constructed in 1976, is significantly different than LaVallee's planting plan for the original buildings in the Administrative Core. Building 585 has a much deeper setback and consequently has a larger expanse of lawn and has a different palette of plants than used during World War II. Foundation shrubbery is not used around the building and shrubbery that is used is placed away from the building. Building 525, built in 1970, also has a different planting design drawn from a different palette of plants than what was used in the early implementation of station planting. Vegetation at this building is almost entirely confined to the narrow planting strip and planters built into the building and the parking strip on the east side of the building. Vines planted in the building's planters have grown up the exterior of the building, a vegetation feature not used in the original planting plan, or found elsewhere in the Administrative Core. These elements of the vegetation are not character-defining features of the historic designed landscape because they were not present during the period of significance, nor are they additions that are appropriate to the historic designed landscape.

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Photograph 150: 1945, facing Building 1 from the center of the large entry mall.¹⁹⁸



Photograph 151: 2010, facing Building 1 from the center of the large entry mall.

¹⁹⁸ Naval Air Station Alameda, California 1940-1945 photo album, National Archives and Records Administration, Pacific Region, (San Francisco), 27.

Shops Area

Portions of the Shops Area that have retained the characteristic deep setback of buildings planted with lawn and foundation shrubs are character-defining features of the historic designed landscape. These areas include buildings adjoining the primary north-south axis – Buildings 6, 8, 62, and 114 (see **Photograph 94**, **Photograph 95**, **Photograph 96**, and **Photograph 97**) – and buildings on the northwest side of the Shops Area – Buildings 42, 43, 44, and 102. The vegetation around each of these buildings has retained the distinctive aspects of the planting plan found throughout the planted parts of the station. It cannot be determined whether or not the shrubs found at these buildings are original materials, but the shrubs present are appropriate to the design intent of the original planting plan.

Residential / MWR Area

LaVallee's planting plan for the Residential Area of the station strongly reinforced the elements of hierarchical distinction between ranks, and uniformity within ranks that had been laid out in the spatial organization by the station plan. The Officers' Housing was designed with generous areas of lawn, an amenity reserved in the planting plan for this class of housing, and allowed for in the station plan by the placement and wide spacing of the Officers' houses with minimal use of hedges, vines, or ground cover (see **Illustration 14**). The street trees called for in the planting plan, and implemented by January 1942 created a strong sense of order and uniformity within the Officers' Housing (see **Photograph 2**). Most of these trees were removed in the intervening years between the 1960s and the 1980s, and the result is that there is far less order and uniformity present in the vegetation in the existing conditions (see **Photograph 100**). In the absence of these street trees, the lawn filling in the spaces between and around the houses serves as the strongest visual tie to the original design concept that emphasized order and uniformity. The planting plan also emphasized the supremacy of the Commanding Officer's position at the top of the station hierarchy with a densely planted mixed grove of trees wrapping around Quarters A, creating a more private space with a park-like atmosphere. Plans called for a pair of yew trees at the projecting corners of the wall that contained the main entry of Quarters A, giving the entry a formal and symmetrical appearance. The yew tree on the west corner remains in the existing conditions (see **Photograph 108**). Although original planting plans could not be obtained for the CPO Housing, aerial photographs taken during the war show that the planting plan highlighted the quadrilateral symmetry of the CPO Housing area bound by Pan Am Way, Corpus Christi Road, and Pensacola Road. Australian tea trees currently line the parking areas on the east and west sides of the block, and historic photographs indicate that this was the planting arrangement in 1945 (see **Photograph 105**). Although it is unclear whether the trees present at that time were Australian tea trees, the design concept has been maintained. These trees continue to define these matched spaces and convey a sense of symmetry and uniformity within this block of the CPO Housing.

Australian tea trees are also present in a wedge-shaped area northwest of the Officers' Housing. This wedge-shaped area is included in the historic district boundary because it contributes to the separation of the Officers' Housing from the recreation area to the northwest, just as the park to the south of the Officers' Housing separates the area from the CPO Housing. These Australian tea trees provide cover for a water tank (Building 95), keeping it hidden from view from the vantage point of the Officers' Club (Building 60). Available plans also do not indicate the species of trees originally planted at this location, however, planting plans for the nearby Officers' Club do indicate the use of Australian tea trees in that plan. The size of the extant trees at this location and the use of Australian tea trees at Building 60 provide evidence that the extant trees are those that were originally planted to hide Building 95.

Other features of the vegetation in the Residential Area include parking strips, and a small park. Parking strips planted with grass are located throughout the Officers' Housing and CPO Housing areas, between the curb and sidewalk at the front yards (see **Photograph 103** and **Photograph 111**). Other areas of the station, particularly the Administrative Core, featured similar planting strips in the first years of the station, however, some were removed by the end of World War II and others were removed by the end of the 1950s; the planting strips were paved to create widened sidewalks. These secondary sidewalks are narrower in the CPO Housing area than the Officers Housing area. The removal of planting strips throughout the station was likely an accommodation to the increased personnel during the war and/or an effort to decrease maintenance of such features. Foot-traffic would not have increased in the Officers' or CPO Housing areas where the number of houses remained constant during and after the war, and the planting strips were consistent with the more heavily vegetated landscape of the housing area, so this area retained this aesthetic feature of the original design. The spatial division between Officers' and CPO Housing created by the small park east of Pan Am Way was planted with lawn and trees during World War II, which remain present in the existing conditions and is a character-defining feature of the historic designed landscape.

In his planting plan for the station, LaVallee designed a dense line of trees to line the north border of the station along Main Street (see **Illustration 6**). The trees delineated a clear boundary for the station. As designed, and executed during World War II, the line of trees created a visual curtain along the approaching drive to the Main Gate. Upon reaching the curved parking area north of the Main Gate, the line of trees continued around the parking area, only breaking at the sentry house (Building 31). This tree cover served to reserve the visual impact of the entry mall for the moment when visitors passed the sentry house and entered the station. Many of the trees along the north border, particularly the Cypress trees, were removed in the 1970s because they had become infected with a fungal disease. The remnants of this tree line and the cluster of trees immediately east of the parking area at the Main Gate are character-defining features of the historic designed landscape because they retain enough of the shape and

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character of the tree line present in 1945 to convey the original design principle (see **Photograph 77** and **Photograph 78**).

Foundation shrubbery, as noted, was prevalent throughout LaVallee's planting plan for the station. Because it is generally not possible to discern species of shrubbery from historic photographs, it is unknown exactly what types of shrubbery were planted on the station during World War II. Historic photographs, however, do indicate the presence of foundation shrubbery around most buildings included in the planting plan (see **Photograph 152** and **Photograph 153**). Although specific shrubs present in the existing conditions cannot be categorized as character-defining because the historical record does not support their presence during the period of significance, foundation shrubs are appropriate to the historic designed landscape on NAS Alameda.



Photograph 152: 1945. Facing Building 18 from the center of the large entry mall.¹⁹⁹



Photograph 153: 2010. Facing Building 18 from the center of the large entry mall.

¹⁹⁹Building 18, California 1940-1945 photo album, National Archives and Records Administration, Pacific Region, (San Francisco), nd.

Operations Area

In the Operations Area, the Control Tower, Building 77, and the landplane hangars – Buildings 20, 21, and 22 – have deep setbacks and lawn panels, similar to some setbacks in the Administrative Core. These lawn panels are character-defining features of the historic designed landscape (see **Photograph 117** and **Photograph 118**). They were present during the period of significance and are distinctive aspects of the planting plan on NAS Alameda.

Some of the changes in vegetation in the Operations Area include the species selection and style of plant layout around Building 19, which reflects a more recent design character that likely dates to after the historic period of significance. Historic photographs indicate the presence of foundation shrubbery around Building 19; however, the foundation shrubbery as part of the original planting plan is no longer present.²⁰⁰ Although the specific shrubs present cannot be categorized as character-defining because the historical record does not support their presence during the period of significance, foundation shrubs are appropriate to the historic designed landscape on NAS Alameda.

4.2.5 Circulation

The circulation system (including arrangements for both vehicles and pedestrians) was fundamental to the design of the station because of its importance in connecting functional areas, allowing the station to operate efficiently, and articulating the strong axial design plan (see Circulation and Land Use diagrams in **Appendix A2**). Portions of the circulation system that was laid out in the original station plan was primary roadways that organized the core of the station, secondary roadways in the Officers' Housing, the runways and taxiways of the Airfield, and the piers. Elements of the circulation system that are character-defining features of the historic designed landscape are those that organized the station functionally, or had a supportive role to the historic designed landscape and retain sufficient integrity to the period of significance. Historically, the Airfield was an important part of the circulation on the station that was directly associated with the mission of the station. It does not, however, retain integrity to the period of significance because it was heavily altered during expansion for jet aircraft. Not all elements of the circulation that were present during the period of significance are character-defining features because they do not have the distinctive characteristics associated with the station plan. For example, the roads in the southeast and eastern portions of the station are organized in a utilitarian manner with a loose grid pattern and some curved or diagonal roads, and comparatively narrow road widths. The circulation pattern in these areas does not have the distinctive quality of a strong axial alignment that serves as a division between functional areas.

²⁰⁰ "Assembly & Repair Buildings, NAS, Alameda-Sept. 1, 1945," Naval Air Station Alameda, California 1940-1945 photo album, National Archives and Records Administration, Pacific Region, (San Francisco), np.

One of the primary ways the station's original plan elaborated strong axial lines and an orthogonal layout was through the siting of streets and paths, fundamental elements of the circulation patterns on the station. The main thoroughfares on the station tied the functional areas together to create the most efficient circulation patterns possible between different areas of the station. These roadways are Monarch Street, Lexington Street, Saratoga Street, Pan Am Way, West Redline Avenue, West Essex Drive, West Midway Avenue, and West Tower Avenue. The Navy adapted the larger circulation plan for the station to include pedestrian paths. These followed the same orthogonal principals and they emphasize the orthogonal layout of the station in the Administrative Core and Shops Area and provide access from one functional area to another.

Administrative Core

Circulation onto the station began at the north entrance, either at the sentry house (Building 31) or the parking lot just north of the entry for those who needed to stop at the Main Gate (Building 30). The tree line along the north border broke at the sentry house, demarcating this as an access point. The physical space of the parking lot, an exterior space carved into the interior of the base boundary, reflected the function of the space as a place where people transitioned from base outsiders to base insiders (see **Photograph 63**). Building 30 also includes a gate that supports circulation of pedestrians onto the station.

Upon entering the station through the Main Gate, vehicular roadways paralleled the axial layout of the station through the Administrative Core, and portions of the Shops, and Operations areas that were part of the original station plan (and within the historic district). Secondary routes within this area were also laid out orthogonally, in relation to the primary axes. Pedestrian pathways west of Pan Am Way were sited orthogonally, mirroring the alignment of roadways. Prominent paths across the entry mall emphasized the formality and symmetry of the space, and also served the functional purpose of providing for pedestrian circulation across the mall. A wide plaza and shallow steps connect the entry mall to the BEQ quadrangle (see **Photograph 59**). From 1942 to 1944, three paths bisected the BEQ quadrangle, one on the east end, and two in the interior, stretching from Building 4 to Building 2. By September 1945 the easternmost path had been removed to accommodate a conversion of the space to a sporting field. Pedestrian paths led east and west out of the BEQ quadrangle, toward the entry mall, and toward the landplane hangars. Wide paths of consistent width diverged perpendicularly from the east-west pedestrian paths toward the entries to each wing of Buildings 2 and 4. All of these elements of the circulation are character-defining features of the historic designed landscape because they contribute to the efficiency of the functional layout of the original station plan and, particularly in the case of the main roadways, serve as strong spatial organizers.

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The orthogonal circulation pattern in the Administrative Core is accentuated in a few locations with circular or curvilinear roadways and pathways, particularly at the circular walkway in the center of the entry mall and on the north side of Building 17 where a walkway with a centrally located circular area bisects a space formed by symmetrically curved drives. Circular forms are used sparingly in the design of the station and as a result, tend to stand out visually in the landscape. In the entry mall, the circular pathway is used to mark the intersection of the primary axes in the spatial alignment of the station plan. The circulation plan on the north side of BOQ Building 17 echoes the arrangement of the entry mall.

Shops and Operations Areas

During the period of significance, and continuing into the existing conditions, circulation in the Shops and Operations areas is primarily characterized by vast paved spaces with few obstructions. Because few pedestrian walkways were present in these areas, roadways also served as walkways. The apron for the Seaplane Lagoon was converted to Taxiway H for landplane aircraft that taxied from the Airfield to the former seaplane hangars. This alteration in function does not alter the character or diminish the integrity of the former Seaplane Lagoon apron because the distinctive aspects of the area – paved without obstructions – remain the same. This report concludes that the historic district boundary includes the paved space between the west side of the landplane hangars and former taxiway that ran parallel to the landplane hangars because it was a circulation area and physical space directly associated with the landplane hangars and has retained integrity to the period of significance.

Residential / MWR Area

The Residential Area of the station had different circulation needs than the other functional areas of the station. Less traffic, both vehicular and foot, circulated in and out of the Residential Areas, and unlike other parts of the station, required overnight parking accommodations. Historically, access to this area was restricted to officers who lived in the housing, their families, and guests. Because of the lighter traffic flow in and out of the housing areas, roadways were narrower in the residential parts of the station than in the other areas. In the Officers' Housing, parking was provided with attached single-car garages, and on the southwest sides of the streets, along the planted parking strips. CPO Housing did not include garages and instead had two parking lots in the middle of the 1-13 CPO housing area. All of these elements of the historic designed landscape are present in the existing conditions and are character-defining features of the historic designed landscape.

4.2.6 Water Features

Although Alameda is an island, and NAS Alameda is surrounded by water on three sides, the only significant designed water feature on the station is the Seaplane Lagoon. The Seaplane Lagoon is significant for its associations with the station's mission in support of naval aviation during World War II. As discussed in the analysis of the spatial organization, the Seaplane Lagoon was aligned on the primary north-south axis of the station and the structure retains sufficient integrity and is a character-defining feature of the historic designed landscape. The Seaplane Lagoon is fully recorded and evaluated in the Combined Specific Buildings Evaluation / Cold War Era Evaluation Report and is included here as a single resource that is a character-defining feature of the historic designed landscape. This report concludes that the historic district boundary runs north and south along the east and west sides of the Seaplane Lagoon because the lagoon is aligned with the primary north-south axis of the station (see **Photograph 19**). This alignment of the historic district boundary required moving the previous eastern boundary of the historic district at the northeast corner of the Seaplane Lagoon to the west side of Ferry Point Road, rather than the east side.

4.2.7 Structures, Furnishings, and Objects

The historic designed landscape on NAS Alameda includes a few structures, site furnishings, and objects integrated into the landscape. Buildings and structures can sometimes be considered elements of a cultural landscape, but this is not the analytical approach used for this CLR. Instead, most buildings, structures, and objects are addressed in Combined Specific Buildings Evaluation / Cold War Era Evaluation Report. These are resources that the Navy identifies in the Internet Navy Facility Assets Data Store (INFADS), most of which have building numbers. The focus of the analysis of the CLR is identifying the historic designed landscape that contributes to the NAS Alameda Historic District, including assessment of structures, furnishings, and objects that are not otherwise addressed in the Combined Specific Buildings Evaluation / Cold War Era Evaluation Report. In addition, however, it is necessary to discuss elements of the built environment that play a role in the integration of architecture and landscape, which is a significant quality of the historic designed landscape.

Buildings and structures, along with spatial organization and circulation patterns, contribute to the justification for the boundaries of the NAS Alameda Historic District, and are discussed elsewhere in this document. The remaining structures, furnishings, and objects that are character-defining features of the historic designed landscape are all within the historic district boundaries and do not impact the justification of those boundaries.

In the Administrative Core within the historic district, the structures, furnishings, and objects that are character-defining features of the historic designed landscape include permanent planters

flanking the plaza connecting the entry mall with the BEQ quadrangle, trapezoidal-shaped free-standing pots at scattered locations, and light poles in the parking area outside the Main Gate (see **Photograph 59**, **Photograph 87**, and **Photograph 88**). The planters flanking the steps at the plaza between the quadrangles are low rectangular concrete planters that do not obstruct sightlines between the BEQ quadrangle and the entry mall. They provide space for paired plantings to demarcate the connection between the two large quadrangles in the Administrative Core. Smaller trapezoidal-shaped free-standing pots like the ones present in the existing conditions at the south entries of Building 1, were also present during the period of significance and help highlight the integration of buildings and landscape. The smooth concrete surfaces of the planters matched the smooth finish of the exterior of the buildings in the Administrative Core, and were generally used to add vegetation near building entries. The light poles in the parking area help further define this area as an access point to the station, and the decorative, rather than strictly utilitarian, nature of the poles further indicates that the Navy took pride in visitors' first impressions of this station.

In the Residential Area, significant elements of the hardscaping consist of curbed planting beds in the front yards of the Officers' Housing, and shallow foundation planting beds in the front yards of the CPO Housing (see **Photograph 111**). This kind of hardscape element was used as a means of integrating the buildings and the vegetation. Vegetation in the housing area was not merely an afterthought, but rather a planned, integrated part of the station design. These planting beds were present during the period of significance and are character-defining features of the historic designed landscape.

Some structures and elements of the hardscape relate directly to the integration of architecture and landscape, however, because they are built-in parts of buildings, they are treated in the building study, and not individually considered character-defining features of the historic designed landscape. Examples of these are paired planters found in locations throughout the station flanking building entries and built-in benches like the ones found at Buildings 3. The planters represent an effort to combine vegetation with architecture, creating a fully integrated landscape. Benches help define the functions of certain spaces on the station. At Building 3 their location between the Mess Hall and BEQ contributed to the sense that this was a social space on the station.

4.3 Evaluation

4.3.1 Criteria of Significance

4.3.1.1 National Register of Historic Places

The inventory and evaluation of the cultural landscape on NAS Alameda presented in this report and on DPR 523 forms (**Appendix B**) – including identification of the historic designed landscape that is a contributor to the NAS Alameda Historic District – was conducted through application of the significance criteria of the National Register of Historic Places (NRHP) program.

Eligibility for listing in either the NRHP rests on the twin factors of significance and integrity. A property, such as a cultural landscape, must have both significance and integrity to be considered eligible. Loss of integrity, if sufficiently great, will overwhelm historical significance a property may possess and render it ineligible. Likewise, a property may retain integrity, but if it lacks significance, it is ineligible for listing.

Historic significance is judged by applying the NRHP criteria.²⁰¹ The NRHP guidelines direct that a historic resource’s “quality of significance in American history, architecture, archeology, engineering and culture” be determined by meeting at least one of the four main criteria. Properties may be significant at the local, state, or national level under the following NRHP criteria:

- Criterion A: association with events or trends significant in the broad patterns of our history;
- Criterion B: association with the lives of significant individuals;
- Criterion C: a property that embodies the distinctive characteristics of a type, period, or method of construction, represents the work of a master, or that possesses high artistic values;
- Criterion D: has yielded, or is likely to yield information important to history or prehistory

In general, Criterion D is used to evaluate prehistoric sites and archaeological resources. Although buildings, structures, and other features can occasionally be recognized for the important information they might yield regarding historic construction or technologies, the resources within the study area for this project are types that are generally well documented in primary and secondary sources, and are not themselves the primary source of this information.

²⁰¹ The NRHP criteria are in the Code of Federal Regulations, Title 36, Part 60.4.

Certain property types are usually excluded from consideration for listing in the NRHP, but can be considered if they meet special requirements in addition to meeting the regular criteria. The following are the seven Criteria Considerations that deal with properties usually excluded from listing in the NRHP:²⁰²

Consideration A: Religious Properties

Consideration B: Moved Properties

Consideration C: Birthplaces and Graves

Consideration D: Cemeteries

Consideration E: Reconstructed Properties

Consideration F: Commemorative Properties

Consideration G: Properties that have Achieved Significance within the Past
Fifty Years

The inventory and evaluation analysis presented in this report included the application of Criteria Consideration G for portions of the station's landscape built in or modified in 1962 or after. This provided analysis regarding resources that may have achieved significance within the past fifty years and assessed whether such resources are of exceptional importance. In general the military has recognized that there is sufficient historical perspective to evaluate resources for potential significance within the theme(s) of the Cold War. In order for a resource to be considered as having exceptional importance evidence must be presented from scholarly research. Application of Criteria Consideration G for this study took into account the historic context, themes, and methodology for Cold War period properties as presented in the Statewide Study.

The evaluation process requires application of the significance criteria followed by analysis regarding *historic integrity*. Integrity is the ability of a property to convey its significance. Assessment of integrity includes review of extant physical features of resources that are historically significant and of resources that are not historically significant. The assessment of the latter group illustrates that the physical features of those resources have been considered in the conclusions regarding NRHP eligibility. As noted above, a resource must have both significance and integrity to be considered eligible. A resource may retain integrity, but if it lacks significance, it is ineligible for listing.

There are seven factors of integrity: location, design, setting, workmanship, materials, feeling, and association, and these seven can be roughly grouped into three types. Location and setting

²⁰² United State Department of the Interior, National Park Service, "How to Apply the National Register Criteria for Evaluation," *National Register Bulletin 15*, 25, 41-43; "Guidelines for Evaluating and Nominating Properties that have Achieved Significance within the Last Fifty Years," *National Register Bulletin No. 22* (Washington, D.C.: Government Printing Office, 1979, revised 1990 and 1996).

relate to the relationship between the property and its environment. Design, materials, and workmanship of historic properties relate to their construction methods and architectural / engineering details. Feeling and association are the least objective of the seven aspects and pertain to the overall ability of the property to convey a sense of historical time and place. As noted by the National Park Service guidelines, assessment of integrity can sometimes be a subjective judgment, but it is always be grounded in an understanding of a property's physical features and how they relate to its significance in terms of where, why and when a property is significant. Only those properties that retain most of these aspects of integrity – and also have historic significance – are eligible for listing in the NRHP.²⁰³

By their nature cultural landscapes contain elements, notably vegetation, which change with time. Consequently, the analysis of historic integrity takes this into account. The integrity of character-defining features, historic features which defined the landscape, is required. Character-defining features are those tied to and help convey the significance of the historic property. For example, vegetation would be a character-defining feature of a landscape significant for an exemplary planting plan or for the introduction of new species, but vegetation may not be a character-defining feature of a landscape significant for its spatial organization or layout. Only those properties that retain most aspects of integrity for their character-defining features – and also have historic significance – are eligible for listing in the NRHP.

4.3.2 California Register of Historical Resources

The analysis in this CLR also included application of the criteria of the California Register of Historical Resources (CRHR), which is largely based upon the criteria and guidelines of the NRHP program. Like the NRHP, eligibility for listing a resource in the CRHR rests on the twin factors of significance and integrity. A property, such as a cultural landscape, must have both significance and integrity to be considered eligible. Loss of integrity, if sufficiently great, will overwhelm historical significance a property may possess and render it ineligible. Likewise, a property may retain integrity, but if it lacks significance, it is ineligible for listing.

The criteria for listing properties in the CRHR are in Section 15064.5(a)(2)-(3) of the CEQA Guidelines, which provide the criteria from Section 20524.1 of the California Public Resources Code. The CRHR is in the California Code of Regulations Title 14, Chapter 11.5. According to this code, properties eligible for listing in the NRHP are automatically eligible for listing in the CRHR. The CRHR criteria are largely based on the NRHP which are codified in 36 CFR Part 60 and explained in guidelines published by the Keeper of the National Register.²⁰⁴

²⁰³ National Park Service, *National Register Bulletin 15*, 44.

²⁰⁴ The most widely accepted guidelines are contained in the "Guidelines for Applying the National Register Criteria for Evaluation," *National Register Bulletin 15* (Washington D.C.: US Government Printing, 1991, revised 1995 through 2002).

The CRHR criteria closely parallel those of the NRHP. Each resource must be determined to be *significant* at the local, state, or national level under one of four criteria (paraphrased below) in order to be determined eligible:

- Criterion 1: Resources associated with important events that have made a significant contribution to the broad patterns of our history.
- Criterion 2: Resources associated with the lives of persons important to our past.
- Criterion 3: Resources that embody the distinctive characteristics of a type, period, or method of construction, or represents the work of a master.
- Criterion 4: Resources that have yielded, or may be likely to yield, information important in prehistory or history.²⁰⁵

The CRHR definition of integrity and its special considerations for certain properties are slightly different than those for the NRHP. Integrity is defined as “the authenticity of an historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The CRHR further states that eligible resources must “retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance,” and the CRHR lists the same seven aspects of integrity used for evaluating properties under the NRHP criteria.²⁰⁶ The CRHR’s special considerations for certain properties types are limited to: 1) moved buildings, structures, or objects; 2) historical resources achieving significance within the past fifty years; and 3) reconstructed buildings.

4.3.3 Summary Evaluations of Cultural Landscape on NAS Alameda

Inventory and evaluation of a potential cultural landscape on NAS Alameda has identified a historic designed landscape that is a contributing element to the NAS Alameda Historic District. Like the buildings and structures that are contributing elements of the historic district, the historic designed landscape is significant at the state level under NRHP Criterion A / CRHR Criterion 1 and NRHP Criterion C / CRHR Criterion 3. The historic designed landscape is significant for its association with naval air station development in the 1930s, development of naval facilities in the San Francisco Bay Area during World War II, and the station’s role in supporting the Navy’s operations in the Pacific Theater during World War II. This report concludes that that the historic district should include the historic designed landscape as a contributing element. The proposed boundaries have been established by taking into account

²⁰⁵ California Public Resources Code, Sections 4850 through 4858; California Office of Historic Preservation, “Instructions for Nominating Historical Resources to the California Register of Historical Resources,” August 1997.

²⁰⁶ California Public Resources Code, Title 14, Chapter 11.5, Section 4850 et seq.

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areas of the station's landscape that have historic significance and that retain sufficient historic integrity to convey significance within the historic district's period of significance, 1938-1945.

The historic designed landscape that is a contributor to the NAS Alameda Historic District does not appear to be significant under Criterion B / Criterion 2 because it does not have important direct association with one or more historically significant persons from the pre-World War II / World War II period and it has not yielded, nor is it likely to yield, information important to history in a manner that would make it significant under Criterion D / Criterion 4.

The full evaluation of the historic designed landscape is provided below and on DPR 523 forms located in **Appendix B**.

Besides the historic designed landscape that is a contributor to the NAS Alameda Historic District, no other NRHP or CRHR-eligible cultural landscape has been identified on NAS Alameda. Based on recordation of existing conditions and historical research conducted for this report, there are three factors regarding this conclusion regarding potential cultural landscape on NAS Alameda that are not part of the identified historic designed landscape.

Firstly, no element or area of the landscape on NAS Alameda is significant as a resource that individually appears to meet the criteria for listing in the NRHP / CRHR. The resources that are NRHP / CRHR eligible are like the buildings and structures that are contributors to the historic district, as discussed in the Combined Specific Buildings and Cold War Evaluation Report. The NAS Alameda Historic District is a significant and distinguishable entity whose components lack individual distinction, but which comprise an important concentration and continuity of buildings, structures, objects, and landscape features that are united historically and aesthetically by overall plan and physical development.

Secondly, areas of the station outside the boundary of the historic district are not eligible for listing in the NRHP / CRHR as part of the historic designed landscape or as any other category of cultural landscape. Some areas outside the historic district share some of the historical associations related to NAS Alameda's significance related to the station's initial development and use during World War II, but these areas do not retain sufficient historic integrity to convey that significance.

Some landscape elements and areas of the station appear to meet the criteria for their association and importance under NRHP Criterion A / CRHR Criterion 1 and NRHP Criterion C / CRHR Criterion 3. This potential significance is with, and as a possible expression of, the strategic development of naval air stations in the 1930s, development of naval facilities in the San Francisco Bay Area during World War II and for its important associations with the station's role in Pacific Theater naval operations during World War II. Like the resources within the historic

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district, resources outside the historic district do not appear to be significant under Criterion B / Criterion 2 because none have important direct association with one or more historically significant persons from the pre-World War II / World War II period and it has not yielded, nor are they likely to yield, information important to history in a manner that would make it significant under Criterion D / Criterion 4.

Under NRHP Criterion A / CRHR Criterion 1, and as discussed in more detail below, the landscape on NAS Alameda is noted as a designed landscape that follows military traditions of master planning that stressed hierarchical and functional qualities. The landscape's organizational features integrated sea and land aircraft operations and maintenance that supported the increased focus on the Navy's aircraft carrier strategy of the 1930s, along with improved facilities for personnel, which demonstrates the importance of this facility and the value the Navy was placing in the 1930s on aviation as part of its strategic development for the Pacific Fleet. This was further emphasized as completion of the station was sped up and successfully used by the Navy in its role during World War II and the new air station was an important component of fleet support for naval air power and strategic operations during the war. Under Criterion C / CRHR Criterion 3, also discussed in further detail below, the landscape on NAS Alameda illustrates a design that was a successful integration of military traditions and practices influenced by civilian landscape architecture and community planning design trends of the early twentieth century. The design's strong orthogonal and symmetrical Beaux Arts style plan included integration and organization of its various functions and expressions of military cultural traditions. Much of its significance is derived from the careful arrangement of spatial organization, land use configuration, views and vistas, and circulation, along with the integration of architecture and landscape, use of Moderne style architecture, and a traditional and orderly style planting plan, which together demonstrate the Navy's distinct efforts to provide a modern facility in support of aviation as part of its strategic development for the Pacific Fleet. As noted, the station's completion was sped up and successfully used by the Navy in its role in the Pacific Theater during World War II; the flexibility of the spatial organization and functional layout enabled the station to rapidly expand to serve and support this important wartime activity.

The areas outside the historic district that do not retain sufficient historic integrity include the Airfield, waterfront operations area at the piers, and the east side of the station from the family housing area on the north to the recreation facilities at the southeast corner of the station.²⁰⁷ The Airfield has association with the station's original spatial design and layout, as well as the station's role during World War II. All other areas outside the historic district have association with use of the station during World War II, many of which included secondary functions that were not placed within the formal hierarchal planning of the station's major functions. These

²⁰⁷ The historic evaluation of NAS Alameda does not include the "TERM-1" parcel that encompasses a portion of the Breakwater, Pier No. 3, Wharf No. 2, and the shoreline adjacent to Dock No. 5. Historically, the Navy leased this parcel from the City of Alameda and the lease has ended.

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areas were laid out in utilitarian manner that lacked the design qualities of the orthogonal and functional layout of the core part of the station and included functions placed away from more densely occupied portions of the station for safety requirements. These areas do not have a potential role in illustrating the station's orthogonal and symmetrical landscape layout and design. The landscape features in the Airfield, waterfront operations areas at the piers, and on the east side of the station generally do not have the physical features that relate to or convey the significance described above, and even though they retain their integrity of location, they lack elements of the other aspects, including design, setting, materials, workmanship, feeling, and association.

The Airfield was greatly altered when it was converted for use by jet aircraft in the 1950s, and while some features of the original Airfield are present, such as portions of the original runways, the changes to the area greatly modified the design, materials, and workmanship of the original design and the ability for that portion of the station to illustrate its symmetrical layout to the rest of the station and to convey its significance during World War II operations. Similarly, the waterfront operations at and near the piers also have some components that were present during World War II, including the three pier layout and general openness of the area. The design, setting, materials, and workmanship were all compromised as this portion of the station was modified, particularly in the 1960s and 1970s, to accommodate larger ships and different ship maintenance procedures during the latter half of the twentieth century. The landscape on the east side of the station has the least integrity to the World War II period, having lost much of the setting, design, materials, and workmanship that was present during the war. The 1960s family housing almost completely replaced the temporary style barracks that were part of the station's war time build-up. There are also additions to the landscape along the east side of the station that include many new buildings from the 1950s to the 1980s, landscaping / planting changes at the east gate in the 1970s, and addition of MWR facilities, such as the Fleet Recreation Center at the south end of the station built in the 1970s, which replaced space that had been occupied by aircraft parking during the war, or the soccer fields that replaced the World War II Homoja that was demolished in the 1960s. The east side of the station also has association with the A&R Department (later O&R / NARF), particularly in the area on the east side of the Seaplane Lagoon. As noted, the area lacks distinctive design qualities that are present within the historic district, multiple World War II-era buildings and structures in the area have been demolished or greatly altered, and it includes multiple new buildings from the 1950s to 1980s, all of which diminish the area's integrity of setting, design, materials, and workmanship. The lack of integrity of setting, design, and workmanship in all these areas greatly decreases the ability of these areas to present a sense of the time and period that are the aspects of integrity of feeling and association.

Thirdly, the history of the station during the Cold War illustrates that the historic district, its contributing elements including the historic designed landscape, and other components of the

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former NAS Alameda facility outside the historic district, had no direct or important associations with historically significant Cold War Era themes.

The evaluation of resources on NAS Alameda within the context of the Cold War, including examination of potential cultural landscape, took into account the Statewide Study, which presents important Cold War themes. Within the Statewide Study, Cold War themes fall within two general categories: the “high technology” themes that define much of the significance of the achievement of California military bases during this period; and the more routine thematic areas, such as training and support, which have typified the role of California military installations for more than a century. Within the “high technology” themes, the sub-themes are: weapons research and development, weapons and aircraft testing and evaluation, early warning systems and electronic warfare, strategic nuclear capabilities, intercontinental and anti-ballistic missile installations, and man in space sites. Examples of NRHP-eligible Cold War military properties in California under these sub-themes include: Michelson Laboratory at Naval Air Weapons Station China Lake; Test stands of the Air Force Research Laboratory at Edwards Air Force Base (AFB); and Atlas, Titan, Minuteman, and Peacekeeper launch facilities at Vandenburg AFB. The emphasis on non-routine, leading edge technology, while consistent with the requirements to establish exceptional significance, can lead to a biased presentation of the history of the military during this period. The vast majority of men and women who served in the military during the Cold War, as well as the majority of civilian employees at California bases, were involved with so called “routine” functions. The use of the term “routine” does not imply that these people were not doing vital or crucial work. Rather, the emphasis upon non-routine leading-edge developments is pursued in recognition of the historically significant aspects of Cold War-era history, as well as the higher burden of proof that is required in determining NRHP eligibility for properties that may have achieved significance during the last 50 years. Within the Cold War themes, routine sub-themes include: support for troops overseas, total Army and Navy coordination of Regular Forces, Reserve, and National Guard, and a separate theme of military architecture of the Cold War era. At the time of publication of the Statewide Study in 2000, no military properties within the sub-themes of support for military personnel overseas and total Army and Navy coordination of Regular Forces, Reserve, and National Guard, had been found to be eligible to qualify for listing in the NRHP.²⁰⁸

NAS Alameda continued to support carrier operations in overseas conflicts, and other overseas operations, during the Cold War era, as well as its main function of aircraft overhaul and repair, but the station did not play an important direct role in advancement of military research, testing, development, or evaluation of aircraft or weapons systems, which constituted the historically significant themes of naval missions and activities during that time. The historical record did not

²⁰⁸ JRP Historical Consulting Services, “Historic Context: Themes, Property Types, and Registration Requirements,” Volume 3, *California Historic Military Buildings and Structures Inventory*, 8-1 to 8-60.

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illustrate a direct link between specific development, building / structure construction or alteration, shift in station planning, or alteration to components of the landscape tied to specific operations. Cold War resources on NAS Alameda, including components of its landscape, served general support functions for the fleet and its personnel. The history of the station during the Cold War, therefore, illustrates that neither the historic district, nor its contributing elements, nor any other components of the former NAS Alameda facility, had direct or important associations with historically significant Cold War-era themes.

None of these facilities played an important role in the technological advancements that were historically significant during the Cold War, nor did they play a historically significant role in Navy operations overseas; rather, NAS Alameda performed functions in support of operations similar to those undertaken at other air stations and naval facilities around the nation.²⁰⁹ Furthermore, none of the individual landscape features constructed during World War II gained significance simply because they were utilized during NAS Alameda operations and functions during the Cold War period.

No areas of the station's landscape evaluated within the context of the Cold War, therefore, meet the criteria for listing in the NRHP or CRHR because they do not have direct or important associations with either the important events or trends of that era (NRHP Criterion A / CRHR Criterion 1), or an historically significant individual of that era (NRHP Criterion B / CRHR Criterion 2). These landscape features and areas of station do not exemplify important types, periods, or methods of construction of the Cold War era (NRHP Criterion C / CRHR Criterion 3), nor are they likely to reveal important historical information about that period (NRHP Criterion D / CRHR Criterion 4). None of the landscape on NAS Alameda has historic significance within the Cold War period of operations or functions of the station. This applied to landscape features considered individually on NAS Alameda, as well as to any potential collection of landscape features on station designed or built during the Cold War period. The lack of significance of the station during the Cold War in general, and of the separate landscape features on NAS Alameda, supports the conclusion that a distinguishable entity that has a significant concentration, linkage, or continuity of resources for a Cold War-era historic district does not exist on this facility.

Furthermore, some components of landscape on NAS Alameda were designed and installed after 1962 and are less than fifty years old. These resources were not only subject to the thresholds of significance described above, but were also subject to NRHP Criterion Consideration G for properties less than fifty years old, and the similar special consideration under CRHR. NRHP guidance dictates that properties less than fifty years old can only be eligible for listing if they: 1) meet one or more of the NRHP criteria of significance; 2) retain historic integrity; and 3) are of

²⁰⁹ JRP, "Historic Context: Themes, Property Types, and Registration Requirements."

“exceptional importance,” the latter of which would require sufficient historical perspective and scholarly research to consider and provide an extraordinary level of significance. Resources on NAS Alameda dating to post 1962 fall within the context of the Cold War, and were evaluated for potential important associations within this context. While NAS Alameda served a vital support function during the Cold War era and there is sufficient historical perspective to evaluate these resources, none of these facilities rose to the level of exceptional importance as required to meet NRHP Criterion Consideration G (and similar CRHR special consideration).

4.3.4 Discussion of Cultural Landscape on NAS Alameda in Previous Reports

The Navy concluded that the NAS Alameda Historic District was NRHP eligible based upon Sally Woodbridge’s 1992 report, which focused on the station’s buildings and structures, but the report also mentioned that the historic district included features of the designed landscape, although the features were not identified as contributing elements of the historic district. Major streetscape and landscape elements of the NAS Alameda Historic District were further discussed in the 1997 “Guide to Preserving the Character of the Naval Air Station Alameda Historic District,” prepared by Stephen Mikesell of JRP Historical Consulting Services. Neither of these reports, however, addressed the designed landscape elements as representing “cultural landscape.” Neither report formally evaluated the cultural landscape (historic designed landscape), its character-defining elements, or provided a comprehensive identification of historic designed landscape features. No specific determination of NRHP eligibility was previously concluded about cultural landscape / historic designed landscape features on NAS Alameda.

The original historic district significance discussion in the 1992 evaluation included selected aspects of what is being identified as part of the historic designed landscape:

The major finding was that, although no buildings were found to be individually eligible for listing on [sic] the National Register of Historic Places, an historic district comprising the permanent and non-permanent buildings, open spaces, and street system in the central core of the naval air station and the officer housing adjacent to the core was identified. Under Criterion A of the National Register Criteria for Evaluation, the contextural [sic] theme of the district is the development of U.S. Navy bases in the San Francisco Bay Area for World War II; the period of significance is 1938-1945. The integrity of the district is high with few non-contributing structures in contrast to the rest of the base, which has changed considerably since World War II and no longer conveys a strong impression of the naval air station in the period of significance.

...The triangular and quadrangular open spaces that stretch from Main Gate on the north side of the base southward to the Main Administration Building, and the

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east quadrangle formed by Buildings 2, 3, and 4 contribute importantly to a dignified and gracious introduction to the base

...Under Criterion C, the buildings in the historic district have a continuity of style and a high degree of architectural integrity enhanced by the retention of landscaping and parklike open spaces.²¹⁰

Woodbridge's comments on what is being defined in this CLR as features of the historic designed landscape are limited to highlighting the importance of the entry mall and BEQ quadrangle, along with less defined "parklike open spaces" and the street system as important elements of the historic district. She also indicated that the areas of the station beyond the historic district boundaries lacked historic significance and/or historic integrity.

The 1997 Mikesell / JRP report recognized the significance of the Navy's master planning for the station. The report identified and noted as important aspects of NAS Alameda's design the entry mall, BEQ quadrangle, views along the hangars, and the parklike division between the two housing areas, as well as contrasted the layout of the Officers' Housing and CPO Housing. Mikesell noted the open spaces between and among the contributing buildings of the historic district and that the buildings were arranged in a formal plan, built around strong axes that intersect at key buildings. He said that the layout of the historic district was as much a part of the plan for the station as the architectural design for the buildings and that the layout provided "some symbolic meaning, providing focus" for important buildings that accentuated their architectural character. The report identified the layout of the station as an "orthogonal" plan to describe the strong, straight lines that define the placement of buildings, streets, and landscape elements. Mikesell identified several prominent and defining linear organizational elements, including the north-south axis that bisects the entry mall, which he referred to as "by far the most dramatic element of the plan of NAS Alameda" that "offers a dramatic view and frames the important buildings along it." Also, he recognized the east-west axis from Building 3 that flanks the less formal recreational space at the BEQs. He noted, however, that this axis ended at Saratoga Street on the east side of the entry mall (instead of where West Essex Drive and Pan Am Way intersect). He also remarked upon the strong edges and "dramatic vistas" along, and defined by, the landplane and seaplane hangars. Mikesell observed the non-orthogonal edges and curving streets in the Officers' Housing area that were juxtaposed to the orthogonal areas of the station, which he recognized as having similarities to affluent civilian suburban residential tract development, as well as the narrow setback and straight streets of the CPO housing area and the small park area dividing the Officers' Housing area from the CPO Housing area.²¹¹

²¹⁰ Sally B. Woodbridge, "Historic Architectural Resources Inventory for the Naval Air Station, Alameda," (1992), 1-2, 11-12.

²¹¹ Mikesell (JRP Historical Consulting Services), "Guide to Preserving the Character of the Naval Air Station Alameda Historic District," 85-90.

Limits to the analysis in the 1997 report include the description of the axis that stretches eastward from Building 3 as not including the distinct extension of that axis along West Essex Drive. The report also did not compile information on vegetation and overstated the contributing nature of the station's mature landscaping by stating that "common sense dictates that these mature landscape elements should always be considered part of the character-defining qualities of the historic district, because they add to the historical sense of the area, the sense that the area has been occupied and use (sic) for many years." This conclusion about the vegetation provides challenges regarding treatment and was not based upon historical research / documentation, nor the opinion or survey of a landscape architecture professional, so it does not sufficiently define the qualities of the vegetation that are historically significant and are character-defining features of the historic designed landscape.²¹²

4.3.5 Evaluation of the Historic Designed Landscape as Contributor to the NAS Alameda Historic District

Inventory of existing conditions of NAS Alameda, review of previous historic resources reports regarding NAS Alameda, and extensive historical research conducted for this CLR lead to the conclusion that there is a historic designed landscape that is a contributing element to the previously identified NAS Alameda Historic District. A "historic designed landscape" is a category of cultural landscape. As noted in Section 2, the NPS defines "historic designed landscape" as:

. . . a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person, trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.²¹³

This definition largely focuses on the significance of a historic designed landscape under NRHP Criterion C / CRHR Criterion 3, for importance under the NPS established theme of landscape architecture as well as (potentially) the theme of community planning and development. *National Register Bulletin 18* also notes that historic designed landscapes can be significant for association with important historical events and trends related to other historical themes established by NPS. Established historical themes include the military. This is further emphasized in the USACERL's guidelines for documenting and evaluating historic military

²¹² Mikesell (JRP Historical Consulting Services), "Guide to Preserving the Character of the Naval Air Station Alameda Historic District," 85.

²¹³ National Park Service, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, 1996. The current edition of these guidelines is available online at <http://www.nps.gov/tps/standards/four-treatments/landscape-guidelines/organization.htm>.

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landscapes.²¹⁴ NAS Alameda's historic designed landscape is significant under both NRHP Criterion A / CRHR Criterion 1 and NRHP Criterion C / CRHR Criterion 3.

This historic designed landscape is not individually significant, but rather is similar to other buildings and structures that are contributors to the historic district. The district, as discussed in the Combined Specific Buildings and Cold War Evaluation Report, is a historically significant and distinguishable entity whose components lack individual distinction, but which comprise an important concentration and continuity of buildings, structures, objects, and landscape features that are united historically and aesthetically by overall plan and physical development. The identification and analysis of the historic designed landscape on the station concludes that the historic district should include the historic designed landscape as a contributing element.

Under NRHP Criterion A / CRHR Criterion 1, the historic designed landscape on NAS Alameda is a contributing element to the NAS Alameda Historic District because of its important association with, and as an expression of, the strategic development of naval air stations in the 1930s, development of naval facilities in the San Francisco Bay Area during World War II, and for its important associations with the station's role in Pacific Theater naval operations during World War II. Under the historical theme of military, highlighting the important components of national defense, NAS Alameda is significant as one of the major naval air stations constructed in the years prior to World War II in response to national defenses demands in the Pacific Ocean and on the West Coast. NAS Alameda was the only one of the three air stations built on the West Coast that was completely new construction.

Navy architects and planners consciously designed, laid out, and established NAS Alameda following military traditions of master planning that stressed hierarchical and functional qualities. The historic designed landscape's organizational features that integrated sea and land aircraft operations and maintenance that supported the increased focus on the Navy's aircraft carrier strategy, along with improved facilities for personnel, illustrates and provides a direct link to the naval strategy of the mid to late 1930s for expanded facilities to serve the Pacific Fleet that were to increase efficiency and functionality for naval aviation in support of the military's mission of that period. The Navy's extensive attention to detail in the plan and execution of this major station, including the components of the historic designed landscape, demonstrates the importance of this facility and the value the Navy was placing on aviation as part of its strategic development for the Pacific Fleet. This level of consideration was further emphasized as completion of the station was sped up and successfully used by the Navy in its role during World War II, wherein the new air station was an important component of fleet support for naval air power and strategic operations centered around aircraft carriers. Thus, the historic designed

²¹⁴ *National Register Bulletin 18*, 6; *National Register Bulletin 16A*, 41; USACERL, "Guidelines for Documenting and Evaluating Historic Military Landscapes: An Integrated Landscape Approach," 23-24, 45, and 50-51.

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landscape is importantly associated with, is an expression of, and provides a direct link to NAS Alameda support of a central and vital role in the Pacific Theater during World War II.

Under Criterion C, the historic designed landscape within the NAS Alameda Historic District is significant under historical themes of military, landscape architecture, and community development and planning. As noted, Navy architects and planners consciously designed and laid out NAS Alameda. They did so following established design principles in a recognized style / tradition, following military practices of the period. The military traditions and practices followed were influenced by civilian landscape architecture and community planning design trends of the early twentieth century. The historic designed landscape on NAS Alameda illustrates an important and highly successful integration of these practices that resulted in an outstanding functional military installation with high aesthetic value.

Navy architects and planners designed NAS Alameda as one of a series of stations designed prior to the war that had similar functional layouts and organization following master planning principles that have been called “total base design.” The design of NAS Alameda integrated a strong Beaux Arts style plan – that was fundamental to the station layout – with assiduous attention to the integration and organization of its various functions. Also integrated into the station design were expressions of military cultural traditions of hierarchy, uniformity, and order, expressed on a large scale in the siting of the landplane and seaplane operations along the primary axes, precisely laying out spaces and buildings symmetrically, and, at a smaller scale, with details such as evenly spaced trees that conveyed a sense of order and uniformity. By the 1930s, the military had integrated Beaux Arts style civilian community planning concepts that had been highly influential in the early twentieth century City Beautiful Movement to refine and enhance efficiency and functionality of its major facilities. NAS Alameda’s careful arrangement of spatial organization (bilateral symmetry / orthogonal layout), land use configuration, views and vistas, and circulation, along with the integration of architecture and landscape, use of Moderne style architecture, and a traditional and orderly style planting plan, demonstrate the Navy’s distinct efforts to provide a modern facility in support of aviation as part of its strategic development for the Pacific Fleet. The station plan clearly expressed the primacy of the mission in support of Navy aviation with the alignment of the primary operational components, the landplane and seaplane operations, along the primary station axes, and by designing sightlines that connected the Administrative Core to those areas. Refined details in station vegetation, structures, and objects further support the importance placed on the design. Integration of buildings and landscape was an important principle in the field of landscape architecture in the early twentieth century, and LaVallee’s planting plan integrated vegetation into the extant station plan in a manner that emphasized and mirrored elements of the overall station plan. The Navy’s appropriation of valuable land created with fill to wide open formal spaces at the center of the station designed to make an aesthetic impact upon entry reflects both the investment and pride in the station.

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The Navy's extensive attention to detail in the plan and execution of this major station, along with the importance placed on aesthetic enhancements in the architecture and integration of landscape and buildings, demonstrates the importance of this facility and the value the Navy was placing on aviation as part of its strategic development for the Pacific Fleet. This level of consideration was further emphasized as completion of the station plan was sped up and successfully used by the Navy in its role in the Pacific Theater during World War II, wherein the new air station was an important component of fleet support for the strategic operations centered around aircraft carriers. The flexibility of the spatial organization and functional layout enabled the station to rapidly expand to serve and support this important wartime activity.

The station does not, however, have significance as the important work of a master as neither the designers at BuDocks, Emery LaVallee, or any of the builders of NAS Alameda have been recognized for greatness in their respective field. The station also does not articulate its design plan in a manner that it fully expresses an aesthetic ideal and thus does not have significance for possessing high artistic value.

The historic designed landscape that contributes to the NAS Alameda Historic District is significant and it retains sufficient historic integrity to convey that significance. It has the physical features that relate to its significance, and it retains elements of all aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Much of the historic designed landscape's design intent and setting, reflected in the station layout and refined details remains intact. While functions of buildings have changed, the essential land use pattern from the period of significance can still be understood. Changes to the historic designed landscape include the replacement in kind of materials such as vegetation and paving, as well as additions to the built environment and vegetation. These alterations and additions have changed the station over time, however, both large-scale character-defining features of the historic designed landscape such as the spatial organization, land use configuration, circulation patterns, and integration of architecture with the landscape, as well as small-scale character-defining features such as the important structural details, objects, and features of the vegetation, provide one an understanding of the station's historical associations and design significance. This provides comprehension of the workmanship inherent in the station's design along with the aesthetic and historic sense of district's period of significance and a direct link to the important events of that time. The boundaries of the NAS Alameda Historic District, discussed below, were drawn to exclude areas of the station that lack historic integrity.

The character-defining features of the historic designed landscape are presented on the table in Section 5. For a full understanding of the character-defining features in any given functional area, readers should consult the diagrams and character-defining features lists provided in **Appendix A2** in tandem with the relevant subsections in Section 4.2 and in the DPR 523 form in **Appendix B**.

4.3.6 Boundary of the NAS Alameda Historic District (including the historic designed landscape)

The boundary of the NAS Alameda Historic District is as follows. The northern boundary of the historic district extends east from the parking area adjacent to the Main Gate along the northern edge of the station on Main Street and then south to the north edge of the landscape area around Building 95. The boundary line extends east to the northwest side of where San Pedro Road meets Barbers Point Road. The line extends northeast along the northern side of Barbers Point Road, heads southeast along the east side of Pearl Harbor Road, and then southwest on the east side of Essex Drive. The boundary encompasses a portion of the lawn on the east side of Quarters A's driveway and follows the fenced yard of Quarters A southeast, nearly to Lemoore Road, then southwest nearly to Pensacola Road. The line then encompasses the yard of Chief Petty Officer housing unit 7 and continues east along the northern edge of the yards of Chief Petty Officer housing units 25-29. The boundary then turns south, crossing Corpus Christi Road, and then west along the back yards of Chief Petty Officer housing units 14-24. Upon reaching Pan Am Way, the line extends south along the east side of Pan Am Way, deviating south of Midway Avenue to include Building 35. The boundary then continues along the east side of Pan Am Way following the southern edge of the curve as Pan Am Way transitions to Ferry Point Road. The line continues south along the west side of Ferry Point Road moving further west at a point south of Atlantic Avenue to exclude the parking adjoining the road. At the northern edge of Pier 1, the boundary turns west excluding the pier, but includes the jetties forming the southern edge of the Seaplane Lagoon. The line extends up the west side of the Seaplane Lagoon, jogs to the west on the north edge of Taxiway "H" and continues west from Monarch Street toward the Airfield to encompass Building 19. The boundary extends north along the east side of Taxiway "E" to the northern edge of Building 20 and heads east along the northern edge of Red Line Avenue and heads north, encompassing the landscaped area adjacent to Lexington Avenue and along the west edge of Building 30 including the associated parking lot north of the Main Gate.

5. INVENTORY AND EVALUATION TABLE

Character-Defining Features by Area

Reference numbers listed in the following table are shown on Character-Defining Features diagram in **Appendix A2**. Area numbers noted correspond to the maps used for the diagrams in Appendix A. The area divisions (Area 1, Area 2, and Area 3) are not related to analytical aspects of the diagrams, such as the functional areas.

Feature #	Area 1 Map	Feature #	Area 1 Map	Feature #	Area 1 Map
	<i>Administrative Core</i>				
<u>Spatial Organization</u>		<u>Vegetation</u>			
1	Bi-laterally symmetrical entry mall with north-south axis between Buildings 1 and 31	12	Monterey cypress east of Main Gate and along north border	29	Symmetrical, curved drives at Building 17
2	East- west axis at the center line of West Essex Drive and the BEQ quad	13	Specimen Monterey cypress at corners of entry mall	30	Matched wide paths approaching each wing of Buildings 2 & 4
3	Bi-laterally symmetrical BEQ quad	14	Rows of Chinese elms at BEQ quad		
4	Bi-laterally symmetrical entry drive at north end of entry mall	15	Pairs of Brush Cherries at Building 2 & 4 entries of BEQ quad	<u>Water Features</u>	
5	Landscaped courtyards enclosed by buildings on three sides	16	Two groups of Monterey pines at west end of BEQ quad		None
6	Deep setback of buildings planted with lawn and shallow foundation shrub beds	17	Paired Yews at the west end of the BEQ quad		
Non-Mapped	Orthogonal layout of roads, buildings, and paths	18	Black pines flanking path approaching east end of Building 2 and on south side of path approaching east end of Building 4	<u>Structures, Furnishings & Objects</u>	
Non-Mapped	Integration of architecture and landscape	19	Expanse of low ground cover with trees and few or no shrubs at entry mall and BEQ quad	31	Planters flanking entry mall and BEQ quad
		20	Three multi-trunk trees - myoporum and mayten – west of Building 3	32	Paired, free-standing pots used throughout area
<u>Views and Vistas</u>		21	Pair of Rusty leaf fig trees north of BOQ (Building 17)	33	Light poles in parking area outside Main Gate
7	Views south at the entry mall	22	Lawn and foundation shrubs in deep setback of buildings	Non-Mapped	Integration of architecture and landscape
8	Views along east-west axis of BEQ quad and West Essex Drive				
9	Views south along Lexington and Saratoga streets from entry mall to Seaplane Lagoon	<u>Circulation</u>			
10	Views of Oakland north along Lexington and Saratoga streets	23	Main Gate parking and waiting area		
11	Panoramic views from corner of Red Line Avenue and Monarch Street	24	Prominent paths across the entry mall		
		25	Paths in the BEQ quad		
<u>Topography</u>		26	Orthogonal path alignment west of Pam Am Way		
Non-Mapped	Flat, with gentle slope at steps connecting entry mall and BEQ quadrangle	27	Symmetrical, wide plaza, and shallow steps that connect the entry mall and the BEQ quad		
		28	Central path with circle of planting at Building 17		

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Feature #	Area 1 Map	Feature #	Area 1 Map	Feature #	Area 1 Map
	<i>Shops Area</i>	<u>Structures, Furnishings & Objects</u>	Integration of architecture and landscape	<u>Vegetation</u>	
<u>Spatial Organization</u>				48	Lawns planted throughout and minimal use of hedges, vines, or ground cover.
34	Continuing north-south axis through Building 1, Building 39, and Seaplane Lagoon		<i>Residential / MWR Area</i>	49	Officers' houses surrounded by generous areas of lawn
35	Deep setback of buildings with lawn and foundation shrubs	<u>Spatial Organization</u>		50	Planted parking strip between the curb and sidewalk at front yards in Officer's and CPO Housing
Non-Mapped	Orthogonal layout of roads, buildings, and paths	40	Offset alignment (from orthogonal layout) on West Redline Avenue and West Essex Drive at Pan Am Way	51	Park improvements limited to lawn and trees
Non-Mapped	Integration of architecture and landscape	41	Egg-shaped layout of the Officers' Housing with curved roads	52	Mixed grove of trees behind Quarters A
		42	Orientation of "Big Whites" Officers' Housing facing northeast	53	Yew tree on north side of Quarters A
<u>Views and Vistas</u>		43	Park and the open space south of West Essex Drive separates the Officers' Housing from the Chief Petty Officers (CPO) Housing	54	Australian tea trees at parking lots on east and west sides of CPO Housing and around Building 95
36	Views south along Lexington and Saratoga Streets from entry mall to Seaplane Lagoon	44	Axial alignment of CPO Housing, parking and open space surrounding Building 178 aligned with Building 17		
37	View along West Tower Avenue	45	Consistent setback of CPO Housing on Pensacola and Corpus Christi roads	<u>Circulation</u>	
<u>Topography</u>		46	Setback without property line fences and minimal use of hedges in the Officers' Housing area	55	Parking in attached single car garages and driveways for "Big Whites"
Non-Mapped	Flat	Non-Mapped	Orthogonal layout of roads, buildings and paths	56	Narrow road widths in Officers' and CPO Housing
		Non-Mapped	Integration of architecture and landscape	50	Planted parking strip between the curb and sidewalk at front yards
<u>Vegetation</u>				57	Secondary paths are narrower in CPO Housing than in Officers' Housing area
38	Lawn and foundation shrubs in deep setback of buildings at Buildings 6,8, 62 and 114 and at Monarch and Midway Avenues (Buildings 42, 43, 44, 102)	<u>Views and Vistas</u>			
		47	Limited internal views	<u>Water Features</u>	None
<u>Circulation</u>		<u>Topography</u>		<u>Structures, Furnishings & Objects</u>	
39	Vast paved areas without curbs and few obstructions	Non-Mapped	Flat	58	Curbed planting bed at front yards; curb slopes up towards the house.
<u>Water Features</u>	None			59	Shallow foundation planting beds on Corpus Christi Drive

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Feature #	Area 2 Map	Feature #	Area 2 Map	Feature #	Area 3 Map
	<i>Operations Area</i>				<i>Operations Area</i>
<u>Spatial Organization</u>		<u>Water Features</u>		<u>Spatial Organization</u>	
1	Generally spaces between buildings are paved without sidewalks, curbs, or pedestrian paths	10	Seaplane Lagoon	1	Generally spaces between buildings are paved without sidewalks, curbs or pedestrian paths
2	Building 39 is on the north-south axis from the Administrative Core			2	Deep setback of buildings planted with lawn and foundation shrubs at Building 19
3	Seaplane Lagoon is bi-laterally symmetrical and on the north-south axis of the Administrative Core				
4	Deep setback of buildings planted with lawn at Building 77 and Landplane Hangar Buildings 20, 21, and 22			<u>Views and Vistas</u>	
Non-Mapped	Orthogonal layout of roads, buildings, and paths			3	Views along row of Landplane Hangars
Non-Mapped	Integration of architecture and landscape			Non-Mapped	Integration of architecture and landscape
				Non-Mapped	Orthogonal layout of roads, buildings, and paths
<u>Views and Vistas</u>					
5	Views along West Tower Avenue			<u>Topography</u>	
6	Views along the row of Seaplane Hangars			Non-Mapped	Flat
7	Panoramic views south across Seaplane Lagoon and west across the Airfield from the Seaplane Hangars			<u>Vegetation</u>	
				4	Lawns on east side of Landplane Hangar Buildings 20, 21, and 22
<u>Topography</u>				5	Deep setback planted with lawn and foundation shrubs at Building 19
Non-Mapped	Flat			<u>Circulation</u>	
<u>Vegetation</u>				6	Vast paved areas without curbs and few if any obstructions. Spaces dominated by vehicular circulation; few if any pedestrian sidewalks or paths
8	Lawn surrounding Building 77			<u>Vegetation</u>	
<u>Circulation</u>				<u>Water Features</u>	None
9	Vast paved areas without curbs and few if any obstructions. Spaces dominated by vehicular circulation; few if any pedestrian sidewalks or paths			<u>Structures, Furnishings & Objects</u>	None

6. DESIGN REVIEW GUIDELINES FOR THE HISTORIC DESIGNED LANDSCAPE IN THE NAS ALAMEDA HISTORIC DISTRICT

This section of the CLR provides guidelines for design review considerations of the historic designed landscape in the NAS Alameda Historic District. The guidelines are intended to guide and support the management and re-use of the historic property and the character-defining features of the historic designed landscape through the preservation of historic materials and features. The guidelines are intended for use by the Navy, planning staff of the City of Alameda and the Alameda Reuse and Redevelopment Authority (ARRA), and the City of Alameda's Historical Advisory Board in their consideration of projects that may be proposed for the interim and long-term re-use of and within the NAS Alameda Historic District. This chapter of the CLR should be viewed as a supplement to the 1997 "Guide to Preserving the Character of the Naval Air Station (NAS) Alameda Historic District."

These guidelines are focused on treatment of the historic designed landscape (which is how the cultural landscape on NAS Alameda is defined) as it contributes to the historic district as a whole, as well as to the landscape's specific character-defining features, as defined and discussed in Section 4. This section is comprised of general treatment guidelines, as well as general and specific design review considerations organized by system type and functional area.

This section is organized in four sections: Recommended Treatment Approach, General Management and Design Guidelines, and Design Review Considerations by Functional Area.

6.1 Recommended Treatment Approach

The four treatment approaches recognized by the Secretary of the Interior for historic properties were considered in conjunction with the objectives of the BRAC PMO West, to assess the treatment approach most suitable for NAS Alameda.

The four treatment approaches include: preservation, rehabilitation, restoration, and reconstruction. Described in *The Secretary of the Interior's Standards for Historic Properties* as forming "the philosophical basis for responsible preservation practice and enable long-term preservation of a landscape's historic features, qualities, and materials,"²¹⁵ the approaches are defined as:

²¹⁵ Page, Gilbert, and Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*, 82.

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- **Preservation:** the act or process of applying measures necessary to sustain the existing form, integrity, and material of a historic property. Includes stabilization work, where necessary, as well as ongoing preservation maintenance and repair of historic materials and features.
- **Rehabilitation:** the act or process of making possible a compatible use for a property through repair, alteration, and additions while preserving those portions of features which convey its historical, cultural, or architectural values.
- **Restoration:** the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by removing features from other periods in its history and reconstruction missing features from the restoration period.
- **Reconstruction:** the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Rehabilitation is recommended as the appropriate overarching treatment approach for the NAS Alameda historic designed landscape. Because rehabilitation is defined as the act or process of making possible a compatible use for a property, this approach allows for protection of the site's historic character and resources while addressing the need for limited changes necessary for the new use of the site. Under rehabilitation, stabilization, protection, and preservation of historic resources occur to allow for planned new uses. Therefore, these guidelines focus on resources and systems to be stabilized, protected, preserved, and maintained.

With regard to other treatment alternatives, this CLR concludes those options are not appropriate for the following reasons. Preservation is overly restrictive and is limited in scope because it does not allow for, or take into account, the enhanced access and facilities needed to accommodate new uses, nor appropriate alterations that may be needed in the landscape to accommodate new uses within the historic district. Restoration and Reconstruction are not appropriate because they assume that significant losses of historic fabric have occurred, which is not the case on NAS Alameda. Additionally, these treatment approaches would likely be incompatible with the interim leasing and ultimate redevelopment that are, or have been, envisioned for the former NAS Alameda after property transfer.

6.2 General Management and Design Guidelines

The following section provides general guidelines for the treatment of the historic designed landscape on NAS Alameda that are intended to support the rehabilitation treatment approach and the design review considerations presented herein. They are intended to support specific landscape treatments and work in conjunction with other design considerations during reuse planning.²¹⁶

These guidelines are intended to conform to NPS cultural resources policies and guidelines, as applied to the rehabilitation of a historic property's contributing features. Recommended treatments are consistent with, and intended to support the avoidance and/or minimization of adverse effects to the NAS Alameda Historic District as a historic property under NHPA Section 106. The recommendations also are consistent with the NPS Director's Orders, the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*.

In general, projects potentially affecting the historic designed landscape, which is a contributor to the NAS Alameda Historic District, should be undertaken under the direction of appropriate specialists, including historical landscape architects, architectural historians, historical architects, and qualified technicians and artisans. Additionally, like the Secretary of Interior's Standards for Rehabilitation of Historic Properties, these guidelines should "be applied to specific rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility."²¹⁷ It is also recommended that changes and treatments should be documented through before and after drawings, photographs, and notes. All records of treatments should be maintained according to professional archival standards.

The following are general management and design review guidelines that apply to the historic designed landscape on NAS Alameda. In general, the historic character of the historic property should be retained and preserved. Efforts should be made to monitor and manage land uses that would potentially damage character-defining features of the historic designed landscape or other contributing elements to the historic district.

²¹⁶ These design considerations include, but are not limited to the "Guide to Preserving the Character of the Naval Air Station Alameda Historic District;" The City of Alameda Historic Preservation Ordinance (Section 13-21 of the Alameda Municipal Code); the Community Reuse Plan for NAS Alameda; City of Alameda General Plan; Alameda Municipal Code requirements for new development in Alameda; State and Regional Agency requirements, such as requirements by the Bay Conservation and Development Commission (BCDC) to address sea level rise and State Lands Commission requirements regarding the reuse and redevelopment of land subject to "Tidelands" restrictions; and federal Agency requirements, such as requirements by the Federal Emergency Management Agency (FEMA) to address flood risk at Alameda Point.

²¹⁷ Secretary of Interior's Standards for Rehabilitation, codified at 36 CFR 67.

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Furthermore, additional study and recordation of character-defining features of the historic landscape may be required prior to modification, repair, or replacement in order to protect research and interpretive opportunities. The rehabilitation approach emphasizes preservation of character-defining features of a historic property, repair over replacement, and replacement in-kind, as necessary.

As codified in US Department of Interior Regulations 36 CFR 67, the Standards for Rehabilitation are:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Users of these guidelines are encouraged to refer to the definition and discussion of the historic designed landscape's character-defining features in Section 4 and take into account the Standards for Rehabilitation for outcomes that encourage preservation and appropriate rehabilitation of the NAS Alameda Historic District, including the historic-designed landscape and its character-defining features. Also, refer to the inventory and evaluation table in Section 5 for the list of character-defining features. Overall, the guidelines encourage efforts to minimize potential impacts of reuse and development in the historic district by working with developers, planners, historic landscape architects, historians, and other appropriate professionals. The guidelines encourage solutions that minimize direct and indirect impacts to character-defining features of the historic designed landscape.

The following general recommendations are intended to work in conjunction with the treatment recommendations for the specific functional areas. See Section 6.4 for discussion of Special Considerations regarding accessibility, as well as environmental and energy issues.

Spatial Organization

1. Retain and preserve the historic designed landscape's orthogonal layout – the geometric design created by the perpendicular alignment of roads into rectilinear blocks, and the arrangement of buildings and siting of sidewalks/paths parallel and perpendicular to main roads – to the maximum extent possible. This includes taking into consideration the layout of roads, sidewalks, primary and secondary paths and buildings. Avoid, or reduce impact of, adding new roads or sidewalks/paths that are not parallel or perpendicular to established roads, or siting new buildings at angles that are not parallel to the main roads.
2. Evaluate proposed development, adaptive reuses, and changes in the spatial organization within the historic district in consultation with appropriate professionals, such as a historical landscape architect and/or historic preservation specialist.

Views and Vistas

Minimize visual impacts to character-defining views and vistas. Consider using techniques such as establishing vegetative screens to hide newly-introduced features. New development should incorporate view corridors and building height limits that will maintain character-defining views.

Topography

The flat topography within the NAS Alameda historic district is a character-defining feature of the historic designed landscape. Minimize impact to the flat topography within the historic district. When improving drainage and/or implementing improvements to address flood risk and sea level rise, the appearance of the flat topography should be maintained to the extent feasible. Attempt to minimize the visual appearance of any modifications to topography.

Vegetation

1. Employ best management practices (BMPs) when thinning or removing trees or other vegetation, or implementing other routine plant maintenance tasks. This is intended to improve tree health, decrease potentially hazardous issues related to vegetation, and support the preservation of distinctive vegetation materials present in the historic designed landscape. BMPs include arboricultural standards established by “Pruning Standards” of the Western Chapter of International Society of Arboriculture and ANSI A300 ‘Pruning Standards.’²¹⁸
 - a. Use of, and/or advice from, a certified arborist (such as a Registered Consulting Arborist (RCA), as recognized by the American Society of Consulting Arborists) is recommended for implementation of these BMPs.
 - b. To help retain and preserve the historic character of the historic district, consider employing BMPs to help rehabilitate vegetation that is appropriate to historic district’s period of significance.
2. To the extent practicable, protect and maintain the individual trees and tree groups identified as character-defining features. This includes the root zone of those trees.

²¹⁸ American National Standards Institute, and National Arborist Association, Inc. *American National Standard for Tree Care Operations: Tree, Shrub and Other Woody Plant Management: Standard Practices (pruning)*, (Londonderry, NH: Tree Care Industry Association, 2008); American National Standards Institute, ANSI A300 (Part 1)-2001 “Pruning: Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices (revision and redesignation of ANSI A300-1995, includes supplements),” (Washington DC: American National Standards Institute, 1995).

3. When replacing character-defining trees, it is advisable to replace them in-kind or to use suitable replacements species that share physical qualities with the original. This may depend on species of tree. The physical qualities of replacements are the expected form, size, and approximate color of the trees once they mature. This also includes following the original general category of tree type – coniferous, deciduous or evergreen. It is important that replacements be well suited to the micro-climates on the station. Replacement in-kind may not be possible or advisable, depending on the species and its relative weakness to disease, fire resistance, drought tolerance, or compliance with other policies related to sustainability and public safety. Some disease resistant pine species, for example, are currently being developed that may be useable on this facility.

Circulation

1. Avoid or minimize alterations to the character-defining circulation routes. The character-defining circulation are those elements that help define the orthogonal layout of the station, denote hierarchical distinctions or help define land use areas that are emphasized by the vehicular or pedestrian circulation.
2. Avoid impacts, or minimize alterations, to the character-defining circulation routes when considering other transportation policies / practices or when adding new circulation routes.
3. Minimize visual impacts of new circulation routes to the extent feasible.
4. Retain and preserve the design, layout, and detailing of the character-defining driving lanes / roadways, driveways, and parking strips where they occur.
5. Retain and preserve, to the extent feasible, the location and design of the sidewalks and paths that are character-defining to the historic designed landscape. When replacing or adding new sidewalks or paths, widths should be similar to historic sidewalks and paths with primary paths wider than secondary paths, as extant in the historic designed landscape. While installing visually compatible sidewalks, subtle scoring, finish treatments, or date stamps could be used to differentiate sidewalks and paths that are new.
6. In providing universally accessible routes to primary facilities, comply as possible with accessibility recommendations described under the Special Considerations section.

Structures, Furnishings and Objects

1. Design and locate new structures, furnishings, and objects within the historic designed landscape, or alterations to existing features, in such a way that such actions avoid or minimize impacts to historic materials, features, and/or spatial relationships that are character-defining features of the landscape.
2. Prepare and adopt design guidelines for new construction so that it is designed in a manner that is compatible with the existing character- defining features of the historic designed landscape and is consistent with the Secretary of Interior's Standards for Rehabilitation.
3. The design guidelines for new construction should address the Standard for Rehabilitation regarding reversibility and address ways in which new structures, furnishings, and objects constructed in the NAS Alameda Historic District can be built or installed in such a way that if removed in the future, the essential form and integrity of the historic designed landscape would be unimpaired.
4. When installing new site furnishings, fencing, signage, and site lighting consider the size, scale, materials, massing, style, and views of the original area and strive for sympathetic installations. Additionally, guidelines for installation of signage are provided in the 1999 Memorandum of Agreement for the NAS Alameda Historic District.

Water Features

There are no general treatment recommendations related to water features.

6.3 Design Review Considerations by Functional Area

The following are design review considerations, organized by functional area, as shown in the Land Use Diagram (**Appendix A2**) and by categories of character-defining features. The recommendations herein are limited to the character-defining features of the historic designed landscape that is a contributing element of the NAS Alameda Historic District. See Section 4 discussion and analysis regarding the historic design landscape's character-defining features.

6.3.1 Administrative Core

Spatial Organization

1. Retain and preserve character-defining features of spatial organization including:

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- a. Orthogonal layout of roads, buildings and paths.
 - b. North-south bi-laterally symmetrical alignment and axial alignment of entry mall from the Main Gate to Building 1.
 - c. East-west bi-lateral symmetrical alignment of the BEQ quadrangle.
 - d. East-west axial alignment along West Essex Drive and in the BEQ quadrangle.
 - e. Bilaterally symmetrical entrance on the north side of Building 17 by retaining the curved driveway and central path with the circle of planting.
 - f. Deep setbacks of lawn and alignment of facades of buildings within each block.
 - g. Sense of openness between buildings and landscape courtyards between wings of buildings. Avoid or minimize the use of fences or hedges that would subdivide spaces between buildings and structures.
 - h. Integration of architecture and landscape (also see Structures, Furnishings, and Objects).
2. Maintain the open space created by the entry mall / BEQ quadrangle and preserve landscape / architecture integration.
 - a. Retain and maintain the entry mall's three panels of low ground cover with trees planted at the corners. Any change to the planting should retain visual access to focal points within the entry mall and character-defining views from the entry mall. Avoid adding trees, other plantings or objects in areas other than the corners of the lawn panels.
 - b. Retain and maintain BEQ quadrangle lines of trees, trees flanking west end of quadrangle, and vegetation accenting building entries.

Views / Vistas

1. Retain and preserve character-defining views and vistas, including:
 - a. Views south at the entry mall
 - b. Views along east west axis of BEQ quadrangle and West Essex Drive
 - c. Views south along Lexington Street and Saratoga Street from entry mall to Seaplane Lagoon
 - d. Panoramic views from corner of Red Line Avenue and Monarch Street

Topography

1. The flat topography within the NAS Alameda historic district is a character-defining feature of the historic designed landscape. Minimize impact to the flat topography within the historic district. When improving drainage systems and/or implementing improvements to address flood risk and sea level rise, maintain, to the extent feasible, the appearance of the flat topography. Attempt to minimize the visual appearance of any modifications to topography.
2. Maintain the elevated grade within the BEQ quadrangle and the gentle slope that connects it to the entry mall.

Vegetation

1. Protect and maintain character-defining vegetation of the historic designed landscape including:
 - a. Monterey cypress trees along Main Street, along north border
 - b. Specimen Monterey cypress trees at corners of entry mall
 - c. Rows of Chinese elm trees at BEQ quadrangle
 - d. Pairs of Brush Cherry trees at building entries at BEQ quadrangle
 - e. Two groups of Monterey pine trees at west end of BEQ quadrangle
 - f. Paired Yew trees at east end of BEQ quadrangle
 - g. Black pine trees flanking path approaching east end of Building 2 and one on south side of path approaching east end of Building 4
 - h. Expanse of low ground cover with trees and few or no shrubs at entry mall and expanse of lawn / turf at the BEQ quadrangle
 - i. Three multi-trunk myoporum and mayten trees west of Building 3
 - j. Pair of Rusty leaf fig trees north of BOQ (Building 17)
 - k. Deep panels of low ground cover between sidewalks and building foundations and foundation planting beds.
2. Protect and maintain, as possible, vegetation that is considered appropriate to the historic designed landscape, taking into consideration the variety, size and character of species, and the proportion of evergreen, coniferous and deciduous species.

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3. When replacing missing trees, replace with the same mix of species or with alternative species that have a similar visual impact. See general guidelines in previous subsection for additional information.
4. When planting in planters at building entries, replant with species originally used. If the original species cannot be determined from historic documents, select a species known to have been planted during the period of significance, and which is also suitable for the exposure and planter size. It may also be necessary to plant an alternative species that has a similar visual quality to the historic plant species.
5. When trimming, consider raising the canopy of the (non-character-defining) Monterey cypress in the center of the south lawn panel in the entry mall to improve visual access along the axes that cross the center of the entry mall. Consult with a certified arborist to discuss how best to execute this change.

Circulation

1. Maintain the general size, form, and layout of the original parking / waiting area north of the Main Gate, including its curved edges and sidewalks.
2. Retain and preserve the material, widths and finish of the character-defining sidewalks and paths, including prominent and orthogonally aligned paths across the entry mall, BEQ quadrangle, matching wide paths approaching each wing of Buildings 2 and 4, and other orthogonally aligned paths elsewhere in the area west of Pan Am Way.
3. Retain and preserve the wide plaza and shallow steps that connect the entry mall and BEQ quadrangle.
4. Retain and preserve the material, design, layout and detailing of the curved drive at Building 17.
5. Retain and preserve the central path and circle of planting on north side of Building 17.

Water Features

There are water features in the Administrative Core Area that are character-defining features of the historic designed landscape, which is a contributing element of the NAS Alameda Historic District.

Structures, Furnishings and Objects

1. Retain and preserve the concrete planters flanking the plaza connecting BEQ quadrangle and entry mall.
2. Retain the trapezoidal-shaped free-standing concrete ornamental pots found at various locations, including the south side of Building 1.
3. Retain and repair original light poles north of Main Gate. Replace light pole in-kind if they are sufficiently deteriorated.
4. Retain and preserve building features that integrate with elements of the historic designed landscape.

6.3.2 Shops Area

Spatial Organization

1. Retain and preserve character-defining features of spatial organization, including:
 - a. Orthogonal layout of roads, buildings and paths
 - b. North-south axial alignment that continues from the Main Gate, through entry mall and Building 1 to Building 39 and Seaplane Lagoon.
 - c. Deep buildings setbacks, including those with lawn and foundation shrubs.
 - d. Integration of architecture and landscape, including paths to major building entries (also see Structures, Furnishings, and Objects).
2. The design guidelines for new construction proposed in Section 6.2. General Management and Design Guidelines should address ways to ensure that new building siting, massing, parking areas, and landscape areas are designed in a manner that is compatible with the character-defining features of the historic designed landscape. The design guidelines should address ways to maintain, to the extent feasible, the character-defining large, open, areas between buildings.

Views / Vistas

1. Retain and preserve character-defining views, including:
 - a. South along Lexington Street and Saratoga Street from entry mall to Seaplane Lagoon.
 - b. Along West Tower Avenue.

Topography

The flat topography within the NAS Alameda historic district is a character-defining feature of the historic designed landscape. Minimize impact to the flat topography within the historic district. When improving drainage systems and/or implementing improvements to address flood risk and sea level rise, maintain, to the extent feasible, the appearance of the flat topography. Attempt to minimize the visual appearance of any modifications to the topography.

Vegetation

Protect and maintain character-defining deep panels of low ground cover between sidewalks and building foundations, along with appropriate foundation planting beds / plantings.

Circulation

The design guidelines for new construction proposed in Section 6.2. General Management and Design Guidelines should address ways to ensure that new building siting, massing, parking areas, and landscape areas are designed in a manner that is compatible with character-defining circulation features of the large, open areas between buildings.

Water Features

There are no water features in the Shops Area that are character-defining features of the historic designed landscape, which is a contributing element of the NAS Alameda Historic District.

Structures, Furnishings and Objects

Retain and preserve building features that integrate with elements of the historic designed landscape, such as the planters flanking building entries.

6.3.3 Residential / MWR Area

Spatial Organization

1. Retain and preserve the layout, alignment, materials, and design details of the roadways and layout. Alignment is offset from the orthogonal layout that is west of

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- Pan Am Way. Preserve “egg-shaped” layout of Officers’ Housing area with curved roads. Preserve “Big Whites” orientation facing northeast.
2. Retain and preserve the park and open space that separates the Officers Housing from the CPO Housing.
 3. Retain and preserve the axial alignment of CPO Housing area.
 4. Retain and preserve consistent setback of houses, both Officers Houses and CPO Houses on Pensacola Road and Corpus Christi Road.
 5. Retain and preserve the sense of openness between both Officers’ Houses and CPO Houses. Minimize the use of fences or hedges that would subdivide spaces between buildings.
 6. Maintain integration of architecture and landscape, including organization of houses to open space and the differences in character of the spaces as they express hierarchy and different land use than is present west of Pan Am Way.

Views / Vistas

Preserve the limited internal views of and within the residential area.

Topography

The flat topography within the NAS Alameda historic district is a character-defining feature of the historic designed landscape. Minimize impact to the flat topography within the historic district. When improving drainage systems and/or implementing improvements to address flood risk and sea level rise, maintain, to the extent feasible, the appearance of the flat topography. Attempt to minimize the visual appearance of any modifications to the topography.

Vegetation

1. Retain, preserve, protect and maintain character-defining vegetation, including:
 - a. Deep panels of low ground cover between sidewalks and building foundations, with minimal use of hedges, vines and other ground cover.
 - b. Planted parking strips between sidewalk and street.
 - c. Park plantings of low ground cover and trees in park area between Officers Housing and CPO Housing.
 - d. Mixed grove of trees around Quarters A and lawn adjacent Quarters A driveway

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- e. Yew tree on north side of Quarters A.
- f. Australian tea trees at parking lots on east and west sides of CPO housing and around Building 95.
2. Retain and maintain existing planted parking strips. Avoid introducing planting strips where they did not exist during the period of significance.
3. As trees need replacement, consider reducing the number of different species being planted. This would serve as part of the effort to restore qualities of the historic designed landscape that existed during the period of significance.
4. Preserve and retain foundation planting beds at Officers' Houses.

Circulation

1. Retain and preserve the layout, alignment, materials, and design details of the roads in the residential areas to the extent feasible.
2. Modifications to circulation (such as bicycle lanes, improved pedestrian facilities, and transit facilities) should be designed to be compatible with the original design of the streets.
3. Retain and preserve the location and design of sidewalks, parking strips between the curb and sidewalks, and secondary paths.

Water Features

There are no water features in the Residential / MWR Area that are character-defining features of the historic designed landscape, which is a contributing element of the NAS Alameda Historic District.

Structures, Furnishings and Objects

1. Retain curbed planting beds at front yards of Officers Houses ("Big Whites"); curbs slope up from the street towards house and contain foundation plants.
2. Retain the shallow / narrow foundation planting beds between the front yard and building facades at CPO houses. Retain definition of these beds with a cut edge of the lawn. Avoid the addition of concrete mow-bands, wood headers or other non-historic edging.

6.3.4 Operations Area

Spatial Organization

1. Retain the orthogonal pattern established by the roads and building mass and volume.
2. Retain and preserve the north-south bi-laterally symmetrical alignment (that extends from the Main Gate to Building 1) through Building 39 and the Seaplane Lagoon.
3. Preserve and maintain the deep setback of low ground cover around Buildings 77, 20, 21, and 22.
4. The design guidelines for new construction proposed in Section 6.2. General Management and Design Guidelines should address ways to ensure that new building siting, massing, parking areas, and landscape areas are designed in a manner that is compatible with the character-defining features of the historic designed landscape. The design guidelines should address ways to maintain, to the extent feasible, the open qualities of the character-defining spatial organization and views in the Operations Area.

Views / Vistas

1. Retain and preserve views:
 - a. Along Monarch Street and the west side of the Landplane Hangars
 - b. Along Tower Avenue and along the south side of the Seaplane Hangars
 - c. Southward to the Seaplane Lagoon and piers.
 - d. Westerly across Airfield

Topography

The flat topography within the NAS Alameda historic district is a character-defining feature of the historic designed landscape. Minimize impact to the flat topography within the historic district. When improving drainage systems and/or implementing improvements to address flood risk and sea level rise, maintain, to the extent feasible, the appearance of the flat topography. Attempt to minimize the visual appearance of any modifications to the topography.

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1. Protect and maintain the low ground cover on the south side and southeast corner of Building 77 and surrounding the Control Tower.
2. Avoid adding foundation planting beds or trees at Building 77 within the open space area created by the setback.
3. Protect and maintain the low ground cover east of landplane hangars Buildings 20, 21, and 22.

Circulation

The design guidelines for new construction proposed in Section 6.2. General Management and Design Guidelines should address ways to ensure that new building siting, massing, parking areas, and landscape areas are designed in a manner that is compatible with the character-defining circulation features of the large, open areas within the Operations Area.

Water Features

1. Retain and preserve the Seaplane Lagoon, including its bulkhead and ramps on the north edge, the rip-rap sides, and jetties on the south side.
2. New features constructed in the Seaplane Lagoon, such as pedestrian, visitor and boating facilities, docks, and/or piers should be designed to be compatible with character-defining features of the of the Seaplane Lagoon.

Structures, Furnishings and Objects

There are no structures, furnishings, and objects in the Operations Area that are character-defining features of the historic designed landscape, which is a contributing element of the NAS Alameda Historic District.

6.4 Special Considerations for Historic Designed Landscape

Accessibility

When following Uniform Federal Accessibility Standard (UFAS), Americans with Disabilities Act Accessibility Guidelines (ADAAG), and other applicable local guidelines to address issues of accessibility, work with local accessibility and preservation specialists to determine the most appropriate solutions which will have the least impact

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on character-defining features. The mutual goal should be providing access to the highest degree practicable, while preserving character-defining landscape features, materials and finishes. Minimize disturbance to historic designed landscape when installing access facilities and systems.

Flood Risk

When addressing flood risk and flood protection as required by federal and state law and other applicable local and state guidelines, determine the most appropriate solutions that will have the least impact on character-defining features of the historic landscape. The mutual goal should be to protect the district facilities, structures, users, and occupants from flood hazards to the highest degree practicable while minimizing disturbance to historic character defining landscape features.

Directional Signage and User Facilities

When designing directional signage and user facilities such as bus shelters, bicycle racks, and informational kiosks, choose design solutions that recognize, support, complement and celebrate the historic district. Design solutions should be compatible with the period of significance and the character-defining features of the district while also providing for the convenience of district users and supporting the economic opportunities to reuse and revitalize the district.

Environmental and Energy

Various general measures related to environmental and energy treatments could support the preservation of the character of the historic designed landscape. The following are suggested:

1. Minimize areas of ground disturbance, grading, soil compaction and alterations to the drainage patterns.
2. When selecting energy efficient lighting fixtures, choose fixtures that are compatible in design to the original fixtures. Consider the color and quality of energy efficient lighting such that it is appropriate to the character of the historic district.
3. Take into consideration life-cycle costing of materials to assess their long-term wearing capacity and maintenance costs. Consider materials that are non-toxic, durable, long-lived and low-maintenance.

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4. Avoid altering the habitats of rare, threatened or endangered species or species of special concern. Evaluate the potential impact to wildlife habitat prior to undertaking any construction or vegetation removal.
5. As part of BMPs, consider removal of invasive species identified during vegetation monitoring activities using ecologically sound removal techniques.
6. As part of BMPs, considered integration of pest management, as well as soil and erosion control measures in maintenance and management practices.
7. Consider appropriate sustainable design measures, including:
 - a. Water conserving measures such as the use of drought tolerant lawn species, drought tolerant shrubs, high efficiency irrigation systems, and the use of mulches and good maintenance. This strategy is similar to the original choice of plant materials chosen for the planting design in 1941.
 - b. Strategies for storm water management.
 - c. Use of materials with recycled content.
 - d. Techniques for minimizing the use of herbicides and pesticides.
8. As part of water conservation efforts in the management of vegetation, the planting design of the entry mall could be restored to the design depicted in historic photographs and drawings.

7. CONCLUSION

This report presents analysis that draws conclusions regarding NRHP / CRHR eligibility of three categories of landscape resources on NAS Alameda:

1. Elements of landscape within the NAS Alameda Historic District extant during the period of significance (1938-1945) and had been identified in previous reports, but not yet been fully evaluated;
2. Elements of landscape within the NAS Alameda Historic District extant during the period of significance (1938-1945) that had not been identified in previous reports; and;
3. Elements of landscape outside the NAS Alameda Historic district, including features conceived and / or implemented during the Cold War (1946-1989).

The NAS Alameda Historic District was determined eligible for listing in the NRHP as a result of the 1992 report, “Historic Architectural Resources Inventory for Naval Air Station, Alameda,” prepared by architectural historian Sally Woodbridge. The report identified some elements of the landscape, such as the entry mall, BEQ quadrangle, and street pattern, as part of the historic district, but Woodbridge did not formally evaluate the landscape features and no landscape features were listed as contributed elements of the district. In 1997, the “Guide to Preserving the Character of the Naval Air Station Alameda Historic District” assessed vistas or viewsheds, open spaces, streetscapes, and some landscape elements that were considered to be a part of the historic district. These included the entry mall axis, BEQ quadrangle axis, curvilinear residential streets, and park-like area separating Officers’ Housing from the CPO Housing. Neither study conducted a comprehensive inventory and evaluation of all elements of the cultural landscape.

This CLR concludes there is a historic designed landscape that is a contributor to the NAS Alameda Historic District. Consultation correspondence for this CLR is provided in **Appendix E**. As discussed in Section 4, the historic designed landscape (a category of cultural landscape) is significant under NRHP Criterion A / CRHR Criterion 1 and NRHP Criterion C / CRHR Criterion 3 and it retains sufficient historic integrity to convey its significance to the NAS Alameda Historic District’s period of significance, 1938-1945. The historic designed landscape includes character-defining features that are related to spatial organization; views and vistas; topography; vegetation; circulation; water features; and structures / furnishings / objects. These character-defining features include landscape features identified in previous reports and features not identified in previous reports.

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Landscape features outside the boundaries of the revised NAS Alameda Historic District do not appear to meet the criteria for listing in the NRHP or CRHR as part of a cultural landscape. This includes resources that: 1) are not historically significant within the context related to the historic district's period of significance (1938-1945); 2) do not retain sufficient historic integrity to convey their potential significance to the historic district's period of significance (1938-1945); 3) are not historically significant within the context of the Cold War period (1946-1989), including some resources that do not retain integrity that period. Overall, no landscape features studied for this report meet the criteria for individual listing in the NRHP or CRHR.

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