

7.2 Proposed Action

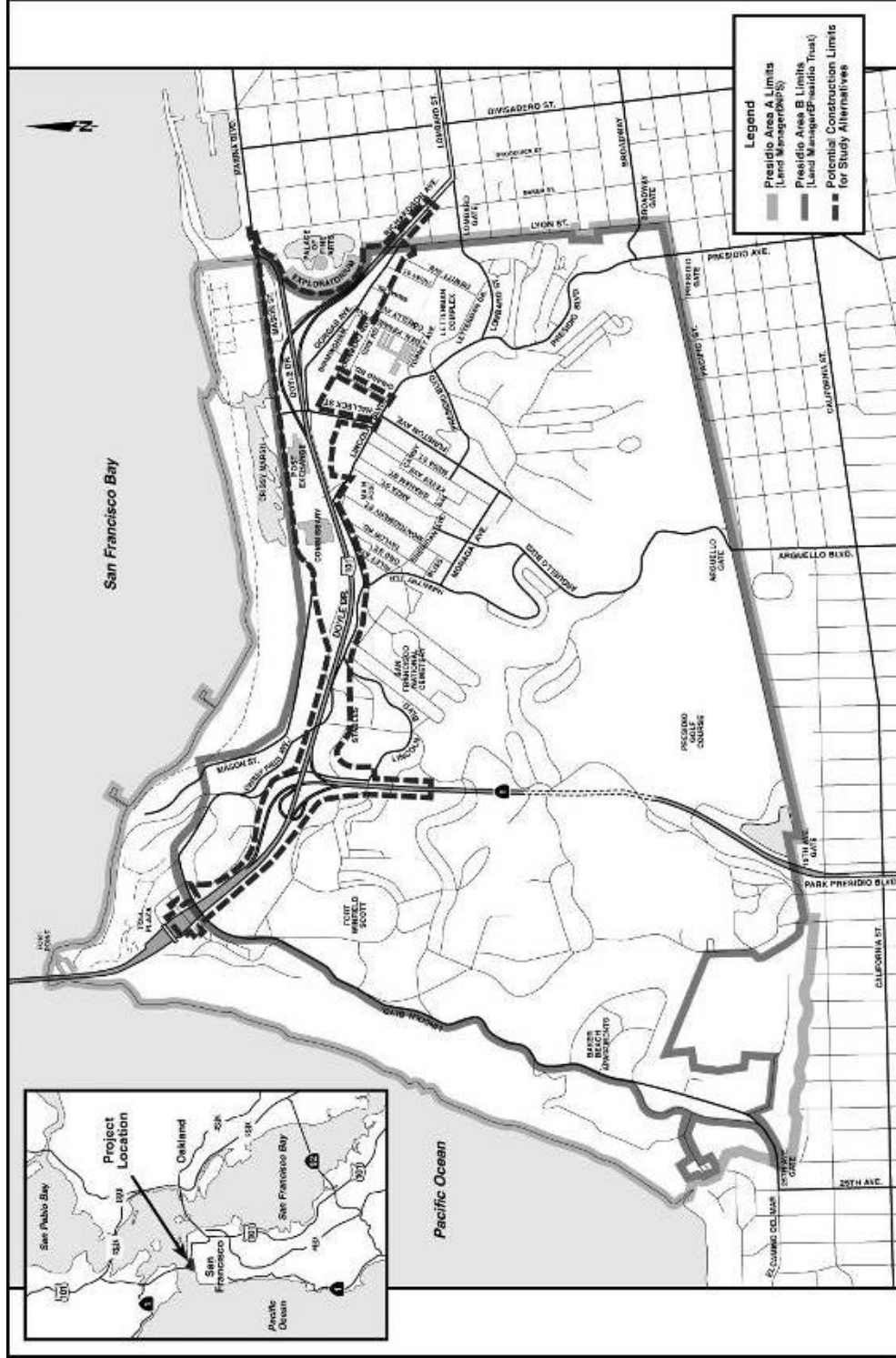
A complete discussion of the purpose and need for the project is provided in Chapter 1 of this *Final Environmental Impact Statement/Report* (FEIS/R) and is incorporated herein by reference.

The purpose of the project is to improve the seismic, structural, and traffic safety of Doyle Drive (see **Exhibit 7-1**) within the setting and context of the Presidio of San Francisco and its purpose as a National Park. Objectives of the Doyle Drive project are to:

- improve the seismic, structural and traffic safety of Doyle Drive;
- maintain the functions that the Doyle Drive corridor serves as part of the regional and City transportation network;
- improve the functionality of Doyle Drive as an approach to the Golden Gate Bridge;
- preserve the natural, cultural, scenic, and recreational values of affected portions of the Presidio;
- be consistent with the *San Francisco General Plan* and the *General Management Plan Amendment Final Environmental Impact Statement, Presidio of San Francisco, Golden Gate National Recreation Area* (NPS 1994a and 1994b) for Area A of the Presidio and the *Presidio Trust Management Plan: Land Use Policies for Area B of the Presidio of San Francisco* (Presidio Trust 2002);
- minimize the effects of noise and other pollution from the Doyle Drive corridor on natural areas and recreational areas at Crissy Field and other areas adjacent to the project;
- minimize the traffic impacts of Doyle Drive on the Presidio and local roadways;
- improve intermodal and vehicular access to the Presidio; and
- redesign the Doyle Drive corridor using the parkway concept described within the *Doyle Drive Intermodal Study* (1996).

The following sections describe the alternatives considered in the DEIS/R and the Preferred Alternative identified subsequent to circulation of that draft document. A more detailed discussion of the project alternatives, including exhibits, can be found in Chapter 2 of this FEIS/R.

**Exhibit 7-1
Doyle Drive Project Location Map**



7.2.1 Alternative 1: No-Build Alternative

The No-Build Alternative represents the future year conditions if no other actions are taken in the study area beyond what is already programmed by the year 2020. It is the baseline condition and future travel conditions against which all the alternatives are compared. Doyle Drive would remain in its current configuration (i.e., “No-Build”): 2.4 kilometers (1.5 miles) long with six traffic lanes ranging in width from 2.9 to 3 meters (9.5 to 10 feet) wide. No fixed median barriers or shoulders currently exist on Doyle Drive. The roadway passes through the Presidio on one high steel truss viaduct and one low elevated concrete viaduct with lengths of 463 meters (1,519 feet) and 1,137 meters (3,730 feet), respectively. The height of the high-viaduct varies from 20 to 35 meters (66 to 115 feet) above the ground surface while the low-viaduct has an average of eight meters (26 feet) above existing ground surface.

Vehicular access to the Presidio is available from Doyle Drive via the off-ramp to Merchant Road at the Golden Gate Bridge Toll Plaza. Presidio access at the east end of the project area is provided for southbound traffic via a right turn from Richardson Avenue to Gorgas Avenue. Presidio access for northbound traffic at the east end is provided by a slip ramp from Richardson Avenue to Gorgas Avenue.

This alternative incorporates those operational and safety improvements that have been planned and programmed to be implemented by the year 2020. This alternative is required of all federal and state planning guidelines. The No-Build Alternative does not improve the seismic, structural, and traffic safety of the roadway.

Two alternatives with several options that meet the project objectives are proposed, as follows. Note that Alternatives 3 and 4 were eliminated during the course of project development and are thus not included in this *Section 4(f) Evaluation*.

7.2.2 Alternative 2: Replace and Widen

The Replace and Widen Alternative would replace the 463-meter (1,519-foot) long high-viaduct and the 1,137-meter (3,730-foot) long low-viaduct with wider structures that meet the most current seismic and structural design standards. The height of the high-viaduct would vary from 20 to 35 meters (66 to 115 feet) above the ground surface. The low-viaduct would have an average height of approximately ten meters (33 feet) for the No-Detour Option and approximately eight meters (26 feet) for the Detour Option. The new facility would be replaced on the existing alignment and widened to incorporate improvements for increased traffic safety.

This alternative would include six 3.6-meter (12-foot) lanes, a 3.6-meter (12-foot) southbound auxiliary lane with a fixed median barrier, or six 3.6-meter (12-foot) lanes with a moveable median barrier. The new facility would have an overall

width of 38 meters (124 feet). Both options would include continuous three-meter (ten-foot) shoulders along the facility. The fixed median barrier option would require localized lane width reduction to 3.3 meters (11 feet) to avoid impacts to the historic Batteries Slaughter and Blaney and Lincoln Boulevard, reducing the facility width to 32.4 meters (106 feet). At the Park Presidio Interchange, the two ramps connecting southbound Doyle Drive to Veterans Boulevard and the ramp connecting northbound Doyle Drive to southbound Veterans Boulevard would be reconfigured to accommodate the wider facility. The Replace and Widen Alternative would operate similar to the existing facility except that there would be a median barrier and shoulders to accommodate disabled vehicles.

The Replace and Widen Alternative includes two options for the construction staging:

- **No-Detour Option** – The widened portion of the new facility would be constructed on both sides and above the existing low-viaduct and would maintain traffic on the existing structure. Traffic would be incrementally shifted to the new facility as it is widened over the top of the existing structure. Once all traffic is on the new structure, the existing structure would be removed and the new portions of the facility would be connected. To allow for the construction staging using the existing facility, the new low-viaduct would be constructed two meters (six feet) higher than the existing low-viaduct structure.
- **With Detour Option** – A 20.4-meter (67-foot) wide temporary detour facility would be constructed to the north of the existing Doyle Drive to maintain traffic through the construction period. Access to Marina Boulevard during construction would be maintained on an elevated temporary structure south of Mason Street. On- and off-ramps for the mainline detour facility would connect to existing Marina Boulevard/Lyon Street intersection.

Vehicular access to the Presidio is available from Doyle Drive via the on- and off-ramps to Merchant Road at the Golden Gate Bridge Toll Plaza. Presidio access at the east end of the project would be provided for southbound traffic via a planned right turn from Richardson Avenue to Gorgas Avenue. There would be no Presidio access for northbound traffic at the east end of Doyle Drive under Alternative 2 due to geometric constraints and concerns for traffic safety.

Retaining walls would be required at the Park Presidio Interchange to accommodate the ramp realignments. A retaining wall would also be constructed on the south side of the facility along the constrained section between the National Cemetery and the historic batteries.

7.2.3 Alternative 5: Presidio Parkway

The Presidio Parkway Alternative would replace the existing facility with a new six-lane facility and a southbound auxiliary lane, between the Park Presidio Interchange and the new Presidio access at Girard Road. The new facility would consist of two 3.3-meter (11-foot) lanes and one 3.6-meter (12-foot) outside lane in each direction with three-meter (ten-foot) outside shoulders and 1.2-meter (four-foot) inside shoulders. In addition, a 3.3-meter (11-foot) auxiliary lane would run along southbound Doyle Drive from the Park Presidio Interchange to the Girard Road exit ramp. The width of the proposed landscaped median would vary from five meters (16 feet) to 12.5 meters (41 feet). To minimize impacts to the park, the footprint of the new facility would occur largely within the existing facility's footprint east of the Park Presidio Interchange.

A 450-meter (1,476-foot) long high-viaduct would be constructed between the Park Presidio Interchange and the San Francisco National Cemetery. The height of the high-viaduct would vary from 20 to 35 meters (66 to 115 feet) above the ground surface. Shallow cut-and-cover tunnels would extend 240 meters (787 feet) past the cemetery, to east of Battery Blarney. The facility would then continue towards the Main Post in an open depressed roadway with a wide heavily landscaped median.

From Building 106 (Band Barracks), two cut-and-cover tunnels up to 310 meters (984 feet) long would extend to east of Halleck Street. The amount of fill over the tunnels to provide for landscape plantings is being coordinated with the Presidio Trust based on requirements of the *Vegetation Management Plan*. The expected minimum depth is two meters (six feet). The facility would then rise slightly on a low level causeway 160 meters (525 feet) long over the site of the proposed Tennessee Hollow restoration and a depressed Girard Road. The low causeway would rise to approximately four meters (13 feet) above the surrounding ground surface at its highest point. East of Girard Road the facility would return to existing grade north of the Gorgas warehouses and connect to Richardson Avenue. The proposed facility would provide a transition zone starting from the Main Post tunnel to reduce vehicle speeds prior to entering city streets. A motor control and switch gear room to operate the tunnel life safety equipment would be integrated with the Main Post tunnels.

The Presidio Parkway Alternative would include an underground parking facility up to four meters (12 feet) deep at the eastern end of the alignment between the Mason Street warehouses and Gorgas Street warehouses. The parking garage would supply approximately 500 spaces to maintain the existing parking supply in the area and improve pedestrian and vehicular access between the Presidio and the Palace of Fine Arts.

Merchant Road Option - At the intersection with Merchant Road, just east of the Toll Plaza, a design option has been developed for a Merchant Road Slip Ramp. This option would provide an additional new connection from westbound Doyle Drive to Merchant Road. The Merchant Road Slip Ramp Option which would

serve the Golden Gate Bridge facilities, visitor areas and areas of the Presidio such as Fort Scott and Battery East, would require the removal of a row of trees along the north side of Doyle Drive, as well as the removal of the row of apartment buildings along Armistead Road.

The existing Park Presidio Interchange would be reconfigured due to the realignment of Doyle Drive to the south. The exit ramp from southbound Doyle Drive to southbound Veterans Boulevard would be replaced with standard exit ramp geometry and widened to two lanes. The loop of the northbound Doyle Drive exit ramp to southbound Veterans Boulevard would be improved to provide standard exit ramp geometry. The northbound Veterans Boulevard connection to northbound Doyle Drive would be realigned to provide standard entrance ramp geometry. There are two options for the northbound Veterans Boulevard ramp to a southbound Doyle Drive connection:

- **Loop Ramp Option** - Replace the existing ramp with a loop ramp to the left to reduce construction close to the Cavalry Stables and provide standard entrance and exit ramp geometry.
- **Hook Ramp Option** - Rebuild the ramp with a similar configuration as the existing directional ramp with a curve to the right and improved exit and entrance geometry.

The Presidio Parkway Alternative includes two options for providing direct access to the Presidio and Marina Boulevard at the eastern end of the project:

- **Diamond Option** – The Diamond option would provide direct access to the Presidio and indirect access to Marina Boulevard in both directions via new access ramps from Doyle Drive connecting to an extension of Girard Road. East of the new Letterman garage, Gorgas Avenue is a one-way street and connects to Richardson Avenue with access to Palace Drive via a signalized intersection at Lyon Street.
- **Circle Drive Option** – This option would provide direct access to the Presidio and indirect access to Marina Boulevard for southbound traffic via access ramps from Doyle Drive connecting to an extension of Girard Road. Northbound traffic from Richardson Avenue would access the Presidio through a jug handle intersection to Gorgas Avenue.

Retaining walls would be required at the Park Presidio Interchange to accommodate the reconstruction of the ramps. A retaining wall up to eight meters (26 feet) would be constructed along the south side of the facility between the Battery and Main Post tunnels. Retaining walls would also be required in the eastern end of the alignment primarily along the extended Girard Road. Fences would be required along the edge of the at-grade portions of the roadway to restrict pedestrian access onto the roadway.

7.2.4 Preferred Alternative: Refined Presidio Parkway

In response to comments received after release of the DEIS/R, and to address traffic circulation, tidal inundation issues, the elimination of the underground parking below Doyle Drive, the provision of additional surface parking to more closely match the existing condition, while further minimizing the impacts on recreational, historic and cultural resources, the following refinements were made to the Presidio Parkway Alternative (now titled Preferred Alternative: Refined Presidio Parkway).

- The Hook Ramp Option at the Park Presidio Interchange was modified to reuse portions of the existing ramps to reduce impacts to resources while achieving similar improvements to traffic safety.
- In order to simplify construction, a portion of the alignment west of the Battery tunnels was adjusted to accommodate single stage construction of each tunnel structure.
- To reduce disturbance to the existing bluff, the refined alternative would raise the profile of the southbound lanes by up to three meters (ten feet). To further retain the cultural relationship between the upper and lower portions of the Presidio, the landscaping over the Main Post tunnels would recreate the bluff north of the tunnels.
- The accommodation of marsh expansion in the project corridor would subject the proposed facility to coastal events such as storm surge and tsunamis. In order to meet serviceability design criteria the profile would be raised to clear the 100-year tsunami elevation of 3.4 meters (11.1 feet) NAVD88. To accommodate the revised mainline profile, the profile of Halleck Street would be raised by an additional 0.8 meters (2.6 feet) at the north face of Building 228, with the crest of Halleck Street at elevation ten meters (32.8 feet).
- The revised alignment of the mainline created greater separation between the northbound and southbound roadways over the future marsh expansion area, providing an opportunity for increased light penetration to the ground. The additional curvature to the southbound roadway also enhanced the traffic calming impact of the roadway, reducing traffic speeds before reaching city streets.
- By redesigning the Richardson connection as ramps connecting to an urban street, rather than mainline segments, the traffic balance between Richardson Avenue and Marina Boulevard would more closely match the existing condition.
- In conjunction with the realignment of the southbound roadway, the intersection of the off-ramp to Girard Road was moved 20 meters (66 feet) south. This moved the connection along Gorgas Avenue away from the Gorgas Avenue warehouses, preserving the streetscape in front of the buildings.
- The intersection for the northbound on-ramp was also moved 20 meters (66 feet) south. In conjunction with reducing the northbound off-ramp from two

lanes to one lane, much of the landscaping area west of the Palace of Fine Arts was preserved.

- In response to the plans by San Francisco Department of Recreation and Parks (SFDRP) for the rehabilitation of the Palace of Fine Arts and surrounding grounds, the refined alternative would maintain Palace Drive as a two-way road and incorporate the modifications proposed by SFDRP at the north and south ends where Palace Drive connects to Lyon Street. The Preferred Alternative would also maintain Lyon Street as a two-way street with connection to Bay Street.
- To enhance pedestrian safety and accessibility the proposed design would provide pedestrian access under Doyle Drive from the Gorgas warehouses to the Palace of Fine Arts and under Girard Road from the Palace of Fine Arts to the Mason Street warehouses.
- The refinements would include a parking concept that would maintain a parking supply similar to the existing condition. The main features are:
 - elimination of underground parking below Doyle Drive;
 - redesign parking west of Palace Drive and south of Mason Street warehouses as surface parking rather than underground parking;
 - modification to Palace Drive to provide perpendicular parking on both sides of a two-way Palace Drive;
 - provide surface parking behind the Gorgas warehouses; and,
 - provide on-street parking along Gorgas Avenue.

The Doyle Drive Subcommittee to the Citizens' Advisory Committee (CAC), and the Doyle Drive Executive Committee comprised of lead, cooperating and responsible agencies and the Authority CAC all held meetings in July 2006 to consider recommendations for a preferred alternative and design options. All three groups made identical recommendations for selection of the Presidio Parkway incorporating modifications.

The recommendation was Alternative 5, Presidio Parkway, with specific design elements and modifications including the modified Hook Ramp Option for the Presidio Parkway Interchange and the Diamond Option for Presidio Access. Options which were included in Alternative 5 that were eliminated in the Preferred Alternative included:

- Underground parking. Due to improved pedestrian and vehicular circulation achieved with surface parking and the avoidance of potential disturbance to the existing groundwater regime and archaeological impacts, reconfigured surface parking was selected over an underground parking facility.
- Merchant Road Option. Since the additional impacts were considered too great to justify the improved access to Merchant Road, the Merchant Road Option was eliminated. The construction of the slip ramp would take an additional 0.5 hectares (1.2 acres) of parkland, require the removal of four residential buildings along Armistead Road, and increase construction costs

by \$28.1 million. The improvements to weekday PM traffic operations could be achieved through the addition of an all-way stop sign at the northern terminus of Merchant Road and weekend congestion reduced through improvements to the Golden Gate Bridge visitors' parking lot.

- Loop Ramp Option. Due to the increased impacts to biological resources and intrusion into scenic vistas, the Loop Ramp Option at the Park Presidio Interchange was eliminated. Careful design of the ramp connecting northbound Veteran Boulevard to southbound Doyle Drive minimized any impacts to Cavalry Hollow; therefore, the take of an additional 0.6 hectares (1.4 acres) to construct the Loop Ramp Option was not justified.
- Circle Drive Option. Since the development of the Circle Drive Option as presented in the DEIS/R, the SFDRP advanced their plans for the rehabilitation of the Palace of Fine Arts and identified the need to retain Palace Drive as a two way street. Although many configurations were developed, the Circle Drive Option remained incompatible with a two-way Palace Drive. Residents along Lyon Street were also adamant that Lyon Street should remain as a two-way Street. In addition, the construction of Circle Drive would require the removal of Building 1151, the historic pool building. Since the refined Diamond Option accommodates a two-way Palace Drive and Lyon Street and retains the pool building, the Circle Drive option was eliminated.

In addition to these recommendations and modifications, the subcommittee voted to support three design refinements:

- move Girard Road intersection south;
- restrict Lyon Street connection for the Presidio; and
- reserve additional right of way for the connection from Marina Boulevard to Doyle Drive.

The following is the description of the Preferred Alternative, incorporating the modifications. A more detailed discussion of the project alternatives, including exhibits, can be found in Chapter 2 of this FEIS/R. Detailed drawings showing the plan and profile of the Preferred Alternative in addition to the various design options can be found in **Appendix B**.

The Refined Presidio Parkway Alternative would replace the existing facility with a new six-lane facility and a southbound auxiliary lane, between the Park Presidio Interchange and the new Presidio access at Girard Road. (See **Exhibit 2-31**)

The new facility would consist of two 3.3-meter (11-foot) lanes and one 3.6-meter (12-foot) outside lane in each direction with three-meter (ten-foot) outside shoulders and 1.2-meter (four-foot) inside shoulders. The southbound direction would include a 3.3-meter (11-foot) auxiliary lane from the Park Presidio Interchange to the Girard Road exit ramp. The width of the proposed landscaped median would vary from five meters (16 feet) to 12.5 meters (41

feet). To minimize impacts to the park, the footprint of the new facility would overlap with a large portion of the existing facility's footprint east of the Park Presidio Interchange.

7.3 Description of Section 4(f) Properties

This section describes the *Section 4(f)* properties that would be subject to *Section 4(f)* use by the proposed build alternatives, including the Preferred Alternative. These properties include:

- the Presidio NHLD;
- Doyle Drive;
- the Golden Gate Bridge;
- Marina Viaduct;
- the Presidio Viaduct; and
- Palace of Fine Arts.

Exhibit 7-2 on the following page provides a listing of the resources in proximity to Doyle Drive construction.

7.3.1 The Presidio

The Presidio of San Francisco, a publicly owned recreational area and historic property is located in the northwestern most point of San Francisco peninsula. The property is approximately 600 hectares (1,480 acres) in size and is both a national park and National Historic Landmark District (NHLD). The existing Doyle Drive corridor encompasses 9.1 hectares (22.5 acres) of the property.