

3.2.11 Cultural Resources

Cultural and historic resources provide information about people from the past and establish important connections to the present. They also provide evidence about important historical trends and events, reflect people's everyday lives and accomplishments and illustrate distinctive architectural, landscape, and engineering designs.

The Doyle Drive project area and the Presidio of San Francisco contain a rich collection of cultural resources, including archaeological sites, historic buildings, structures and objects, and cultural landscape features. These include the Presidio National Historic Landmark District and its contributing elements, the Doyle Drive viaducts, the Golden Gate Bridge (to which Doyle Drive is a contributor), the Palace of Fine Arts, and a prehistoric archaeological site known as CA-SFr 6/26.

Regulatory Setting

A number of federal and state regulations govern the treatment of cultural resources for the Doyle Drive Project. These include the *National Historic Preservation Act* (NHPA), and the *California Environmental Quality Act* (CEQA).

NHPA sets forth policy and procedures regarding “historic properties” – that is, districts, sites, buildings, structures, and objects included in or eligible for the *National Register of Historic Places* (NRHP), including cultural landscapes. Section 106 of the NRHP (1966, as amended) requires that before implementing any federal undertaking, a federal agency must take into account the effects of its undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) and other interested parties as opportunity to comment on these actions. Because the project will have an adverse effect on an NHL, the Secretary of the Interior must also be invited into the Section 106 consultation process.

The NHPA defines an effect as an alteration to the characteristics of a historic property that qualify it for inclusion in or eligibility for the NRHP. Under Section 106 of this act, as codified in 36 CFR 8005.4(d)(2), if there are historic properties which may be affected, if any, in accordance with the *Criteria of Adverse Effect* defined in 36 CFR 800.5:

Criteria of adverse effect (36 CFR 800.5 (a)(1). An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify that property for inclusion in the National Register in a manner that would diminish the integrity of that property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the *National Register*. Adverse effects may included reasonably

foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. Adverse effects on historic properties include, but are not limited to:

- 1) Physical destruction of or damage to all or part of the property;
- 2) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;
- 3) Removal of the property from its historic location;
- 4) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- 5) Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- 6) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- 7) Transfer, lease, or sale of property out of Federal ownership or control or conditions to ensure long-term preservation of the property's historic significance.⁹

CEQA requires the lead CEQA agency to assess the effects of the project on historical and archaeological resources. These resources are defined as buildings, sites, structures, objects, or districts (as well as cultural landscapes) – each of which may have historical, architectural, scientific, archaeological, cultural, or engineering importance.

If Native American human remains are discovered on federal land then the requirements of the *Native American Graves Protection and Repatriation Act* (NAGPRA) must be followed. If the remains were found on non-federal land the procedures outlined in Public Resources Code 5097 would apply.

Status of Section 106 Compliance Process

FHWA established that the Doyle Drive Project is an undertaking for the purposes of *Section 106* of the NHPA and that the project has potential to cause effects to historic properties. FHWA, with assistance from Caltrans and other agencies, identified appropriate participants, identified points for seeking public and tribal input, and began the process to notify the public regarding the project's area of potential effects (APE)¹⁰, an extensive public participation

⁹ 36 CFR 800.5, "Assessment of adverse effect," incorporating amendments effective August 5, 2004.

¹⁰ An APE is a specific study area established for a cultural resources analysis. The extent of the study area is dependent upon potential historic or archaeological resources in the general area. Different

process as part of NEPA compliance and Section 106, the identification of historic properties in the APE, and the documentation of these efforts in a *Historic Property Survey Report (HPSR)*. The HPSR was submitted to the State Historic Preservation Officer (SHPO) in 2002, who concurred with the following findings:

- All properties in the APE that were previously listed in or determined eligible for listing in the NRHP, either individually or as contributors¹¹ to the NHL, remain eligible for listing in the NRHP under criteria established by 36 CFR 60.4;
- The 55 Cold War-era architectural properties in the NHL located in the APE, that were constructed after the district's period of significance and have become fifty years of age since 1993, are not eligible for inclusion in the NRHP under any of the criteria established by 36 CFR 60.4;
- The 35 architectural properties located in the Marina neighborhood outside of the presidio, but in the APE, are not eligible for inclusion in the NRHP under any of the criteria established by 36 CFR 60.4;
- Archaeological site CA-SFr-6/26 is individually eligible for inclusion in the NRHP under Criterion D as set forth in 36 CFR 60.4.

The SHPO also responded to the request for concurrence that the Palace of Fine Arts was eligible for the NRHP. At the time SHPO did not concur with this finding, however the Palace of Fine Arts property, including the lagoon, has since been nominated to the NRHP and is awaiting formal listing. Therefore the Section 106 compliance process has included consideration of the Palace of Fine Arts as a historic property.

Additionally, prior to the submittal of the HPSR for the Doyle Drive Project, the two Doyle Drive viaducts had been determined to be individually eligible for the NRHP (1987). The Golden Gate Bridge had also been nominated, but not yet listed, as a National Historic Landmark, with Doyle Drive as a contributing element (1997); for the purposes of Section 106 compliance, these resources are considered historic properties.

A *Finding of Effect* (FOE) was then prepared for agency review. The FOE assesses the potential for this project to cause adverse effects on historic properties and initiates the process to mitigate those adverse effects on historic properties and initiates the process to resolve those adverse effects. The adverse effects of the project will be addressed in a Memorandum of Agreement (MOA)

APEs can be established for different types of cultural resources. Two APEs were established for this undertaking. One encompasses archaeological resources and the other encompasses architectural/engineering resources that may be potentially affected by the Doyle Drive Project.

¹¹ *A contributor is a building, structure, object, or site that may lack individual distinction and is, consequently, not individually eligible for the NRHP. Although such resources may lack individual distinction, if they add to the character of a historic district, they are considered to be contributors to that historic district, and are treated as historic properties.*

and a historic property treatment plan. The MOA will be developed in coordination with FHWA, the SHPO, the ACHP, the federal cooperating agencies and other interested parties.

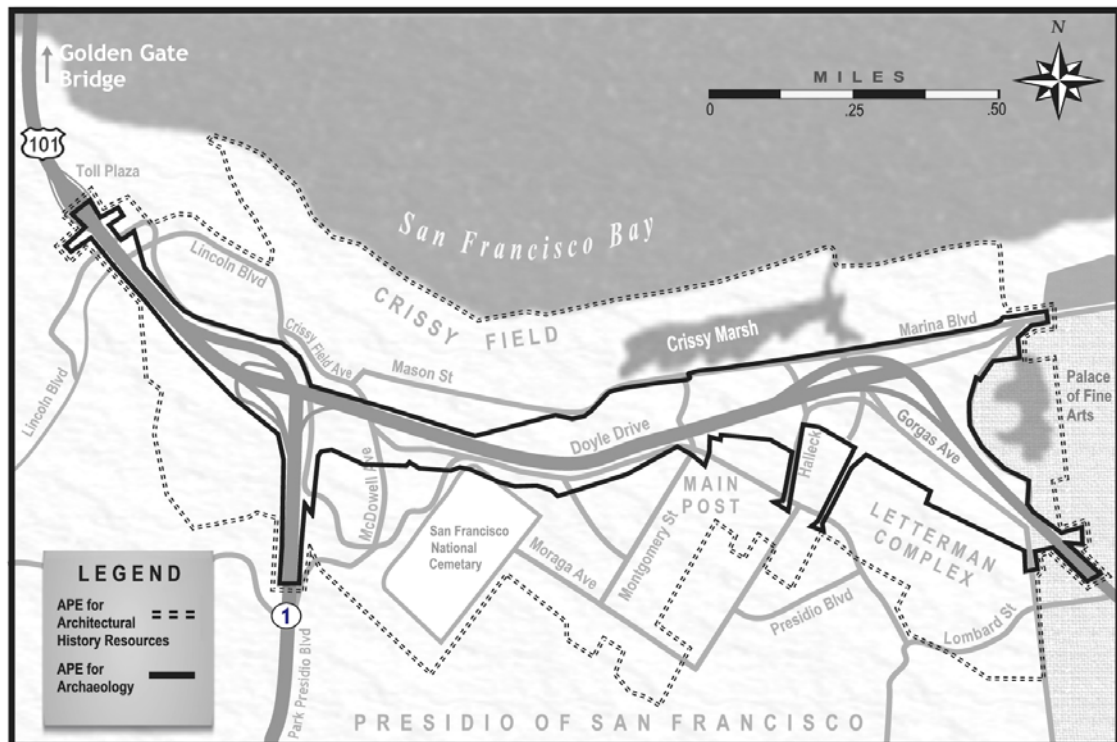
Methodology

A number of technical studies were completed prior to preparation of this environmental document. These included several inventory reports, consisting of archaeological survey report (ASR) [Jones & Stokes, August 2002], an historic architectural survey report (HASR) [JRP Historical Consulting, August 2002], and historic properties survey report (HPSR) [Jones & Stokes, August 2002]. These combined reports document the known and predicted resources in the project's APEs. In addition, an archaeological evaluation report was prepared based on the excavation and analysis of CA-SFR-6/26. These inventory reports were followed by the preparation of a finding of effect (FOE) (Jones & Stokes 2005), which describes the effect of the project's alternatives on known and predicted historic properties. These identification reports and the FOE form the basis for the effects assessment in the following analysis.

Affected Environment

As shown in **Exhibit 3-37** two focused APEs were developed to identify and analyze the potential effects of the project on cultural resources. One focused

Exhibit 3-37
Doyle Drive Project Area of Potential Effect (APE)



APE was for architectural resources and one was for archaeological resources. Both focused APEs meet the definition of an APE set forth in 36 CFR 800.16(d).

The historic properties in the APEs that are eligible for, or listed in, the NRHP are: the Presidio NHL and its contributors, prehistoric archaeological site CA-SFr-6/26, the Presidio Viaduct and the Marina Viaduct of Doyle Drive (bridges 34 0019 and 34 0014), the Golden Gate Bridge (to which Doyle Drive is a contributor), and the Palace of Fine Arts.

Presidio National Historic Landmark District

The Presidio of San Francisco is a NHL. NHLs are properties that have been recognized by the Secretary of the Interior as possessing national significance and are the highest possible designation of historic significance. NHL's are places that possess exceptional value or quality in illustrating and interpreting the heritage of the United States. Nationally significant properties help us understand the history of the Nation and illustrate the nationwide impact of events or persons associated with the property, its architectural type or style, or information potential. A nationally significant property, like the Presidio of San Francisco, is of exceptional value for its ability to represent or illustrate an important theme in the history of the Nation. All NHLs are also included in the NRHP, which is the official list of the Nation's historic properties worthy of preservation.

The Presidio NHL encompasses the lands of the former Presidio of San Francisco military reservation, and has been the subject of a variety of studies before the initiation of the Doyle Drive Project. The federal government listed the Presidio as a NHL in 1962 and listed it in the NRHP in 1966. In 1993, the NPS National Register Program prepared and submitted an "upgraded NHL documentation" for the Presidio NHL that the Keeper of the National Register approved.¹² Doyle Drive was identified as a contributor to the NHL in this documentation

The focused architectural history APE includes a portion of the Presidio NHL that contains approximately 280 resources, including buildings, structures, objects and sites that are contributors to the Presidio NHL. These and other elements together contribute to the cultural landscape found on the Presidio. In addition to the individually listed or eligible properties in the architectural APE, **Appendix D** provides a list of the contributors to the NHL that are in the APE.

Approximately 210 of the contributing elements to the NHL in the architectural history APE are not in close proximity to the alignment of the build

¹² NPS, "Presidio ... Registration Forms" 1993; NPS and Land and Community Associates, "Presidio of San Francisco: Cultural Landscape Report, Work in Progress, Phase One Priority Areas" November 1992.

alternatives and will not experience a direct, indirect, or cumulative adverse effect largely because of their distance from the project. Approximately seventy contributors to the NHLD are in close proximity to the project area and could experience adverse effects under one or more of the build alternatives.

CA-SFr-6/26

One prehistoric archaeological site, CA-SFr-6/26, was located during the course of studies for the Doyle Drive Project. In 2001, a comprehensive research design and testing plan, as well as an archaeological survey report/historic study report (HSR/ASR) was prepared for the project. Subsequently, a testing program was undertaken in November and December 2001. Test excavations identified the buried remains of a prehistoric shell mound first investigated by L. Loud in 1912 and subsequently designated as CA-SFr-6.

Although no evidence of CA-SFr-26, a single Native American burial that was excavated from beneath a nearby Army building in 1972, was found during the test excavation, an archaeological relationship was determined between CA-SFr-6 and CA-SFr-26. Therefore the boundaries of CA-SFr-6 were expanded to include the plotted location of CA-SFr-26, which is directly adjacent to CA-SFr-6 now referred to as CA-SFr-6/26. CA-SFr-6/26 was evaluated and recommended eligible for listing in the NHRP. The SHPO concurred with this evaluation in correspondence dated December 17, 2002. Additionally, because it has the potential to contain Native American burials, CA-SFr-6/26 may be ascribed other values exclusive of NRHP criteria. If other burials are discovered in this area or elsewhere within the NGHLD as a result of the project the requirements of NAGPRA would apply. CA-SFr-6/26 is currently covered with fill to a depth of 1.7 meters (5.6 feet) and is located in an area where impacts can be avoided.

Unknown Historic and Prehistoric Archaeological Resources

The Presidio of San Francisco NHLD documentation identified areas within the Presidio that are considered sensitive for both historic period and prehistoric resources archaeological resources. Sensitivity maps for both prehistoric and historic period archaeological resources have been generated to help predict the locations of unknown sites. The areas of prehistoric archaeological sensitivity that are within the Doyle Drive APE include the bluff on the upper Post along and under Doyle Drive, the lower Post along the base of the bluff, the area around the former historic extent of Crissy March and the areas were Tennessee Hollow and the Crissy Marsh joined prior to development of the Presidio. For example, another prehistoric site (CA-SFr-126) was uncovered during the Crissy Marsh expansion project, suggesting that other prehistoric sites may exist in the APE. These other sites may be individually eligible for the NRHP.

The testing program targeted these sensitive areas as well as the areas sensitive for historic archaeological resources, such as the locations where various historic structures, features, and activity areas were formerly located. However, many areas of the APE could not be test excavated due to a variety of practical

constraints, including a high water table, numerous underground utilities, and the prohibition to test under the existing Doyle Drive.

Although the testing program did not identify any significant archaeological properties other than CA-SFr-6/26 in the Doyle Drive Project area, the project area is nonetheless considered sensitive for the presence of historic archaeological sites and features and therefore additional measures to locate and treat additional archaeological resources that might be located in the APE also being considered for implementation in advance of construction. These efforts would be designed to reduce the potential for inadvertent discoveries and also allow for archaeological site avoidance measures where feasible. Even with these measures archaeological discoveries during construction are anticipated.

Presidio Viaduct and Marina Viaduct

The Presidio Viaduct (bridge 34 0019) and the Marina Viaduct (bridge 34 0014), the elevated portions of Doyle Drive, were determined eligible for listing in the NRHP in 1987. These two structures are also part of the overall Doyle Drive structure that is a contributor to the Presidio NHL and is considered a contributor to the NRHP eligible Golden Gate Bridge.

Golden Gate Bridge

The Golden Gate Bridge was determined eligible for listing on the NRHP in 1980, and was designated as California State Historic Landmark No. 974 in 1990. As of June 2005, the Golden Gate Bridge has not yet been listed in the NHRP. In 1997, NPS prepared a NHL nomination for the Golden Gate Bridge. In this nomination, Doyle Drive is recognized as a contributor to the Golden Gate Bridge property, and as a contributor to the Presidio NHL, because it is functionally and aesthetically integral to the Golden Gate Bridge. As of September 2005, the Golden Gate Bridge had not been designated as a National Historic Landmark.

Palace of Fine Arts

In 2004 the Maybeck Foundation nominated the Palace of Fine Arts for listing on the NRHP. The State Historical Resources Commission approved the nomination at its



Doyle Drive with the Golden Gate Bridge in the background.

meeting on February 6, 2004. As of November 2005, the Palace of fine arts had not been listed on the NRHP, however, because the SHPO has determined it to be eligible, it is regarded as an historic property for the purposes of this project. The Palace of Fine Arts has been designated San Francisco City Landmark #88 and as such, is also considered a historical resource for the purposes of CEQA.

Temporary Impacts

It has been determined that there will not be any temporary impacts on cultural resources.

Permanent Impacts

The following section discusses the potential permanent impacts by alternative on cultural resources that may result from the Doyle Drive Project. These impacts include the primary construction activities as well as secondary effects such as impacts to historic buildings from vibration or work in close proximity to historic properties that could effect their structural integrity. Permanent impacts may result from the following activities:

- Preconstruction staging and storage of equipment;
- Utilities relocation;
- Geotechnical studies;
- Construction of haul roads;
- Excavation, grading, stockpiling of soil;
- Construction of aerial structures and substructures;
- Construction of tunnels;
- Construction and demolition of temporary detours;
- Removal of vegetation and existing facilities; and
- Erection of temporary bracing and shoring, roadway construction, placement of reinforced concrete and pre-cast concrete, landscaping, and demobilization.

The impacts on cultural resources that could result from the implementation of mitigation of other resources are not included here because the mitigation that will be implemented has not been selected.

Alternative 1: No-Build

The No-Build Alternative would have no effect on historic buildings, structures, objects, sites, districts, or the cultural landscape because it represents the existing condition with no project-related activities.

Alternative 2: Replace and Widen

The Replace and Widen Alternative, with either the No-Detour or With Detour option, would cause adverse effects to the Presidio NHL, as well as to individual historic properties. The Replace and Widen Alternative would adversely affect the Doyle Drive viaducts as historic properties through their

removal and replacement with new structures. This alternative would cause a direct adverse effect to the Golden Gate Bridge historic property through the removal of Doyle Drive, which is a contributing element of the bridge property.

Based on available information, the Replace and Widen Alternative would not have an adverse effect on the Palace of Fine Arts property; however there are concerns about possible vibration impacts to the buildings and the lagoon. Although the projects meet standards for acceptable vibration in proximity for fragile historic structures, additional vibration testing and the preparation of an *Historic Structures Report* for the Palace of Fine Arts would be implemented to ensure that the property would not be damaged during construction of the project.

The Replace and Widen Alternative and would have no adverse effect with conditions¹³ on the known archaeological site CA-SFr-6/26. If prehistoric or historic period archaeological sites are identified prior to or during construction, then the construction of the Replace and Widen Alternative could adversely affect them.

The Replace and Widen Alternative – No-Detour Option would have a direct adverse effect on the Presidio NHLD by the removal of Doyle Drive, a contributing element to the NHLD, by altering the alignment of some contributing roads, and by the removal of existing cultural landscape features, including trees. The increased width and height of the new structure would also increase the structure's visual presence in areas immediately adjacent to the structure and would alter the integrity of feeling in these areas. Contributing roads affected include Battery Blaney Road, Veterans Boulevard (Route 1/Veterans Boulevard), Lincoln Boulevard, and Crissy Field Avenue.

There would be direct adverse effects to the cultural landscape of the Presidio NHLD under Alternative 2: Replace and Widen – No-Detour Option due to the alteration or removal of existing cultural landscape features (trees and circulation features) and the addition of new non-historic features into the cultural landscape. This alternative would result in the removal of the existing Doyle Drive structure, a historic circulation feature and contributor to the Presidio's historic landscape.

The With Detour Option would have the same direct adverse effects as the No-Detour Option, and would additionally cause direct adverse effects to the Presidio NHLD through the removal of Buildings 1182, 1183, 1184, and 1185 (four of the seven Mason Street Warehouses), which are contributing elements to the district. The removal of these warehouses may be temporary (they are expected to be replaced to their original location); however, this action would

¹³ These conditions would include protection measures such as the establishment of an environmentally sensitive area (ESA) to protect the site during ground disturbing activities.

still be an adverse effect. The removal would also be an adverse effect because it would cause a loss of integrity of the edge, or boundary, of the northeast corner of the Presidio NHLD. The replacement of these warehouses to their original location after the demolition of the temporary detour structure would mitigate the loss of contributing elements and boundary erosion.



Buildings 1184, 1183, and 1182, camera facing east.

Alternative 5: Presidio Parkway

The Presidio Parkway Alternative (under both the Diamond and Circle Options) would have an adverse effect on the Presidio NHLD, including the cultural landscape, contributors to the NHLD, and to individual historic properties. Under either option, the alternative would adversely affect the Presidio NHLD by the removal of Doyle Drive and the demolition of Buildings 201, 204, 230, and 670, causing an adverse effect to the NHLD.

The Presidio Parkway Alternative (for both Diamond and Circle Options) would cause direct and indirect adverse effects to the cultural landscape of the Presidio NHLD because it would alter or remove existing cultural landscape features (trees, circulation features, topographic features, spatial organization) and would introduce new non-historic features into the cultural landscape. Both options¹⁴ under this alternative would adversely affect the Presidio NHLD by altering the alignment of the following contributing roads: Veterans Boulevard, Richardson Avenue, Bank Street, Battery Blaney Road, Crissy Field Avenue, Girard Road, Halleck Street, Gorgas Avenue, Lincoln Boulevard, and Vallejo Street. The Presidio Parkway Alternative would adversely affect the Presidio NHLD by removing and/or altering a portion of the bluff, which influenced the pattern of development in the area north of the Main Post, and by adding a non-historic topographic feature.

The Presidio Parkway Alternative – Circle Option would have all the same adverse effects as described above, and would also have an additional adverse effect on the NHLD resulting from the demolition of Buildings 1151. The

¹⁴ *The Presidio Parkway, Merchant Slip Ramp Option Alternative would cause an adverse effect to the NHLD resulting from the alteration of Veterans Boulevard.*

Presidio Parkway Alternative – Hook Ramp Option would also have an additional adverse effect on the NHLD resulting from the alteration of Cowles Street, near Cavlary Stables.

The Presidio Parkway Alternative would have a direct adverse effect on the Doyle Drive viaducts through their removal and replacement with new structures. This alternative would adversely affect the Golden Gate Bridge property directly through the removal of Doyle Drive (a contributing element of the bridge property), and indirectly through the introduction of new Doyle Drive structures that are dissimilar to the existing roadway structures. Based on available information, the Presidio Parkway Alternative would not have an adverse effect on the Palace of Fine Arts property; however there are concerns about possible vibration impacts to the buildings and the lagoon. Although the projects meet standards for acceptable vibration in proximity for fragile historic structures, additional vibration testing and the preparation of an *Historic Structures Report* for the Palace of Fine Arts would be implemented to ensure that the property would not be damaged during construction of the project.

The Presidio Parkway Alternative would have no adverse effect with conditions on the known archaeological site CA-SFr-6/26. If prehistoric or historic period archaeological sites are identified prior to or during construction, then the construction of the Presidio Parkway could adversely affect them.

Comparison of Effects

In terms of the magnitude of effects of the two alternatives, the completed structures and alignment of the Replace and Widen Alternative (under both no Detour and with Detour) would more closely resemble the existing Doyle Drive facility and would cause fewer adverse effects than the Presidio Parkway Alternative (all options), especially in terms of both the cultural landscape and contributing elements of the NHLD. The Replace and Widen Alternative would also adversely affect contributing features in geographically smaller areas than the Presidio Parkway Alternative, thus having less impact on the integrity of the NHLD.

Avoidance, Minimization, and/or Mitigation Measures

The following discussion presents draft avoidance, minimization, and/or mitigation measures for potential impacts to cultural resources. These measures will be negotiated among the cooperating agencies and finalized in the MOA being developed for the project. The Authority, Caltrans, and FHWA will work closely with the SHPO, the Presidio Trust, the National Park Service, the ACHP and other interested parties to ensure appropriate measures are developed and implemented.

Preparation of Historic Structures Reports

Historic buildings are often more fragile than they appear, therefore *Historic Structure Reports* would be prepared for all structures that could be affected by the

project. *Historic Structure Reports* provide the foundation for the rehabilitation, restoration, stabilization or reconstruction of an historic building. They are critical if the proposed work involves fabricating significant missing architectural or landscape features, recapturing the appearance of a property at one particular period of its history, removing later additions, or substantially modifying existing historic fabric. The report also describes the building's architectural history; its original appearance and what changes were made and when; and its present condition. The document also provides guidance with respect to protection, stabilization, and reconstruction. This document provides the information necessary for making appropriate decisions on restoring or removing fabric, and on period of restoration, as recommended in the "Secretary of the Interior's Standards for the Treatment of Historic Properties."

Stabilization /Monitoring During Construction

Based on information from the *Historic Structure Reports*, a treatment plan would be prepared that presents a detailed methodology for the protection of historic properties, such as buildings, structures, objects, and sites, including cultural landscape elements, within the project area that are in close proximity to construction activities. This treatment plan would describe methods for the preservation, stabilization, shoring/underpinning, and monitoring of buildings, structures, and objects. The treatment plan would also include provisions that high vibration construction techniques would be avoided in sensitive areas.

Underpinning and/or other stabilization methods would be used at buildings located near project construction areas and that may be susceptible to damage or inadvertent destruction. A professional historical architect or architectural historian who meets the Secretary of the Interior's *Professional Qualifications Standards* (48 FR 44738-9) would approve and monitor underpinning and stabilization activities.

Archaeological Monitoring, Discovery, Evaluation, and Treatment Plan

An archaeology monitoring, discovery, evaluation and treatment plan would be developed and implemented to address the potential for discovery of unknown archaeological resources. A professional archaeologist who meets the Secretary of the Interior's *Professional Qualifications Standards* (48 FR 44738-9) will prepare the plan and monitor all pre-construction and construction activities in the project area.

The plan will be consistent with the Secretary of the Interior's *Standards and Guidelines for Archaeological Documentation* (48 FR 44734–37) and take into account the Council's publication, *Treatment of Archaeological Properties: A Handbook* (ACHP 1980), and SHPO guidelines. Specifically the plan will specify the process and schedule for conducting evaluations in areas within the APE, including where additional subsurface exploration is to be carried out; the methods, locations, and schedule for subsurface exploration; the methods that will be used to determine whether archaeological properties are significant. It will also outline

the process and schedule for conducting data recovery for significant resources found in the APE, including the research questions to be addressed through data recovery; the methods to be used in analysis, data management, and dissemination of data; the methods to be used for data recovery, with an explanation of their relevance to the research questions. The plan will also describe the proposed curation of recovered materials and records and the proposed methods for disseminating results of the work. Efforts to comply with NAGPRA will also be included as will also be described.

Collections Management/Curation

A comprehensive collections program will be developed and implemented as part of the project for materials discovered during excavation and for records created in support of historic preservation efforts. The program will include a complete collections management protocol that will include accessioning and cataloging, curatorial and preservation treatment, and disposition of these materials into a designated museum facility.

Recordation

Buildings, structures, objects, and sites, including cultural landscape elements of the Presidio NHLD that are impacted by the project would be recorded and documented to the standards of the *Historic American Building Survey* (HABS) or *Historic American Engineering Record* (HAER). This would include coordination with the landowners and the HABS/HAER program of the NPS to determine the appropriate level of recordation. This coordination would also address the adequacy of previously recorded buildings and resources that are to be impacted by the project.

NPS has recently established the *Historic American Landscape Survey* (HALS) to document historic and cultural landscapes. This program has yet to be funded and NPS has not developed standards for documentation under HALS. If HALS documentation standards are established during the period when recordation is occurring for this project, this type of documentation for the components of the Presidio NHLD cultural landscape adversely affected by the project may be appropriate.

Recordation/documentation methods in addition to HABS/HAER/HALS may also be appropriate and could be proposed as mitigation for the project.

Design Guidelines

Design guidelines for construction would be developed to ensure sympathetic, compatible, and appropriate designs for the new structure with design elements of the Golden Gate Bridge. This would partly mitigate for the adverse effects of the loss of a contributing element of the Golden Gate Bridge, as well as the adverse effects of introducing new elements within the Presidio NHLD. It is most likely that the design guidelines mitigation would apply to the visual appearance of the structure, rather than specifics of alignment, overall depth/width, or placement of supports. SHPO, ACHP, the cooperating

agencies and interested parties would review draft design guidelines as part of the MOA and provide comment on the guidelines as well as on proposed design changes.

Interpretive/Educational Materials and Popular Report

Interpretive/educational materials and programs would be prepared regarding the potential impacts (resulting from the Doyle Drive Project) to the Presidio and the specific features of the NHLD. Such materials and/or programs could include: a popular report; documentary videos, booklets, interpretive signage, additional interpretive information available at Crissy Center, the Trust's website, and other Presidio locations. These materials could also include salvage items, historic drawings, interpretive drawings, current and historic photographs, models, and oral histories. Assistance could also be provided for archiving or digitizing the documentation of contributing elements within Presidio NHLD and Doyle Drive itself. Materials such as the popular report, documentary video, booklets, and digitized photos, for example, could be disseminated to appropriate repositories such as the Trust, San Francisco Public Library, San Francisco Architectural Heritage, Golden Gate National Recreation Area (GGNRA), Caltrans District 4, Caltrans Transportation Library in Sacramento, and the Golden Gate Bridge Highway and Transportation District.

Relocation

Four of seven Mason Street Warehouses (Buildings 1182, 1183, 1184, and 1185) will be adversely affected by Alternative 2 - With Detour Option by requiring their removal. It is proposed that these buildings would be temporarily relocated during construction and then returned to their original locations following removal of the temporary detour. These buildings would be recorded to HABS standards prior to their removal and in consultation with the landowners and the HABS program of the NPS. A plan would be prepared for the removal and return of these buildings, and this plan would be included in the treatment plan for architecture and cultural landscapes. The relocation plan would detail the methods for stabilizing the buildings prior to the move, identify locations that could temporarily house the moved buildings, describe methods by which the buildings are actually moved, and describe the manner in which the buildings are stabilized and protected in the temporary location. The plan would also include site plans for relocating the buildings at their original locations and placing them on new foundations that meet Secretary of Interior's *Standards*.

Architectural Resource and Cultural Landscape Monitoring

New construction within the project area would be monitored to ensure conformance with design guidelines and treatment plans. This monitoring would be conducted by a professional architectural historian and a professional cultural landscape historian or landscape architect, who meet the Secretary of the Interior's *Professional Qualifications Standards* (48 FR 44738-9).

Minor Repairs and Reconstruction

Inadvertent damage to historic properties, or to their contributing elements, would be repaired in accordance with the Secretary of the Interior's *Standards for Treatment of Historic Properties*. This would include damage to contributing elements such as landscaping, curbs, fencing, and related features, as well as contributing buildings, structures, and objects.

Salvage

Selected decorative or architectural elements of the historic properties, such as the original light standards on existing Doyle Drive, would be reviewed for the feasibility of salvage in order to mitigate their loss or destruction. Where possible, these elements would be retained and incorporated into the new construction. Where re-use is not possible, selected salvaged elements could be made available to the Golden Gate Bridge District for reuse or in interpretive display.

3.3 Physical Environment

This section discusses six resource areas which are typically characterized as part of the physical environment. These resource areas are:

- hydrology, water quality, and stormwater;
- geology/soils/seismic/topography;
- hazardous materials;
- air quality;
- noise and vibration; and
- energy.

3.3.1 Hydrology, Water Quality, and Stormwater

This section discusses water quality and hydrology in the Doyle Drive Project study area. Water quality relates to the chemical, physical, and biological characteristics of water with respect to its suitability for a beneficial use. Good water quality is essential in maintaining human health, wildlife habitats, and vegetation. Roadway projects can affect water quality as increased impervious surfaces that can lead to changes in hydrology, and affect surface runoff that drain to streams and natural habitats.

Information for this section has been extracted from the *South Access to the Golden Gate Bridge: Doyle Drive Project Revised Hydrology and Water Resources Technical Report*, October 2004.

Regulatory Setting

Federal and state programs regulate and monitor water quality, floodplains, and other water-related resources. This section summarizes these regulations and policies. Regulatory issues related to compliance with the *Coastal Zone Management*