

# San Francisco Bay Conservation and Development Commission

455 Golden Gate Avenue, Suite 10600, San Francisco, California 94102 tel 415 352 3600 fax 415 352 3606

November 30, 2018

**TO:** Commissioners and Alternates

**FROM:** Lawrence J. Goldzband, Executive Director (415/352-3653, [larry.goldzband@bcdc.ca.gov](mailto:larry.goldzband@bcdc.ca.gov))  
Ethan Lavine, Chief of Bay Resources and Permits (415/352-3618, [ethan.lavine@bcdc.ca.gov](mailto:ethan.lavine@bcdc.ca.gov))

**SUBJECT:** **Staff Recommendation for the Golden Gate Bridge, Highway and Transportation District's BCDC Permit Application No. M19196.019.03 (Material Amendment No. Three) for the Golden Gate Bridge Physical Suicide Deterrent System Project**  
(For Commission consideration on December 6, 2018)

## Recommendation Summary

### Proposed Project:

The applicant, Golden Gate Bridge, Highway and Transportation District (District), proposes to install a physical suicide deterrent system (Figure 1) on the Golden Gate Bridge for the purpose of reducing suicide attempts and fatalities from individuals jumping from the sidewalk along the bridge's east and west sides. Installation of the physical suicide deterrent system would require replacement of existing beams and rails that support a rolling maintenance scaffold that runs along the outside and underneath the suspension bridge deck truss, temporary construction staging on portions of the bridge sidewalks, and installation of temporary security fencing along sections of the bridge sidewalks.

**Figure 1. Photo Rendering of Proposed Physical Suicide Deterrent System**



**Issues and****Staff Analysis:**

The staff believes that the primary issues raised by the application are as follows:

1. **Allowable Fill.** The Commission should determine whether the proposed fill for the project is consistent with the McAteer-Petris Act and Bay Plan policies on allowable fill of the Bay. The McAteer-Petris Act allows for some filling of the Bay for purposes providing substantial public benefits if these same benefits could not be achieved equally well without filling. The proposed project would provide for a physical suicide deterrent system with stainless-steel netting that has been successful in reducing fatalities and suicide attempts at other high-profile bridges like the Golden Gate Bridge. The project would fill the Bay for a water-oriented use (i.e., bridge) that has no upland alternative location, would require the minimum necessary fill to achieve its purpose, and is designed with sound safety standards. The project has minimal potential for harmful effects to the Bay, given its location approximately 220 feet above the water, but does have the potential to adversely affect bird species who might attempt to nest or become tangled in the net system. Therefore, a special condition is recommended to report the results of required avian monitoring to the Executive Director and implement additional feasible mitigation measures as determined to be appropriate and necessary through consultation with California Department of Fish and Wildlife and U.S. Fish and Wildlife Service.
2. **Appearance, Design and Scenic Views.** The Commission should determine whether the proposed project is consistent with applicable Bay Plan policies related to Appearance, Design and Scenic Views. The proposed project would result in permanent and temporary adverse visual impacts, however maximum efforts have been made to preserve views of the Bay through its design. The proposed net system would only be visible to individuals looking at the bridge from the shoreline or Bay, or who are looking down at the Bay from over the edge of the handrails along the bridge's sidewalks. To minimize its visual impact on Bay views, the system is also thoughtfully designed to be in keeping with the character of the bridge and to maximize visual transparency to the greatest extent feasible. During construction only, use of temporary chain-link security fencing would be required along the bridge's sidewalk handrails. Staff recommends inclusion of a special condition to ensure removal of the temporary fencing as soon as feasible and immediately upon completion of the work.

3. **Public Access.** The Commission should determine whether the proposed project is consistent with applicable Bay Plan policies related to Public Access. The proposed project would avoid any permanent physical impacts to a public access area, would not displace any existing public access, and would not create greater need or demand for public access than exists at present. Therefore, while the District does not propose to install any new public access improvements as part of the project, the Commission could find that no additional public access must be provided as a condition of development as the project creates no additional lasting burden on the shoreline or public access areas. To avoid potential for major construction-related impacts to public access, staff recommends a special condition to ensure that the same general level of public access exists during construction as does at present.

**Recommended**

**Action:** Staff recommends **APPROVAL WITH CONDITIONS** of BCDC Permit Application No. M1996.019.03 (Material Amendment No. Three).

**Recommended Resolution and Findings**

Because the project involves a material amendment to an existing permit, the format of the recommendation is different from recommendations for new permits. This recommendation includes language from the permit, as well as the changes included in the subject amendment. Language to be deleted from the permit has been struck through and language to be added to the amended permit has been underlined. Language that has neither been struck through nor underlined is language of the existing permit that will remain unchanged with the adoption of Material Amendment No. Three. The staff recommends that the Commission adopt the following resolution:

**I. Authorization**

A. **Authorized Project.** Subject to the conditions stated below, the permittee, the Golden Gate Bridge, Highway and Transportation District, is hereby authorized to do the following:

**Location:** In the Bay and within the 100-foot shoreline band, on, underneath and adjacent to the Golden Gate Bridge, in the City and County of San Francisco and Marin County.

**Description:** 1. Perform seismic and wind retrofit work on and clean up contaminated soils underneath the Golden Gate Bridge-;

The seismic retrofit work includes retrofitting and replacing portions of the north and south viaducts, reinforcing and anchoring the north and south

pylons, reinforcing the north and south anchorage housings, strengthening, installing energy dissipaters, expansion joints and bracing on the Fort Point Arch, strengthening the towers and their piers and immobilizing the saddle/cable connection, installing new expansion joints, dampers, and adding new bracing members beneath the roadway and strengthening existing members on the suspension portion of the bridge. To facilitate the work on Pylons S1 and S2 west and north of the Fort Point Arch, and to provide safe access for workers, equipment and material, install two temporary platforms, one 5,100 square feet, and one, 4,100 square feet supported by a total of 48, 18-inch steel piles (Amendment No. Two). The wind retrofit work includes the replacement of portions of the sidewalk railings with new, more aerodynamic railings and the installation of two new semi-circular wind fairings along the west edge of the bridge between the North and South towers. The soil clean up work includes the removal of contaminated soils beneath and adjacent to the bridge, and the installation of construction and staging areas near Fort Point, Moore Road and Conzelman Road. A small, westerly portion of the existing public access area near Fort Point can be used for a temporary construction staging area. Additionally, public access areas which are currently closed due to contamination will be reopened upon completion of the project.

2. Install a physical suicide deterrent system:

**In the Bay:**

(1) **Physical Suicide Deterrent Barrier.** Install, use, and maintain in-kind approximately 212,000 square feet of stainless-steel netting running along a 5,300-foot-long section of the bridge's east and west sides, supported by steel cables and steel struts attached to the truss roughly 50 feet apart and approximately 20 feet below the level of the sidewalks, extending out horizontally approximately 20 feet from the face of the bridge.

- (2) **Maintenance Scaffold System.** Replace, use, and maintain in-kind the rolling maintenance scaffold system, including rails and trolley beams mounted along the side and bottom of the suspension bridge deck truss.
- (3) **Temporary Security Fencing.** During construction only, install, use and maintain in-kind temporary chain-link security fencing along approximately 1,064 feet of the bridge's sidewalks.
- (4) **Temporary Construction Storage.** During construction only, establish and use temporary storage areas and units on the east and west sidewalks while maintaining a minimum 6-foot-wide clear passage for bicyclists and pedestrians.

**Within the 100-foot Shoreline Band:**

- (1) **Physical Suicide Deterrent Barrier.** Install, use, and maintain in-kind approximately 8,000 square feet of stainless-steel netting along approximately 200 feet of the bridge's east and west sides, supported by steel cables and steel struts attached to the truss roughly 50 feet apart and approximately 20 feet below the level of the sidewalks, extending out horizontally approximately 20 feet from the face of the bridge.
- (2) **Maintenance Scaffold System.** Replace, use, and maintain in-kind the rolling maintenance scaffold system, including rails and trolley beams mounted along the side and bottom of the suspension bridge deck truss.
- (3) **Temporary Security Fencing.** During construction only, install, use and maintain in-kind temporary chain-link security fencing along approximately 336 feet of the bridge's sidewalks.

**In the Bay and Within the 100-foot Shoreline Band:**

- (1) **Temporary Work Access Platforms.** During construction only, install temporary work access platforms, including bottom access platforms, that are approximately 60-foot-long and 130-foot-wide and suspended from the suspension bridge bottom

chord, and side access platforms that are approximately 16-feet-long and 7-feet-wide and attached to the suspension bridge top chord.

**B. Based on Application Dated.** This amended authority is generally pursuant to and limited by your original application dated April 19, 1996, the letter dated July 11, 1999 requesting Amendment No. One, and the letter dated December 6, 2000 requesting Amendment No. Two, the letter dated March 24, 2017 requesting Material Amendment No. Three and the letter dated September 14, 2015, requesting Amendment No. Four (time extension), including all accompanying exhibits, as modified by any subsequent plans, exhibits and correspondence, and all conditions of this amended permit.

**C. Deadlines for Commencing and Completing Authorized Work.** Work authorized ~~herein must~~ in the original permit was to commence prior to December 31, 1998, or ~~this the original permit will~~ would have lapsed and become null and void. Such work ~~must~~ was also to be diligently pursued to completion and ~~must be~~ completed within five years of commencement, or by December 31, 2003, ~~whichever is~~ was earlier, unless an extension of time ~~is~~ was granted by a further amendment of this amended permit. The permittee may extend the December 31, 2003 completion date for this permit for an additional 5-year period, to December 31, 2008, provided the permittee submits an adequate status report and update on the project with an amendment request letter.

The project authorized in Material Amendment No. Three must commence by January 1, 2020, and must be diligently pursued to completion within three years of commencement, no later than January 1, 2023, unless an extension of time is granted by a further amendment of this amended permit.

On January 6, 2016, the Commission staff issued Amendment No. Four to the permit, a time extension, which extended the original permit completion time to December 31, 2019.

## **II. Special Conditions**

The amended authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

### **A. Specific Plans and Plan Review**

- 1. Plan Review.** No work on a specific portion of work shall be commenced pursuant to this authorization until final project plans, specifications, and plan information for any portion of the seismic retrofit construction, the wind retrofit construction and the soil clean-up have been submitted to, reviewed, and approved in writing by or on behalf of the Commission for that specific portion of the work. Further, no work on the erosion control, habitat protection, the site restoration and the public access and traffic plans as required by the National park Service Special Use Permit No. 96-PSF-7043 shall be commenced pursuant to this authorization until final

project plans, specifications, and plan information for that portion of the work have been submitted to, reviewed, and approved in writing by or on behalf of the Commission. Provided the final project plans submitted for a specific portion of work (i.e. the North Viaduct Seismic Retrofit component of the overall Seismic Retrofit Project) are reviewed by or on behalf of the Commission and approved consistent with the terms of this authorization, work on that portion of the project can commence prior to the permittee receiving final project plan approval for other components of the overall project or other required elements. The specific drawings and information required will be determined by the staff. To save time, preliminary drawings should be submitted and approved prior to final drawings.

The improvements authorized herein shall be built generally in conformance the plans entitled: "Golden Gate Bridge Seismic Retrofit," prepared by Sverdrup Civil, Inc., T.Y. Lin International/Imbsen and Associates, Inc., and the Golden Gate Bridge, Highway and Transportation District, on file in the BCDC offices.

Final project plans for any portion of work shall generally include and clearly label the shoreline, property lines, the boundaries of all areas that have been reserved for public access purposes and/or open space, details showing the location, types, dimensions, and materials to be used for all structures, irrigation, landscaping, drainage, parking, signs, lighting, fences, path, utilities and other proposed improvements.

Plans submitted shall be accompanied by a letter requesting plan approval, identifying the type of plans submitted, the portion of the project involved, and indicating whether the plans are final or preliminary. Approval or disapproval shall be based upon:

- (a) Completeness and accuracy of the plans in showing the features required above, particularly the shoreline, property lines, areas reserved or dedicated for public access, and any other criteria required by this authorization;
- (b) Consistency of the plans with the terms and conditions of this authorization;
- (c) Consistency of the plans with the recommendations of the Design Review Board;
- (d) Consistency of the plans with the recommendations of the Engineering Criteria Review Board; and
- (e) Assuring that any fill in the Bay does not exceed this authorization.

Plan review shall be completed by or on behalf of the Commission within 45 days after receipt of the plans to be reviewed.

2. **Conformity with Final Approved Plans.** All work, improvements, and uses shall conform to the final approved project plans. Prior to any use of the facilities authorized herein, a qualified representative of the District shall certify in writing that, through personal knowledge, the work covered by the authorization has been performed in accordance with the approved design criteria and in substantial conformance with the approved plans. No noticeable changes shall be made thereafter to any final project plans or to any constructed structure, lighting, fence, signage, landscaping, restored area, parking area, or public access area without first obtaining written approval of the change(s) by or on behalf of the Commission.
  3. **Discrepancies between Approved Plans and Special Conditions.** In case of any discrepancy between final approved plans and special conditions of this authorization or legal instrument approved pursuant to this authorization, the special condition or legal instrument shall prevail. The permittee is responsible for assuring that all plans accurately and fully reflect the special conditions of this authorization and any legal instruments submitted pursuant to this authorization.
- B. **Public Access.** The existing public access to Fort Point and along Conzelman Road shall be maintained. Following completion of the soil removal, seismic retrofit work and site restoration work on either the Marin or San Francisco side of the Golden Gate, all existing public access areas, as well as the areas which were fenced off pursuant to the California Department of Toxic Substances Control Order on that side of the Golden Gate, as shown in Exhibits A and B, shall be made available to the public for walking, bicycling, picnicking, viewing and related public access activities.
1. **Public Access and Traffic Management Plan.** Prior to commencing construction on a portion of work which will impact a public access area, the permittee shall submit and obtain approval, pursuant to Special Condition II-A above, of the "Traffic Management Plan," as described in the National park Service Special Use Permit Sections VI-3 and VI-4, pages 25 through 28. The permittee shall endeavor to reduce the extent and duration of public access disruptions due to the project.
  2. **Temporary Relocation of Fort Point Educational Facilities.** The interpretive and educational facilities currently provided by national park Service staff at Fort Point shall be relocated to Building No. 989, as shown in Exhibit A, consistent with the plan approved pursuant to Special Condition II-B-1, as described in the National park Service Special Use Permit Section VI-4, pages 27 through 28.

3. **Hand Rail and Wind Fairing Design.** The modifications to the west side pedestrian path handrail and wind fairings authorized herein shall be designed consistent with the recommendations of the Design Review Board and other State and District architectural reviews intended to preserve the visual characteristics of the Bridge to the greatest extent practicable. Final project plans and specifications detailing the handrail and wind fairings shall be submitted to the Commission's offices for review and approval, pursuant to Special Condition II-A, prior to their installation.
4. **Lighthouse Keeper's Bluff.** The southeast overlook located above Fort Point, known as Lighthouse Keeper's Bluff, shall be reopened within 30 days of the completion of the bridge retrofit construction, soil clean up and site restoration work for that portion of the project.
5. **Southwest Side Access.** The beach on the west side of Fort Point shall be made available for public use during special swim events and other events when the National Park Service staff will provide supervision to ensure public safety is maintained.
6. **Lime Point Access.** The Lime Point path, also known as Moore Road, located to the east and below the North Viaduct, shall be reopened within 30 days of the completion of the bridge retrofit construction, soil clean up and site restoration work for that portion of the project.

C. **Site Restoration, Cleanup and Landscaping.** At least 60 days prior to the completion of a specific portion of work on the project, the permittee shall submit and obtain approval, pursuant to Special Condition II-A above, the relevant portion(s) of the "Site Restoration and Cleanup Plan," as described in the National park Service Special Use Permit Sections V-4, pages 21 and 22, and VI-12, pages 30 through 32, which adequately address the necessary site restoration for that portion of the project. Pursuant to the recommendations of the Design Review Board, the District shall ensure, to the extent consistent with the National park Service requirements, that the new landscaping installed uses native plant materials and opens up views to the Bay by eliminating trees wherever possible.

D. **Mission Blue Butterfly Habitat Protection Plan and Program.** Prior to the commencement of work which could disrupt the Mission Blue Butterfly or its habitat, the permittee shall submit and obtain approval, pursuant to Special Condition II-A above, the relevant portion(s) of the "Mission Blue Butterfly Habitat Protection Plan and the Implementation Agreement with the National park Service for the Mission Blue Butterfly Mitigation/Restoration Program," as described in the National park Service Special Use Permit Section VI-10, page 30. It is recognized that a majority of the work associated with this element of the project will be located in the hillsides above Kirby Cove and Fort Baker, well above San Francisco Bay. Therefore, the intent of this condition for plan review of the butterfly habitat work is to

ensure that the work will not adversely affect the Bay or its shoreline, because, in part, the work will be located far enough from the Bay shoreline and/or includes sufficient grading and erosion provisions and management practices which prevent soil, organic matter and construction debris from the work from entering the Bay.

**E. Comprehensive Erosion Control and Storm Water Pollution Protection Plan.** Prior to commencing construction on a portion of work which involves vegetation removal, grading, or other work which could contribute to increased erosion or storm water pollution, the permittee shall submit and obtain approval, pursuant to Special Condition II-A above, the relevant portion(s) of the contract plans and specifications which provide for erosion control, the "Native Vegetation and Habitat Protection Plan" and the "Storm Water Management Plan," as described in the National Park Service Special Use Permit Sections VI-1 and VI-2, pages 23 and 24. The plan(s) shall implement best management practices, as required by the San Francisco Regional Water Quality Control Board, so that the soil removal activities, and the grading and soil importation for site restoration, will prevent contaminated or imported soil from eroding into the Bay.

**F. Shotcrete Installation, South Pylons.** The proposed shotcrete on Pylons S-1 and S-2 shall be installed so that the transition between the new shotcrete and the existing concrete at the top of the pylons is not readily perceptible from all available vantage points. The shotcrete shall include a finish which recreates, at the same scale, the pattern of repetitive horizontal lines similar to the appearance of the individual plank formwork used on the original bridge. Final plans and specifications describing the finished shotcrete details shall be submitted for review and approval, pursuant to Special Condition II-A, prior to the installation of the shotcrete.

**G. Temporary Construction Fencing.** Temporary construction fencing may be installed throughout the various construction phases of the project to ensure the safety of the public and the people who are working on the bridge, provided that the fencing will not have a significant adverse impact on visual and physical public access to and along the shoreline of the Bay. Such temporary construction fencing must also be removed immediately after it is no longer needed for that portion of the work. The temporary construction fencing on the North Viaduct shall be removed as soon as it is no longer needed, or when the North Viaduct retrofit is completed, or by August 2, 2001, whichever is earlier, unless an extension of time is granted by a further amendment of this amended permit. No other fencing shall be installed pursuant to this authorization until final plans, specifications, plan information and expected duration of the fencing have been submitted to, reviewed, and approved in writing by or on behalf of the Commission pursuant to Special Condition II-A of this amended permit (Amendment No. One).

**H. Temporary Construction Platforms.** Temporary construction platforms may be installed at the base of pylons S1 and S2 west and north of the Fort Point Arch. The temporary construction platforms will cover a total of 9,200 square feet of the Bay and will require the installation of 48, 18-inch pre-drilled steel piles for support.

The temporary construction platforms shall extend 7.5 to 30 feet beyond the existing outer edge of the seawall at the west and north sides of Pylons S1 and S2 and may remain in place for the duration of Phase II of the retrofit project or until December 31, 2003, whichever is earlier, unless an extension of time is granted by further amendment of this amended permit. At the completion of the retrofit project, or by December 31, 2003, whichever is earlier, all of the materials associated with the platforms shall be removed to a location outside of the Commission's jurisdiction, the piles vibrated out, and the area restored to its original condition (Amendment No. Two).

I. **Debris Removal.** All construction debris shall be removed to a location outside the jurisdiction of the Commission after the completion of the project. In the event that any such material is placed in any area within the Commission's jurisdiction after the completion of the project, the permittee, its assignee, or successor in interest, or the owner of the improvements, shall remove such material, at its expense, within ten days after it has been notified by the Executive Director of such placement

J. **Construction Operations.** All construction operations shall be performed to prevent construction materials from falling into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittee shall immediately retrieve and remove such material at its expense.

K. **Notice to Contractor.** The permittee shall provide a copy of this permit to any contractor or person working in concert with the permittee to carry out the activities authorized herein and shall point out the special conditions contained herein.

**L. Physical Suicide Deterrent System (Amendment No. Three)**

1. **No Additional Plan Review.** The development authorized by Amendment No. Three shall be built generally in conformance with the materials submitted with the application request and the plans entitled "Golden Gate Bridge Physical Suicide Deterrent System," prepared by HNTB Corporation, dated October 13, 2015. No additional plan review is required pursuant to Special Condition II-A provided the project is constructed in substantial conformance with these plans.
2. **Bird Protection Measures.** The permittee shall implement the requirements of Measures 5, 6, 7, 8, and 9 contained in the project's Mitigation Monitoring and Reporting Program/Plan (MMRP) related to protection of bird species, as identified in the District's Resolution No. 2010-015 dated February 12, 2010. The permittee shall provide a copy of any monitoring reports required by Measures 5 through 9 to the Executive Director. If feasible alternative mitigation strategies are required to comply with Measures 5 through 9, the permittee shall consult with California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. Before implementing the alternative mitigation

strategies, the District shall consult with the Executive Director, and the Executive Director will determine if work proposed for an alternative mitigation strategy legally requires a permit amendment.

3. **Temporary Security Fencing.** Temporary security fencing may be installed only during construction to ensure the safety of the public and the people who are working on the bridge. Such temporary fencing must be removed as soon as feasible, and immediately after the completion of the work.
4. **Public Access During Construction.** At all times a minimum 6-foot clearance will be maintained for use by pedestrians and/or bicyclists. If the contractor establishes storage areas on the east sidewalk, then pedestrians and bicyclists will be separated, with bicyclists moved to the west sidewalk between the hours of 5:30 am and 9 pm. If the contractor does not utilize the east sidewalk for storage or uses the east sidewalk for construction operations between the hours of 5:30 am and 9 pm, then the current public access noted above will be provided. When the contractor is working on the east sidewalk between the hours of 9 pm and 5 am, bicyclists will be routed to the west sidewalk.

### III. Findings and Declarations

On behalf of the Commission, I find and declare that:

#### A. **Project.**

1. **Original Authorization Through Amendment No. Two.** The project authorized by ~~this~~ the original permit through Amendment No. Two involves ~~the~~ seismic retrofit and wind retrofit of an existing bridge structure in the Bay and within the shoreline band, an activity defined in Regulation Section 10601(a)(6) and 10601(b)(5), soil clean up and site restoration work in the shoreline band, an activity defined in Regulation Section 10601(b)(1), and the temporary placement of two construction platforms, a project similar in activity and impact on the Bay as defined in Regulation Section 10601(E)(3) to the placement of 20,000 square feet of fill as defined in Regulation Section 10601(a)(1), and thus ~~is~~ was a “minor repair or improvement” for which the Executive Director may issue: (1) a permit, pursuant to Government Code Section 66632(f) and Regulation Section 10622(a), and (2) an amendment to a permit pursuant to Regulation Section 10822.

- B. The project authorized by this permit is consistent with the McAteer-Petris Act and with the *San Francisco Bay Plan* in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay. The new wind fairings on the west side of the bridge are the only portion of the project which will add new fill in the Bay, totaling approximately 7,950 square feet of cantilevered fill. However, because the wind fairings will

be located more than 200 feet above the Bay surface, the adverse impacts to the Bay from the result of the wind fairings will be insignificant. To ensure that the project will conform to the Commission's policies on the Safety of New Fills in the Bay to the greatest extent practicable, the project was reviewed by the Commission's Engineering Criteria Review Board on May 24, 1994, at which time the engineering criteria and retrofit strategy were approved subject to a final plan approval condition. Furthermore, as conditioned by Special Condition II-A for final plan approval, the final plans for the project will be reviewed to ensure that no additional fill in the Bay is permitted within this project, and that the final plans are consistent with the recommendations of the Engineering Criteria Review Board.

The *San Francisco Bay Plan* Map No. 10 identifies the project site as a "waterfront park priority use area," and identifies State Highways 1 and 101 which cross the bridge as "scenic drives." Furthermore, because the project will be constructed in some of the most heavily used recreation and public access areas around the Bay, the project was reviewed by the Commission's Design Review Board on November 7, 1994, and June 5, 1995. The Board was concerned how the wind fairings, the railing design, the new bracing within the Fort Point Arch, the shotcrete treatment, and the new landscaping would affect views to and from the bridge as well as the visual characteristics of the bridge itself, and how the construction staging areas, the soil clean-up and habitat revegetation plan would affect the existing recreation and public access to and around the project site. The Board commended the Bridge District on the thoroughness of its review of the project and found that the design protected: (1) views both to the bridge and from the bridge; (2) the visual characteristics of the bridge, and (3) physical public access on and round the bridge. Furthermore, Special Conditions II-A and II-B require final plan review and approval of the portions of the project which affect physical and visual public access to ensure: (1) that the final plans are consistent with recommendations of the Design Review Board; and (2) that the public access benefits proposed by the permittee is included in the final project. In conclusion, as conditioned to ensure the project will not adversely impact the public's existing use and enjoyment of the Bay and shoreline in the project vicinity, and because the project is consistent with the "waterfront park" and "scenic highways" designations in the Bay Plan, will significantly contribute to the recreation and public access areas currently available to the public, and will be constructed in a manner that is sensitive to the visual resources and design characteristics of the bridge, the project is consistent with the recreation, public access and appearance, design, and scenic views policies of the *San Francisco Bay Plan*.

The *San Francisco Bay Plan* also includes policies to protect water quality and fish and wildlife within the Bay. At this time, the final project plans for the vegetation removal, site restoration, landscaping, and erosion control plans for the areas to be disturbed during construction, are not available. The vegetation removal could contribute to excessive soil erosion at the project site. Further, because the final site restoration plan would likely involve the importation and movement of significant amounts of soil and organic material, it is possible that the soil and organic matter, if not properly stored, placed and managed, could erode or otherwise wash into the Bay, creating adverse effects to water quality and fish and wildlife. Therefore, to ensure that the project will not adversely affect water quality and fish and wildlife, Special Conditions II-C, II-D and II-E, which requires final plan approval for all elements of the project which could create adverse effects to water quality and fish and wildlife, is needed.

Amendment No. One ~~is~~ was issued for temporary construction and safety fencing. After construction began, workers suffered from debris falling off the bridge deck and construction fencing was erected on the railing of the north viaduct. The permittee has also requested to use temporary construction and safety fences for other parts of the project. To ensure that any new fencing does not adversely affect visual or physical access, Special Condition II-G, which requires final plan review of any new proposed fencing, has been added. Therefore, as conditioned, the use of temporary construction and safety fencing in the seismic retrofit of the Golden Gate Bridge is consistent with the Commission's laws and policies that protect visual and physical public access to San Francisco Bay.

Amendment No. Two ~~is~~ was issued for the temporary placement of two, pile-supported construction platforms covering approximately 9,200 square feet of Bay surface area. The platforms will provide both safe access areas for workers, equipment, and materials and will protect the existing seawall. The 48 pilings supporting the construction platforms will involve 85 square feet of Bay coverage and will not significantly alter current hydrologic conditions. The platforms themselves will be cantilevered over the Bay and, except for shading, should have negligible effects on the Bay. The conditions of the existing permit, which required removal of all construction debris to locations outside of the Commission's jurisdiction and the conducting of construction operations to prevent construction materials from falling into the Bay, as well as ~~new~~ Special Condition II-I which requires the complete removal of the construction platforms and the return of the area to its pre-existing conditions, are necessary to assure that the project will have minimal impacts on Bay water quality and water surface area and volume, as required by the Bay Plan. Special Condition II-B of the existing authorization requiring

the permittee to minimize the disruption of public areas, will assure that the temporary construction platforms will have minimal impacts on public access (Amendment No. Two).

2. **Material Amendment No. Three.** Amendment No. Three authorizes installation of a physical suicide deterrent system on the Golden Gate Bridge for the purpose of reducing suicide attempts and fatalities from individuals jumping from the sidewalk along the Bridge's east and west sides. In 2017, 278 people came to the bridge to harm themselves. Of those 278, 245 were stopped and taken off the bridge for a psychiatric hold at a local hospital, but 33 jumped from the bridge and died. The District believes the deterrent system will result in the Golden Gate Bridge no longer being a major destination for suicide attempts, as net systems such as the one proposed have been proven effective over the past two decades at more than a dozen bridges around the world.

The physical suicide deterrent system consists of stainless-steel netting running the approximately 1.7-mile length of the bridge, supported by steel cables and steel struts attached to the truss roughly 50 feet apart and approximately 20 feet below the level of the sidewalk, extending out horizontally approximately 20 feet from the face of the bridge. Along the bridge's concrete North Anchorage Housing, where netting is infeasible, a vertical barrier will be installed along approximately 300 feet on both sides of the bridge. The North Anchorage Housing is located outside the Commission's jurisdiction.

Installation of the physical suicide deterrent system requires replacement of existing beams and rails that support a rolling maintenance scaffold that runs along the outside and underneath the suspension bridge deck truss to support ongoing maintenance. Finally, the project involves temporary construction staging and security fencing along the bridge sidewalk, though pedestrian and bicycle access would be accommodated at all times during project construction.

a. **Allowable Fill.**

- (1) **Applicable Policies.** The placement of fill in the Bay may be authorized only when it meets the fill requirements identified in Section 66605 of the McAteer-Petris Act, which states, in part: the public benefits from fill must clearly exceed the public detriment from the loss of water areas, and fill should be limited to water-oriented uses or minor fill for improving public access or shoreline appearance; no alternative upland location exists for the uses proposed on fill; the fill should be the minimum amount necessary; the fill should minimize harmful effects to the Bay including the Bay's water volume, circulation, water quality, and fish and wildlife resources; the fill

should be constructed in accordance with sound safety standards; and the fill should be authorized when the applicant has valid title to the affected property.

Bay Plan policies focused on minimization of harmful effects to the Bay include those related to Fish, Other Aquatic Organisms and Wildlife. These policies state, in part, that “[t]he Commission should...[c]onsult with the California Department of Fish and [Wildlife] and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species...[and n]ot authorize projects that would result in the ‘taking’ of...species listed as endangered or threatened pursuant to the state or federal candidate for listing under the California Endangered Species Act, unless the project applicant has obtained the appropriate ‘take’ authorization....”

- (2) **Bay Fill Proposed.** The physical suicide deterrent system will run the approximately 1.7-mile length of the bridge along both its east and west sides. The system consists of horizontal marine-grade stainless-steel netting, supported by horizontal steel struts or frames connected to the superstructure of the bridge. The stainless-steel netting will be located approximately 20 feet below the bridge’s sidewalks, and will extend horizontally approximately 20 feet out from the edge of the bridge superstructure. Only a portion of the structure is located within the Commission’s San Francisco Bay jurisdiction, with the remaining located within the shoreline band or suspended above land outside of the Commission’s permitting jurisdiction. In total, the project results in approximately 212,000 square feet of new fill cantilevered approximately 220 feet over the Bay.
- (3) **Public Detriment versus Public Benefit.** The Golden Gate Bridge has 4-foot-high handrails along its eastern and western sidewalks. There is no other physical barrier beyond the outside handrail preventing an individual from jumping once the handrail is scaled. Without a physical barrier to deter suicide attempts, the District employs non-physical deterrence measures. These include emergency counseling telephones, public safety patrols, intervention and rescue training for bridge security personnel, and surveillance cameras. According to the District, these non-physical measures have stopped approximately two-thirds of those individuals intending to commit suicide at the bridge. However, despite the implementation of various non-physical measures, approximately two dozen deaths per year occur as a result of individuals jumping from the bridge.

The District has determined that a physical suicide deterrent system on the bridge, while it has visual and aesthetic impacts, is necessary to reduce the number of injuries and deaths associated with individuals jumping from the bridge. Should individuals jump, they would be expected to survive the fall into the net and could be rescued. Use of such net installations for suicide prevention on other facilities has resulted in far fewer fatalities and suicide attempts.

- (4) **Water-Oriented Use.** The McAteer-Petris Act identifies bridges as water-oriented uses for which some fill can be authorized. Installation of a physical suicide barrier system results in additional Bay fill beyond the bridge's historic footprint, but the system represents a component of a bridge not unlike other fixtures, equipment or appurtenant structures found on the Golden Gate Bridge and other bridges authorized by the Commission.
- (5) **No Alternative Upland Location and Minimum Amount of Fill.** There is no alternative location for a physical barrier to deter individuals from jumping from the bridge sidewalks. The District considered alternatives to the proposed net system that could have accomplished the same purpose while covering less area cantilevered out over the footprint of the historic bridge structure. These alternatives involved raising the height of the handrail structure from 4 feet to 12 feet. Such alternatives were ultimately rejected because they had significant adverse visual impacts compared to the net structure, which is located beneath the sidewalk where it does not obstruct vistas across the Bay from the roadway or sidewalk.
- (6) **Effects to the Bay.** Because the physical suicide deterrent system will be located approximately 220 feet above the surface of the Bay, the potential adverse impacts to the Bay from potential shading associated with the structure are insignificant. However, the project does have potential to adversely affect bird species, according to an Avian Impact Study prepared as part of the Final EIR/EA. The project has the potential to adversely affect migrating and nesting birds, as migrating birds could collide with the net, particularly during inclement weather. While the horizontal netting's proximity to the bridge structure, as well as heavy car and truck traffic, and heavy bike and pedestrian traffic on the bridge's sidewalks, reduces the likelihood of birds coming in contact with the horizontal netting, the possibility exists. The study also found that birds could be lured to nest or perch in an inappropriate spot on or adjacent to the net where mortality risk is potentially high. Finally, construction activities

could potentially disrupt active nests for Peregrine falcons, a state Endangered species, in the rare event that an active nest is present on the bridge at the time of construction.

The District has incorporated a number of measures to address the potential adverse impacts to bird species. First, the District has incorporated measures to ensure the horizontal netting does not become an attractive nuisance to nesting birds. The District will ensure that no new stable, wide beams or wind sheltered areas will be created that may be attractive for nesting and that trash or other large objects would be removed from the net as needed to minimize the attraction for foraging and nesting material or substrates for nesting. The horizontal netting design also incorporates the largest mesh size possible to reduce the attraction and viability for nests. Second, the District will conduct regular observations of the horizontal netting by trained personnel or a qualified avian biologist for one year after installation of the net to determine if bird carcasses are present in or on the net and whether these carcasses are juvenile birds that may have fledged from a nest adjacent to or on the bridge during the first breeding season after construction. If the observations reveal that mortality levels are greater than pre-established limits (i.e., greater than 10 birds of any native species per month for one month; or one individual Peregrine falcon, two individuals of any other raptor species, or four individuals of other special status species during one year), the District will coordinate with California Department of Fish and Wildlife (CDFW) and the Migratory Bird Division of the U.S. Fish and Wildlife Service (USFWS) to design and implement additional mitigation measures, including feasible changes to the horizontal netting, to reduce mortality. These changes will be implemented prior to the following breeding season and monitored during the breeding season. If the measures are again inadequate, the District will consult with CDFW and USFWS to develop a feasible alternative mitigation strategy. Finally, the District will conduct pre-construction surveys for nesting birds, establish any necessary exclusion zones, and take other protection measures as determined appropriate by a qualified biologist.

Based on the inclusion of these measures, no “take” of endangered species will occur according to the Revised Natural Environment Study. Therefore, no permits are required under the California Endangered Species Act. Additionally, the project will have “no effect” pursuant to Section 7 of the Federal Endangered Species Act.

- (7) **Sound Safety Standards.** The District has confirmed that it has designed the proposed suicide deterrent net system in conformance with sound safety standards for highway bridge construction and allowable stress on the bridge, including the standards established by: AASHTO LRFD Bridge Design Specifications, 4th Edition and the California Amendments, preface dated September 2010 (LRFD); Deutsches Institut fur Normung (German Institute for Standardization): Section 18800, Part 1, dated November 1990 (DIN); 1996 Standard Specifications for Highway Bridges, 16th Edition Adopted by AASHTO with 1997, 1998, 1999, 2000 Interims (WSD); and AISC Manual of Steel Construction Allowable Stress Design (ASD), 9th Edition.
- (8) **Valid Title.** Within the Bay, the Golden Gate Bridge is located on land owned by the State of California. The District's enabling legislation (Cal. Streets and Highways Code Section 27260) provides that "[t]he board may construct works across any stream, strait, bay, water course, street, avenue, highway, railway, canal, ditch, or flume which the route of the works may intersect or cross. The works may also be constructed along any street, avenue, or highway, if they are constructed so as to afford security for life and property. The board shall restore the crossings and intersections as nearly as possible to their former state or in a manner not to have impaired unnecessarily their usefulness."
- (9) **Conclusion.** The Commission finds that the benefits of the Bay fill resulting from the construction of a physical suicide deterrent system exceed the public detriment from the loss of water area, insofar as similar systems around the world have been successful in reducing fatalities and suicide attempts at high-profile bridges like the Golden Gate Bridge.

The authorized fill is for a water-oriented use, in that bridges serve a water-oriented use as defined by the McAteer-Petris Act, and the system is an accessory to the bridge similar to a handrail, light pole, or other essential component of a bridge. No alternative upland location could exist for the barrier, which must be located along the bridge's sidewalks to serve its intended function. While alternative designs could have avoided the need to cover additional area cantilevered out over the Bay, these alternatives would have resulted in adverse visual impacts compared to the net structure. Special Condition II-L-1 is included to ensure that the project is constructed consistent with the materials contained in the District's application for Amendment No. Three and will not result in additional fill beyond what is authorized herein.

The potential effects to Bay resources are mostly insignificant because the fill is cantilevered over and approximately 220 feet above the surface of the Bay. The project has some potential to adversely affect bird species, though the net system has been designed to reduce the likelihood of such adverse effects and the District has incorporated measures into the project to monitor and correct identified problems. Special Condition II-L-2 is included to require that the District report the results of its monitoring to the Executive Director and other appropriate resource agencies and seek approval for additional feasible mitigation measures that a qualified biologist may determine are appropriate and necessary. Finally, the District relied on sound safety standards in designing the project, and the resultant fill is allowed pursuant to the District's enabling legislation. Therefore, as conditioned, the Commission finds that the proposed fill for the project is consistent with the McAteer-Petris Act and Bay Plan policies on allowable fill of the Bay.

**b. Appearance, Design and Scenic Views.**

(1) **Applicable Policies.** Bay Plan Map No. 4 identifies the portion of the project site within the Commission's 100-foot shoreline band as a "Waterfront Park, Beach" Priority Use Area. Bay Plan policies on Recreation state, in part, that viewpoints should be emphasized within waterfront parks, and that "[t]he Commission may permit the placement of public utilities and services, such as underground sewer lines and power cables, in recreational facilities provided they would be unobtrusive, would not permanently disrupt use of the site for recreation, and would not detract from the visual character of the site." Map No. 4 further identifies State Highways 1 and 101, and the bridge, as a "Scenic Drive." Bay Plan policies on Public Access state, in relevant part, that "[r]oads near the edge of the water should be designed as scenic parkways...[on which] roadway and right-of-way design should maintain and enhance visual access for the traveler...and provide for safe, separated, and improved physical access to and along the shore." The introductory chapter to the Bay Plan states: "Views [of the Bay] from...public roads should be protected and scenic roads...should be built in accordance with the policies on Appearance, Design, and Scenic Views."

Bay Plan policies on Appearance, Design, and Scenic Views state, in part: "All bayfront development should be designed to enhance the pleasure of the user or viewer of the Bay. Maximum efforts should be made to provide, enhance, or preserve views of the Bay and shoreline, especially from public areas, from the Bay itself, and from the opposite shore." "Structures and facilities that do not take

advantage of or visually complement the Bay should be located and designed so as not to impact visually on the Bay and shoreline.”  
“Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments...between the view areas and the water. In this regard, particular attention should be given to all waterfront locations, areas below vista points, and areas along roads that provide good views of the Bay for travelers, particularly areas below roads coming over ridges and providing a ‘first view’ of the Bay....”

The Appearance, Design, and Scenic Views policies provide specific guidance on bridges and roadways, stating in part: “New or remodeled bridges across the Bay should be designed to permit maximum viewing of the Bay and its surroundings by both motorist and pedestrians. Guard rails and bridge supports should be designed with views in mind.” “Access routes to Bay crossings should be designed so as to orient the traveler to the Bay (as in the main approaches to the Golden Gate Bridge)....Guardrails, fences, landscaping, and other structures related to such routes should be designed and located so as to maintain and to take advantage of Bay views.”

- (2) **Proposed Design.** The project involves construction of a horizontal net approximately 20 feet below the sidewalk and approximately 5 feet above the bottom chord of the exterior main truss of the bridge. The structure extends out horizontally approximately 20 feet from the bridge and will be covered with stainless-steel netting incorporating a diamond grid pattern with openings between 4.5 and 6 inches. The horizontal support system will connect directly to the exterior truss. The support system for the netting would include cables that will pre-stress the netting to help keep it taut and not allow the wind to whip the netting. The steel struts that support the horizontal net will be painted International Orange to match the existing bridge structure. The cables and the net itself will be unpainted and uncoated stainless steel to minimize visual intrusion for users looking down through the net to the Bay water below. The design was developed in consultation with the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), and other stakeholders.
- (3) **Alternatives Considered.** The District considered many alternative concepts for physical barriers that would achieve the project’s purpose and need. These included options which were eliminated because of feasibility and performance factors, as well as for obvious negative safety, visual or aesthetic impact, such as chain link, barbed

wire, or an enclosure system for the sidewalk. The principal alternatives to the horizontal net system included glass systems and rods, bars or cables which could replace or extend the existing handrails on the edge of the bridge sidewalks (Figure 5). Such alternatives were found to substantially impair the views from the bridge. The net proposed is visible from certain points on the bridge, but the District found that it would be far superior from a visual and aesthetic standpoint compared to the alternatives.

- (4) **Views of the Bridge.** The District states that views toward the bridge would not be significantly altered by the proposed project. The net structure will be visible from certain vantage points, but the major visual components of the bridge—the towers, suspender ropes, and main cables—will remain the dominant feature of the bridge viewed in the landscape. The steel horizontal support system for the net system will be painted International Orange to match the color of the existing bridge, and the net itself will be unpainted and uncoated stainless steel to reduce the visual intrusion of the net.
- (5) **Views from the Bridge.** The proposed net structure will be located approximately 20 feet below the elevation of the bridge roadway and sidewalk. It will not obstruct views across the Bay for individuals in a vehicle on the road or for bicyclists or pedestrians on the sidewalks when looking straight ahead.

The net will have an impact on the currently unobstructed views of the Bay for pedestrians looking straight down over the handrail at the edge of the bridge sidewalks. In the field of vision of the individual looking down toward the water from the edge of the handrail will be the horizontal steel struts and cables supporting them, and a stainless-steel net. The horizontal supports will be spaced about 50 feet apart, and would extend out approximately 20 feet from the exterior main truss of the bridge. The District states that the netting will be 90 percent transparent and will be unpainted and uncoated to reduce its visual presence. Because it will be unpainted and uncoated, the net is not anticipated to create significant daytime glare.

- (6) **Construction Fencing.** The project involves temporary use of chain-link security fencing during construction only to facilitate installation of the physical suicide deterrent system. The fencing would be installed along the railings at the edge of the bridge's sidewalks, and only along sections of the bridge where the fence would not impact the stability of the bridge due to wind loading. While fairly visually transparent, chain-link security fencing will diminish the unobstructed views out over the Bay that are available from the roadway and sidewalk.

(7) **Conclusion.** The project authorized by Amendment No. Three results in permanent and temporary adverse visual impacts, however maximum efforts have been made to preserve views of the Bay through its design. The District considered many alternatives to the selected design, including non-net systems that would have erected barriers to limit the ability of individuals from climbing over the handrail on the edges of the bridge's sidewalks. These alternatives would have greatly reduced the largely unobstructed vistas currently provided along the bridge for motorists, pedestrians, and bicyclists. The net system, insofar as it is located below the level of the road, is only visible to individuals looking at the bridge from the shoreline or Bay, or to individuals who are looking down at the Bay from over the edge of the handrails along the bridge's sidewalks. The net system, which features struts painted to match the distinctive color of the bridge and uncoated stainless-steel netting which will appear largely transparent, will not be invisible, but it is thoughtfully designed to be in keeping with the character of the bridge. It also maximizes visual transparency to the greatest extent feasible in order to minimize its visual impact on Bay views. The Commission therefore finds that the physical suicide deterrent system is designed to maintain Bay views to the greatest extent possible while serving its essential function.

Construction of the permanent physical suicide deterrent system requires the District to install temporary use of chain-link security fencing along the handrails located at the bridge's east and west sidewalks. This fencing is fairly transparent, but it impedes the unobstructed views of the Bay that are available from the roadway and sidewalk. Therefore, Special Condition II-L-3 is included to require the removal of the temporary fencing as soon as feasible and immediately upon completion of the work authorized by Amendment No. Three. As conditioned, the Commission finds the project is consistent with applicable Bay Plan policies related to Appearance, Design, and Scenic Views.

**c. Public Access.**

(1) **Applicable Policies.** Section 66602 of the McAteer-Petris Act states, in part, that "...existing public access to the shoreline and waters of the...[Bay] is inadequate and that maximum feasible public access, consistent with a proposed project, should be provided." Bay Plan policies on Public Access state, in part: "A proposed fill project should increase public access to the Bay to the maximum extent feasible...[and that] maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline."

“Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed.” “Public access improvements provided as a condition of any approval should be consistent with the project and the physical environment, including protection of Bay natural resources, such as aquatic life, wildlife and plant communities, and provide for the public's safety and convenience. The improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should permit barrier free access for persons with disabilities to the maximum feasible extent, should include an ongoing maintenance program, and should be identified with appropriate signs.”

Bay Plan policies on Transportation state, in part: “Transportation projects on...bridges over the Bay...should include pedestrian and bicycle paths that will either be part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.”

- (2) **Existing Access.** The Golden Gate Bridge has sidewalks of approximately 10 feet along both sides of the roadway. The sidewalk is used by pedestrians and bicyclists as part of the San Francisco Bay Trail, and by District personnel to secure, operate, and maintain the bridge. Public access to the west sidewalk is generally restricted to bicyclists, except during the night, when it is closed, and between 5:30 am and 3:30 pm weekdays, when it is used by District maintenance crews. The east sidewalk is generally open at all hours, though at night (9 pm to 5:30 am on weekdays, and 9 pm to 5 am on weekends) access is restricted to bicyclists only.
- (3) **Construction-Related Impacts to Public Access.** The District will maintain the same general level of public access during construction as currently exists. That is, public access will be available at all times during construction on either the east or west sidewalk, and during late night hours would continue to be limited to bicyclists only. Construction storage areas will be established along certain areas of the sidewalks, but at all times a minimum 6-foot clearance will be maintained for use by pedestrians and/or bicyclists. If the contractor establishes storage areas on the east sidewalk, then pedestrians and bicyclists will be separated, with bicyclists moved to the west sidewalk between the hours of 5:30 am and 9 pm. If the contractor does not utilize the east sidewalk for storage or uses the east sidewalk for construction operations between the hours of 5:30 am and 9 pm, then the current public access noted above will be

provided. When the contractor is working on the east sidewalk between the hours of 9 pm and 5 am, bicyclists will be routed to the west sidewalk.

(4) **No Permanent Public Access Improvements Proposed.** The District does not propose to install any new public access improvements as part of the project. The bridge currently provides public sidewalks on both sides of the bridge, which are heavily used by pedestrians and bicyclists. The project places no additional burden on the existing public sidewalks, insofar as the deterrent system occupies no space on the public sidewalks and the project would not attract additional visitors or users of the sidewalks.

(5) **Conclusion.** The physical suicide deterrent system authorized by Amendment No. Three is located entirely outside of existing public access areas, including the public sidewalks along the bridge. The system therefore avoids any permanent physical impacts to a public access area and would not displace any existing public access area. The design also largely maintains the visual access to the Bay provided from the sidewalk as discussed above. Given its purpose, the project will not create a greater need or demand for public access than exists at present. Therefore, while the District does not propose to install any new public access improvements as part of the project, the Commission finds that the project creates no additional lasting burden on the shoreline or public access areas for which additional public access must be provided as a condition of development.

Construction associated with the project is anticipated to have temporary adverse impacts on public access along the bridge's sidewalks. The project includes measures to minimize these potential impacts, principally by ensuring that equivalent hours of access are provided on one or both of the bridge's sidewalks as exists currently. The staging and storage areas required for the work will temporarily displace public access, but the District will maintain a minimum 6-foot-wide clearance along all sidewalks at all times reduce the potential congestion. Nonetheless, the bridge's sidewalks are among the busiest and well-used locations on the Bay shoreline and special consideration must be given for the impact of the project's construction on these spaces. Therefore, Special Condition II-L-4 is included to minimize to the greatest extent possible the construction-related impacts to public access. As conditioned, the Commission finds that the project is consistent with applicable McAteer-Petris and Bay Plan policies related to Public Access.

d. **Public Trust.** The 212,000 square feet of fill is for a water-oriented use as defined by Section 66605 of the McAteer-Petris Act. Water-oriented uses are consistent with the public trust.

3. **Amendment No. Four (Time Extension).** Amendment No. Four was issued on January 6, 2016 and authorized a time extension for the completion of the project authorized under the original permit until December 31, 2019, and it was issued pursuant to the authority granted by Government Code Section 66632(f), Regulation Section 10810, and upon the finding that such time extension was not a material alteration of the project authorized by BCDC Permit No. M1996.019.00.

€. **B. Coastal Zone Management Act.** The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.

Ð. **C. California Environmental Quality Act.**

1. **Original Authorization Through Amendment No. Two.** Pursuant to Regulation Section 11501, the project authorized by ~~this~~ the original permit through Amendment No. Two, inclusive of Amendment No. Four, is was categorically exempt from the requirement to prepare an environmental impact report. In addition, the U.S. Department of Transportation, Federal Highway Administration, and the U.S. Department of the Interior, National Park Service, completed an Environmental Impact Assessment/Initial Study and made a finding of no significant impact for the project on November 12, 1996.

2. **Material Amendment No. Three.** The District and the California Department of Transportation (Caltrans), with the latter serving as delegate for the Federal Highway Administration, prepared a combined Environmental Impact Report and Environmental Assessment and Section 4(f) Evaluation with Finding of No Significant Impact for compliance with the requirements of both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) for the Golden Gate Bridge Physical Suicide Deterrent System Project. Caltrans adopted the project's Final Environmental Impact Report/ Environmental Assessment and issued a Finding of No Significant Impact (FONSI) on January 19, 2010. On February 12, 2010, the District, CEQA lead agency, certified the Final Environmental Impact Report and adopted findings of fact, a Mitigation Monitoring and Reporting Program, and a statement of overriding considerations in approving the project.

È. **D. Administrative Listing.** Pursuant to Regulation Section 10620, the original project was listed with the Commission on December 19, 1996.

#### IV. Standard Conditions

A.—All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city and/or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee of any obligations imposed by State or Federal law, either statutory or otherwise.

B.—The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

C.—Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

D.—Work must be performed in a manner so as to minimize muddying of waters, and if diking is involved, dikes shall be waterproof. If any seepage returns to the Bay, the permittee will be subject to the regulations of the Regional Water Quality Control Board in that region.

E.—The rights, duties, and obligations contained in this amended permit are assignable. When the permittee transfers any interest in any property either on which the authorized activity will occur or which is necessary to the full compliance of one or more conditions to this amended permit, the permittee/transferor and the transferee shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignee executes and the Executive Director receives an acknowledgment that the assignee has read and understands the amended permit and agrees to be bound by the terms and conditions of the amended permit, and the assignee is accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

F.—Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the permit remains in effect or for so long as any use or construction authorized by this permit exists, whichever is longer.

G.—Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all successors in interest in the Bridge District's authorization contained in the National Park Service Special Use Permit No. 96 PSF-7043.

H.—Unless otherwise provided in this permit, any work authorized herein shall be completed within the time limits specified in this amended permit, or, if no time limits are specified in the permit, within three years. If the work is not completed by the date specified in the amended permit, or, if no date is specified, within three years from the date of the amended permit, the permit shall become null and void. If an amended permit becomes null and void for a failure to comply with these time limitations, any fill

placed in reliance on this amended permit shall be removed by the permittee or its assignee upon receiving written notification by or on behalf of the Commission to remove the fill.

I.—Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any permit for such violation after a public hearing held on reasonable notice to the permittee or its assignee if the permit has been effectively assigned. If the permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee or its assignee if the permit has been assigned.

J.—This permit shall not take effect unless the permittee executes the original of this amended permit and returns it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

K.—Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit.

L.—Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

M.—Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this permit shall be subject to removal by the permittee or its assignee if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

**A. Permit Execution.** This amended permit shall not take effect unless the permittee(s) execute the original of this amended permit and return it to the Commission within ten days after the date of the issuance of the amended permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.

**B. Notice of Completion.** The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.

**C. Permit Assignment.** The rights, duties, and obligations contained in this amended permit are assignable. When the permittee(s) transfer any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this amended permit, the permittee(s)/transferors and the transferees shall execute and submit to the Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignees execute and the Executive Director receives an acknowledgment that the assignees have read and understand the amended permit and agree to be bound by the terms and conditions of the amended permit, and the assignees are accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

**D. Permit Runs With the Land.** Unless otherwise provided in this amended permit, the terms and conditions of this amended permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.

**E. Other Government Approvals.** All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee(s) of any obligations imposed by State or Federal law, either statutory or otherwise.

**F. Built Project Must Be Consistent with Application.** Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.

**G. Life of Authorization.** Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the amended permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.

**H. Commission Jurisdiction.** Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the amended permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.

**I. Changes to the Commission's Jurisdiction as a Result of Natural Processes.** This amended permit reflects the location of the shoreline of San Francisco Bay when the amended permit was issued. Over time, erosion, avulsion, accretion, subsidence,

relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future.

**J. Violation of Permit May Lead to Permit Revocation.** Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any amended permit for such violation after a public hearing held on reasonable notice to the permittee(s) or their assignees if the amended permit has been effectively assigned. If the amended permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee(s) or their assignees if the amended permit has been assigned.

**K. Should Permit Conditions Be Found to be Illegal or Unenforceable.** Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this amended permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this amended permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the amended permittee(s) or their assignees if the amended permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.

**L. Permission to Conduct Site Visit.** The permittee(s) shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property during and after construction to verify that the project is being and has been constructed in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice.

**M. Abandonment.** If, at any time, the Commission determines that the improvements in the Bay authorized herein have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the Commission may require that the improvements be removed by the permittee(s), its assignees or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct.

**N. In-Kind Repairs and Maintenance.** Any in-kind repair and maintenance work authorized herein shall not result in an enlargement of the authorized structural footprint and shall only involve construction materials approved for use in San Francisco Bay. Work shall occur during periods designated to avoid impacts to fish and wildlife. The permittee(s) shall contact Commission staff to confirm current restricted periods for construction.