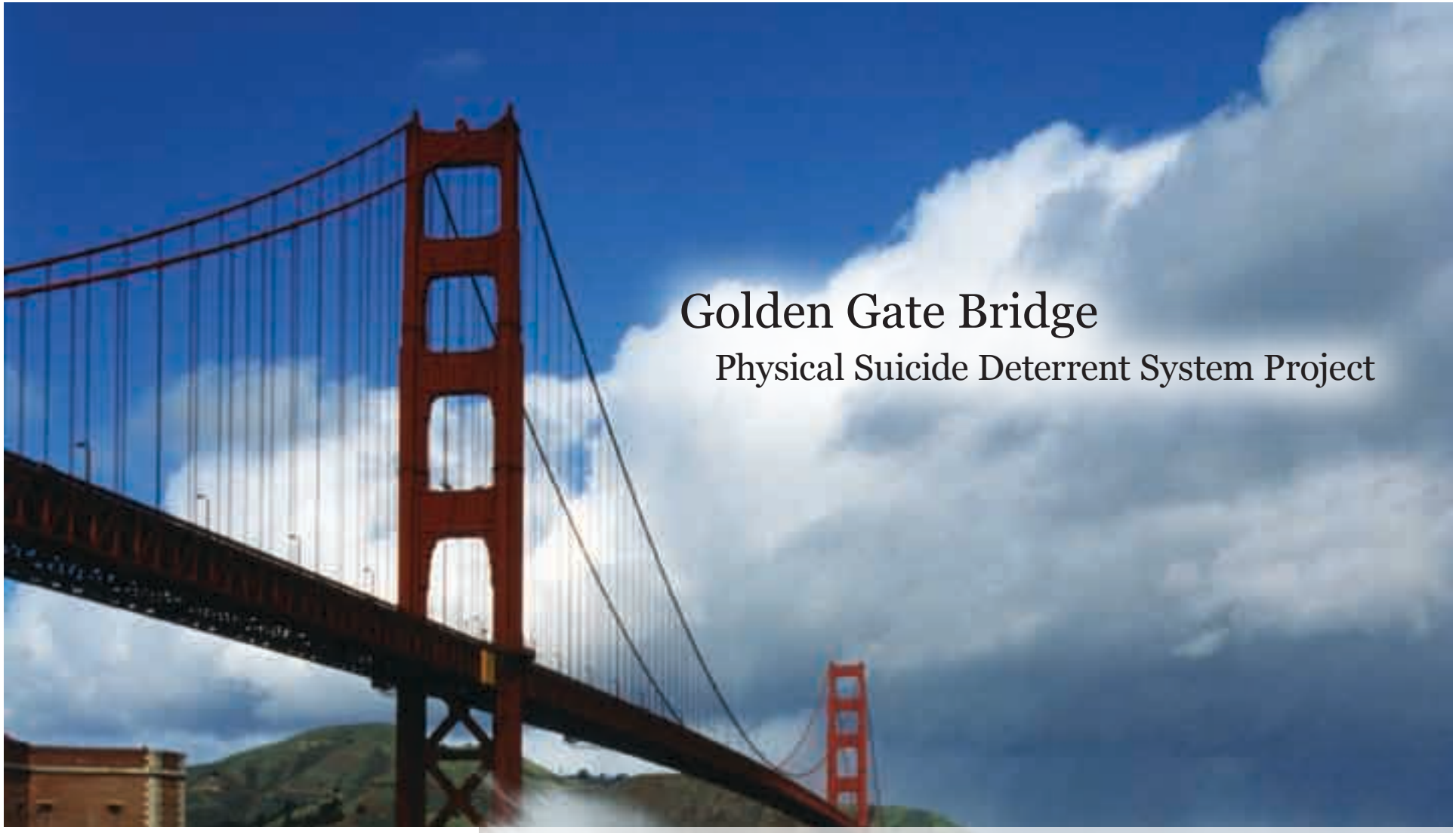


Golden Gate Bridge

Physical Suicide Deterrent System Project

GOLDEN GATE BRIDGE

Caltrans

Citizens' Guide to the Draft Environmental Impact Report/Environmental Assessment

July 2008

Table Of Contents

Introduction

The Golden Gate Bridge, Highway and Transportation District (District), which owns and operates the Golden Gate Bridge, in cooperation with the California Department of Transportation (Caltrans) as assigned by the Federal Highway Administration (FHWA), have prepared a Draft Environmental Impact Report/ Environmental Assessment (Draft EIR/EA) and Section 4(f) Evaluation for the Golden Gate Bridge (Bridge) Physical Suicide Deterrent System Project.

Federal and state laws require review and analysis of projects under consideration that may affect the environment. In keeping with these laws, the District has prepared the Draft EIR/EA to determine whether this project - a potential physical suicide deterrent on the Bridge - could affect the environment.

The Draft EIR/EA describes why the project is being proposed, alternatives for the project, the existing environment that could be affected by the project, the potential impacts from each of the Build Alternatives, as well as proposed avoidance, minimization and/or compensation measures for such impacts.

Purpose of the Citizens' Guide

This guide is intended to be an overview of the Golden Gate Bridge Physical Suicide Deterrent System Project, the alternatives that have been developed and key environmental considerations that would result from the project. While this guide summarizes the Draft EIR/EA, it is not intended to be a part of the formal Draft EIR/EA.

Readers who would like to review all of the information contained within the Draft EIR/EA should request a copy (see page 24). Public comments must address the contents of the Draft EIR/EA and not the contents of this guide.

Project Purpose

Consider a physical suicide deterrent system that reduces the number of injuries and deaths associated with jumping off the Bridge.

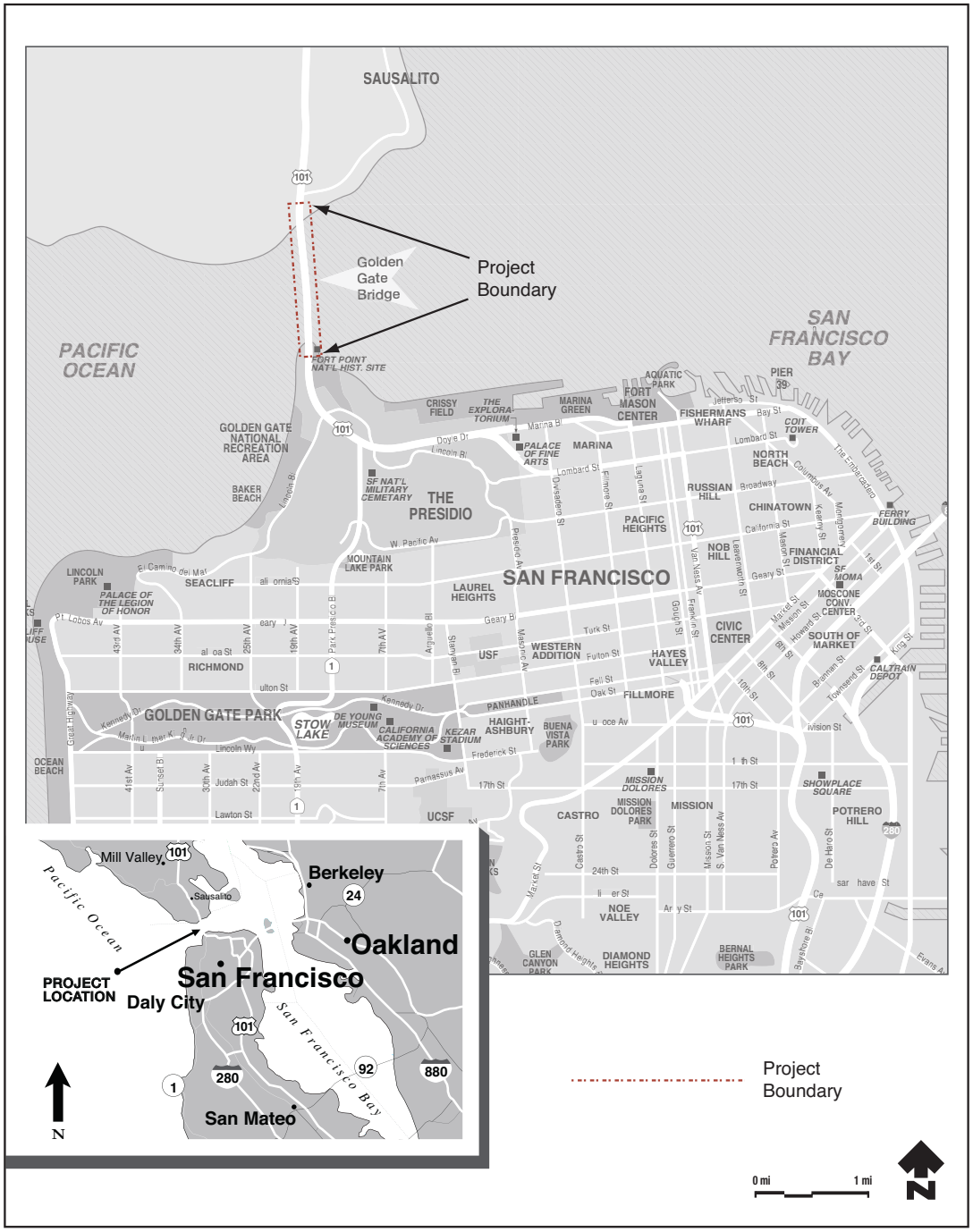
Project Overview

The District has investigated both physical and non-physical measures to stop people from committing suicide by jumping off the Bridge and currently utilizes several non-physical suicide deterrent systems. It has commissioned the project to consider the installation of a physical suicide deterrent system on the east and west sides of the Bridge.

The need for the project stems from the following key factors:

- The Bridge's sidewalks are open to the public and the existing outside railing along the sidewalks is four feet high.
- Individuals of varying heights, weights, ages and sexes, who were not using the Bridge sidewalks for their intended purpose, have climbed over the existing railing and jumped to their death.
- There is no other physical barrier preventing an individual from jumping, once the railing has been scaled.

In 2005, there were 622 known suicides in the nine Bay Area counties, of which 23 were estimated to occur at the Bridge. In that same year, 58 additional persons identified as possibly contemplating suicide were successfully stopped, and these individuals were taken off of the Bridge and transported to a local hospital for a psychiatric evaluation. Although official figures have not been maintained through the years, since 1937 it is estimated that more than 1,300 individuals have committed suicide by jumping off of the Bridge.



Alternative Development

In considering potential alternatives for a physical suicide deterrent system, the District had to address the potential effects of physical changes to the Bridge, particularly with regard to the impacts of high winds on the structure.

Because long span suspension bridges respond dynamically to wind, the District undertook a wind tunnel investigation of potential alternatives to ensure that any potential physical suicide barrier would not negatively impact the aerodynamic stability of the Bridge.

Wind tunnel testing showed that:

- A physical suicide barrier will not adversely impact the wind stability of the Bridge.
- A physical suicide barrier and a moveable median barrier can both be added to the Bridge without adversely impacting the wind stability of the Bridge.
- Wind appendages would be required to eliminate potential adverse wind stability impacts.

As a result of the wind tunnel testing, the potential alternatives were narrowed to five Build Alternatives and one "no-build" alternative. All of the Build Alternatives include one of two different types of wind devices:

- Fairing: A curved element added to the side of the Bridge to streamline the wind as it contacts the Bridge.
- Winglet: A curved element placed above the sidewalk level, that are in essence airfoils or small wings that generate lift. As the wind speed increases, the generated lift increases. The force of the lift resists the tendency of the Bridge to twist in strong wind.

Common Features of the Build Alternatives

In addition to wind tunnel testing, the alternative screening process evaluated the Build Alternatives for their ability to meet the project's purpose (see page 3) and the District Board of Directors' adopted criteria (see page 5).

All of the Build Alternatives being considered would impede the ability of individuals to jump from the Bridge, and generally satisfy all of the District Board of Directors' adopted criteria (see page 5). Additionally, each Build Alternative has been developed to maintain the symmetry of the Bridge. The outside handrail posts, light posts, suspender ropes and belvederes would all remain at their current locations. The Build Alternatives would all be constructed of steel that would be painted International Orange to match the color and material of the Bridge.

Physical Suicide Deterrent System Criteria

On April 22, 2005, the District Board of Directors adopted 11 different criteria that guided the development of the Build Alternatives. The criteria state that a potential physical suicide deterrent system for the Bridge must:

- Impede the ability of an individual to jump off the Bridge
- Not cause safety or nuisance hazards to sidewalk users including pedestrians, bicyclists, District staff, and District contractors or security partners
- Must be able to be maintained as a routine part of the District's ongoing Bridge maintenance program and without undue risk of injury to District employees
- Not diminish ability to provide adequate security of the Bridge
- Continue to allow access to the underside of the Bridge for emergency response and maintenance activities
- Not have a negative impact on the wind stability of the Bridge
- Satisfy requirements of state and federal historic preservation laws
- Have minimal visual and aesthetic impacts on the Bridge
- Be cost effective to construct and maintain
- Not in and of itself create undue risk of injury to anyone who comes in contact with the suicide deterrent system
- Not prevent construction of a moveable median barrier on the Bridge

The Alternatives

Six alternatives are considered in the Draft EIR/EA. Alternatives 1A, 1B, 2A, 2B and 3 represent the "build" alternatives that were developed to achieve the project's purpose and need (see page 3) and the District Board of Directors' adopted criteria (see page 5) while avoiding or minimizing environmental impacts.

THE NO-BUILD ALTERNATIVE

The No-Build Alternative represents the condition of the Bridge in future years if no other actions are taken in the project area beyond what is already in place. It provides the baseline for existing environmental conditions against which Build Alternatives will be compared. The No-Build Alternative includes the modifications approved as part of the Bridge Seismic Retrofit Construction Project and would continue the existing non-physical suicide deterrent programs already in operation:

Emergency Counseling Telephones

Eleven emergency and crisis counseling telephones are located on the Bridge sidewalks. Bridge security staff can connect callers, at their request, to suicide prevention counselors at the San Francisco Suicide Prevention's crisis line.

Public Safety Patrols

Bridge patrol officers and California Highway Patrol officers trained in suicide intervention are deployed on the Bridge.

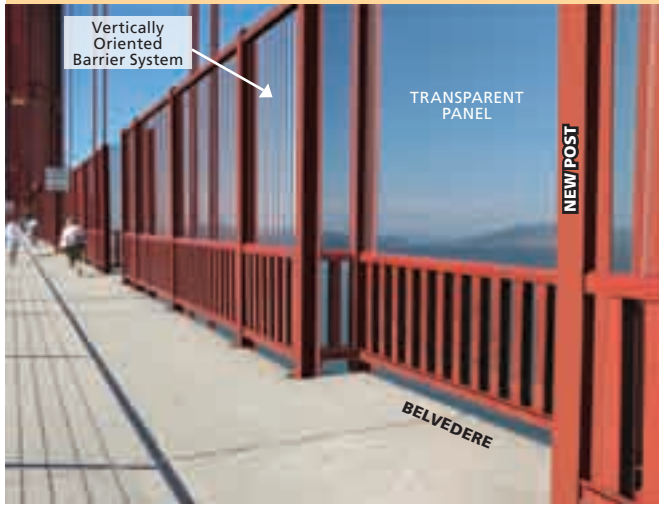
Employee Training

All Bridge workers who have volunteered to assist in suicide intervention and rescue activities have received special training.

Surveillance Cameras

A network of closed-circuit cameras that have the primary purpose of preserving the security of the Bridge, are also available to aid in directing intervention personnel.

ALTERNATIVE 1A
Add Vertical System to Outside Handrail



Alternative 1A would construct a new vertically oriented barrier system on top of the existing 4-foot-tall outside handrail.

Total Height: 12 feet as it extends 8 feet up from the top of the existing 4-foot-tall outside handrail.

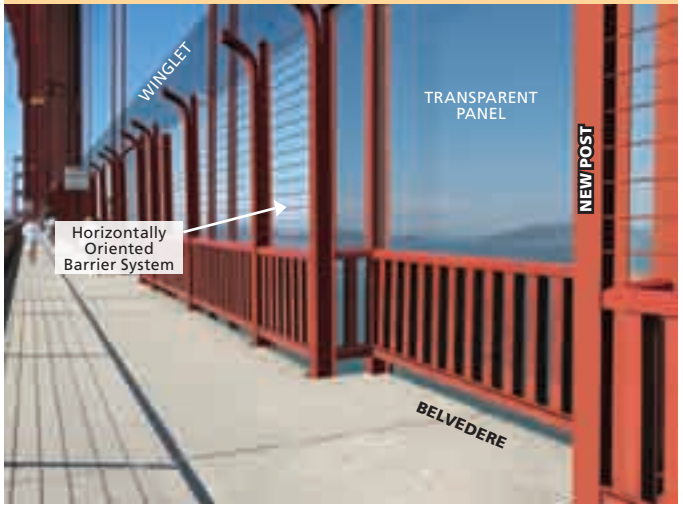
Vertical System: A system of 8-foot-tall steel rods (1/2-inch diameter) added to the top of the existing 4-foot-tall outside handrail are spaced at 6 1/2 inches on center, leaving a 6-inch open space between each rod.

Handrail: Existing outside handrail posts are replaced with new 12-foot-tall outside handrail posts at the same locations; transparent panels installed at the belvederes and where the sidewalks go around the main towers.

Security and Maintenance Access: Access gates would be located every 150 feet on center.

Cost Range: Approximately $40-50 million

ALTERNATIVE 1B
Add Horizontal System to Outside Handrail



Alternative 1B would construct a new horizontally oriented barrier system on top of the existing 4-foot-tall outside handrail.

Total Height: 12 feet as it extends 8 feet up from the top of the existing 4-foot-tall outside handrail.

Horizontal System: A system of 8-foot-tall horizontal steel cables (3/8-inch diameter) added to the top of the existing 4-foot-tall outside handrail spaced at 6 inches on center leaving 5 5/8 inches of open space between cables.

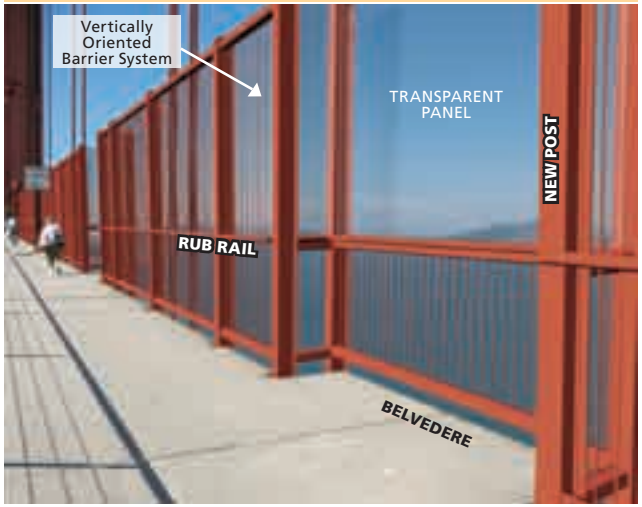
Handrail: Existing handrail posts are replaced with new 12-foot-tall outside handrail posts at the same locations; transparent panels installed at the belvederes and where the sidewalks go around the main towers.

Winglet: A transparent winglet would be placed on top of the outside handrail posts to ensure aerodynamic stability and impede climbing over.

Security and Maintenance Access: Access gates would be located every 150 feet on center.

Cost Range: Approximately $40-50 million

ALTERNATIVE 2A
Replace Outside Handrail with Vertical System



Alternative 2A would construct a new 12-foot-tall vertically oriented barrier system that would replace the existing 4-foot-tall outside handrail.

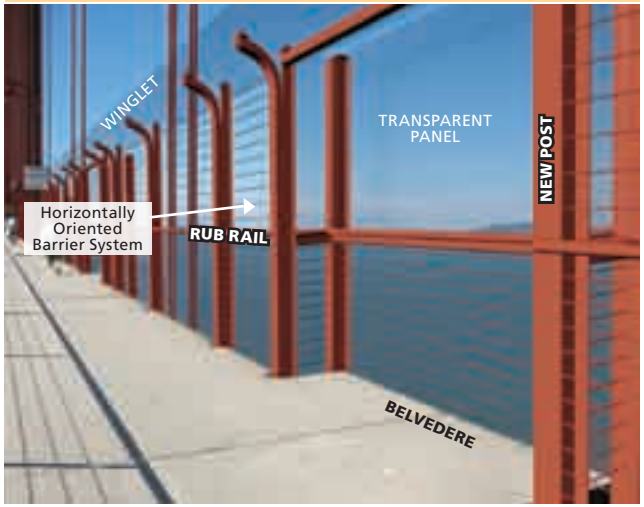
Total Height: 12 feet (replaces outside handrail)

Vertical System: A system of 12-foot-tall vertical steel rods (1/2-inch diameter) every 4 1/2 inches on center, leaving a 4-inch open space between rods. A rub rail installed at the same height as the existing 4-foot 6-inch tall public safety railing which is located between the sidewalk and the roadway. Existing handrail posts replaced with new 12-foot-tall outside handrail posts at the same locations; transparent panels installed along the upper 8 feet at the belvederes and where the sidewalks go around the main towers.

Security and Maintenance Access: Access gates located every 150 feet on center.

Cost Range: Approximately $40-50 million

ALTERNATIVE 2B
Replace Outside Handrail with Horizontal System



Alternative 2B would construct a new 10-foot-tall horizontally oriented barrier system that would replace the existing 4-foot-tall outside handrail.

Total Height: 10 feet (replaces outside handrail)

Horizontal System: A system of 10-foot-tall horizontal steel cables (3/8-inch diameter). In the lower 3 1/2-foot section cables spaced 4.4 inches on center and cables in the upper 6 1/2-foot section would be spaced 6 inches on center. Rub rail installed at the same height as the existing 4-foot 6-inch tall public safety railing which is located between the sidewalk and the roadway. Existing handrail posts replaced with new 10-foot-tall outside handrail posts at the same locations; transparent panels installed along the upper 6 1/2-foot portion at the belvederes and where the sidewalks go around the main towers.

Winglet: A winglet would be placed on top of the handrail posts to ensure aerodynamic stability and also impede climbing over the barrier.

Security and Maintenance Access: Access gates would be located every 150 feet on center.

Cost Range: Approximately $40-50 million

ALTERNATIVE 3
Add Net System

Alternative 3 would construct a horizontal net.

Location: 20 feet below the sidewalk and approximately 5 feet above the bottom chord of the exterior main truss.

Net System: Would extend horizontally 20 feet from the Bridge and be covered with stainless steel cable netting incorporating a grid between 4 and 10 inches.

The support system for the netting would include cables that would pre-stress the netting to help keep it taut and not allow the wind to whip the netting.

The horizontal net would consist of independent 25-foot sections that can be rotated vertically against the truss to allow the Bridge maintenance travelers to be moved.

Cost Range: Approximately $40-50 million

Summary of Build Alternative Impacts

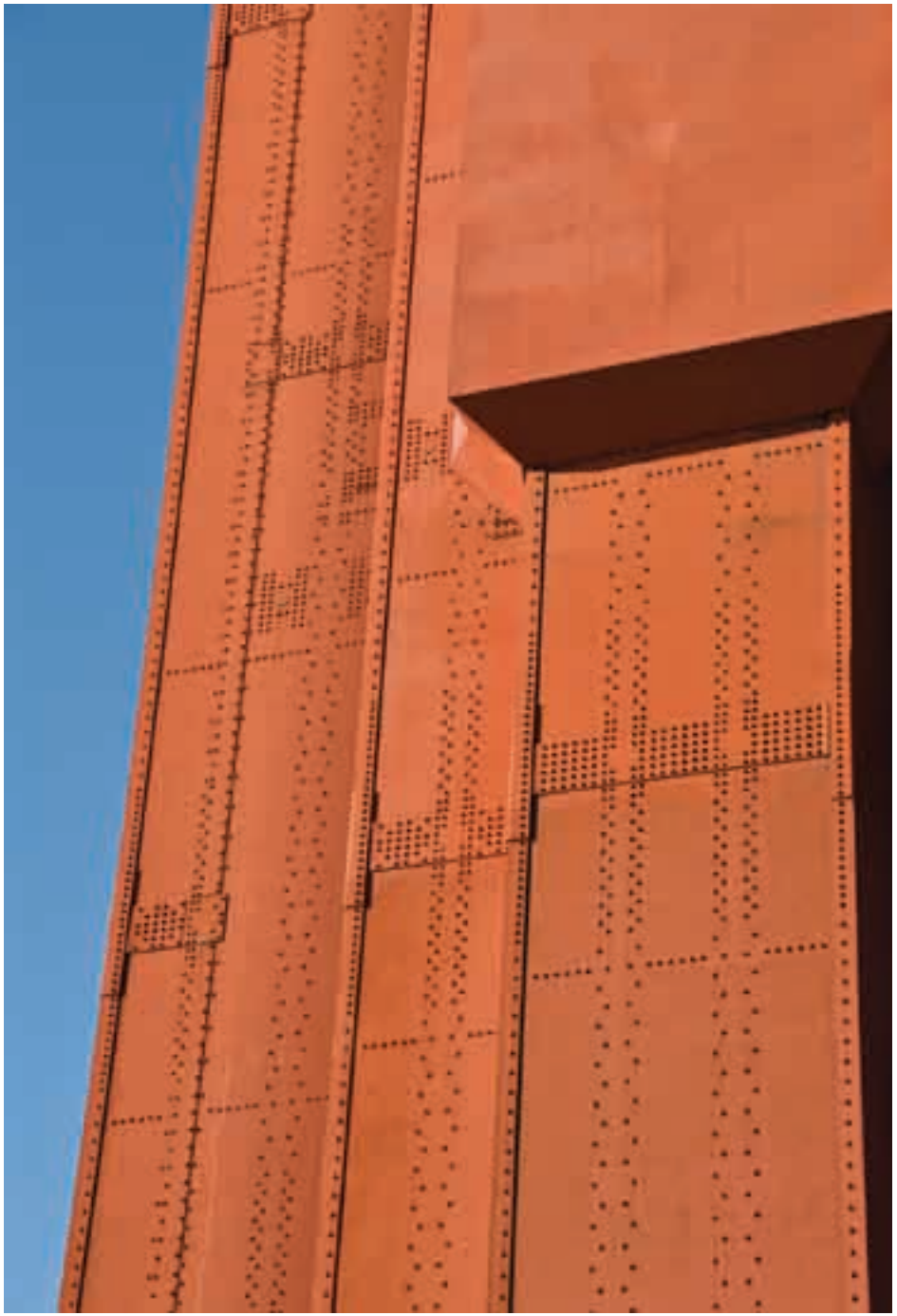
The Draft EIR/EA prepared for the project presents the existing environmental conditions, describes the impacts from construction and operation of the Build Alternatives and the proposed avoidance, minimization and/or mitigation measures to reduce or eliminate impacts of those alternatives.

This summary provides an overview of the impacts identified in the Draft EIR/EA for the five Build Alternatives. The No-Build Alternative does not present impacts and is therefore not included in this summary.

The Draft EIR/EA addresses the environmental issue areas identified as relevant to the project including:

- land use and parks and recreational facilities
- visual/aesthetics
- cultural resources
- biological resources

As part of the environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified: growth, farmlands/timberlands, community impacts, utilities/emergency services, traffic and transportation/pedestrian and bicycle facilities, hydrology and floodplain, water quality and storm water run-off, geology/soils/seismic/topography, paleontology, hazardous waste/materials, air quality, noise, energy, natural communities, wetlands and other waters.



Land Use and Parks and Recreational Facilities

The land use analysis identifies existing regional and local land use and transportation plans and policies that apply to the project area. It describes changes that would occur as a result of the Build Alternatives, evaluates the consistency of the Build Alternatives with local and regional planning policies and discusses their effects on community cohesion. The parks and recreational facilities analysis describes potential impacts and benefits to park and recreational facilities in the vicinity of the Build Alternatives. Impacts can be physical in nature or can be related to the users' enjoyment of the facility.

Overview

Land Use:

- The Build Alternatives would be consistent with local and regional plans and policies.
- As the Build Alternatives would be constructed entirely on the Bridge, there would be no impact to the existing use of the Bridge or lands surrounding the Bridge. Further, there would be no impacts to the use of surrounding properties, parks or recreational facilities.

Parks and Recreational Facilities:

- The Build Alternatives would impact the recreational experience of users on the Bridge sidewalks.
- Should a Build Alternative go to construction, staging areas will be required. One of five potential staging areas is located in the District's parking lot on Merchant Road in which 24 stalls available for use by the public would potentially be impacted during construction. The other potential staging areas are not open to the public and are currently being used for a similar use and/or maintenance activities and are physically separated from recreational uses on surrounding properties.

Impact Summary

Alternative 1A Add Vertical System to Outside Handrail (see description on page 6) **Alternative 1B** Add Horizontal System to Outside Handrail (see description on page 6)	**Alternative 2A** Replace Outside Handrail with Vertical System (see description on page 7) **Alternative 2B** Replace Outside Handrail with Horizontal System (see description on page 7)	**Alternative 3** Add Net System (see description on page 7)
• These alternatives modify existing Bridge components, specifically the outside 4-foot-tall handrail, and introduce new elements (the barrier system) to the Bridge that may affect the recreational experience of its users. • The addition of an 8-foot barrier system to the existing 4-foot-tall outside handrail would substantially alter the recreational experience of pedestrians and bicyclists using the sidewalks. • The potential use of 24 public parking spaces on the District's lot on Merchant Road would create a temporary loss of public parking during construction. Sufficient adjacent parking is located in the other areas available near the Bridge.	• These alternatives modify existing Bridge components, specifically the outside 4-foot-tall handrail, and introduce new elements (the barrier system) to the Bridge that may affect the recreational experience of its users. • The replacement of the existing 4-foot-tall outside handrail with a 12-foot-tall (Alternative 2A) or a 10-foot-tall (Alternative 2B) barrier system would substantially alter the recreational experience of pedestrians and bicyclists using the sidewalks. • The potential use of 24 public parking spaces on the District's lot on Merchant Road would create a temporary loss of public parking during construction. Sufficient adjacent parking is located in the other areas available near the Bridge.	• The alternative modifies existing Bridge components, specifically the main truss, and introduces new elements (the net system) to the Bridge that may affect the recreational experience of its users. • The addition of a horizontal net system would alter the experience of pedestrians and bicyclists looking down from the sidewalk. • The potential use of 24 public parking spaces on the District's lot on Merchant Road would create a temporary loss of public parking during construction. Sufficient adjacent parking is located in the other areas available near the Bridge.

Visual and Aesthetics

The visual and aesthetics analysis assesses the visual impacts of the five Build Alternatives. The analysis looks at potential visual quality, prominent features and scenic resources from representative viewpoints in the project area. In addition, viewpoints where the Build Alternatives could affect existing visual quality are identified and evaluated.

Impact Summary	**Alternative 1A** **Add Vertical System to Outside Handrail** (see description on page 6) **Alternative 1B** **Add Horizontal System to Outside Handrail** (see description on page 6)	**Alternative 2A** **Replace Outside Handrail with Vertical System** (see description on page 7) **Alternative 2B** **Replace Outside Handrail with Horizontal System** (see description on page 7)	**Alternative 3** **Add Net System** (see description on page 7)
	• The primary visual change to views *towards the Bridge* would be the appearance of a higher outside railing (12 feet tall rather than the existing 4-foot-tall handrail) on the Bridge with corresponding increased International Orange coloring added to the landscape which is a minimally adverse visual impact. • Because the physical suicide deterrent system would be a noticeable visual feature in a landscape with high viewer sensitivity, an adverse visual impact would result *from the Vista Point* view point which is located on the northeast side of the span. • The primary visual change to views *from the Bridge* include raising the height from the existing 4-foot-tall outside handrail to a 12-foot-tall barrier system that would extend across the viewer's total field of view which would cause adverse to strongly adverse visual impacts.	• The primary visual change to views *towards the Bridge* would be the appearance of a higher outside railing (12 feet tall [Alternative 2A] or 10 feet tall [Alternative 2B] rather than the existing 4-foot-tall handrail) on the Bridge with corresponding increased International Orange coloring added to the landscape which is a minimally adverse visual impact. • Because the physical suicide deterrent system would be a noticeable visual feature in a landscape with high viewer sensitivity, an adverse visual impact would result *from the Vista Point* view point which is located on the northeast side of the span. • The primary visual change to views *from the Bridge* would be the appearance of a higher outside railing (12 feet tall [Alternative 2A] or 10 feet tall [Alternative 2B] rather than the existing 4-foot-tall handrail) such that it would extend across the viewer's total field of view which would cause adverse and strongly adverse visual impacts.	• The primary visual change to views *towards the Bridge* would be the introduction of a strong horizontal element to the outside of the Bridge in contrast to the existing verticality of the Bridge which is a minimally adverse visual impact. • Because the net would be visible across the total field of view, an adverse visual impact would result *from Vista Point* view point which is located on the northeast side of the span. • Because the net is located beneath the Bridge roadway and sidewalk levels, views *from the Bridge* would result in negligible visual impacts, with the exception of an adverse visual impact where the net view *from the sidewalks at the main towers* would be visible.

Photo Simulations

To evaluate the environmental impacts and visual changes by alternative, a series of public views looking towards and views looking from the Bridge were identified and simulated for each alternative. The viewpoint on page 15 represents the views looking towards the Bridge, while viewpoints on pages 11 through 14 represent views looking from the Bridge. Generally, views looking towards the Bridge would not be substantially affected by installation of a Build Alternative, with visual impacts ranging from negligible to adverse. Views looking from the Bridge would be noticeably impacted, with visual impacts ranging from adverse to strongly adverse.

This guide provides select photo simulation viewpoints. To review all 14 viewpoints, please refer to the Draft EIR/EA (see page 24 for document availability).

Sidewalk View – Looking North from the Bridge, see pages 6 and 7
Sidewalk View – Looking South from the Bridge

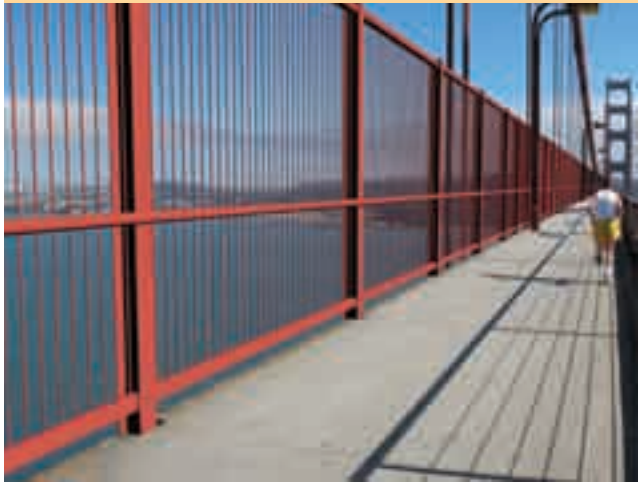
The images below represent each alternative from a pedestrian's or bicyclist's view from the east sidewalk of the Bridge looking southeast towards the San Francisco Bay and the City and County of San Francisco.

THE NO-BUILD ALTERNATIVE
(see description on page 6)

ALTERNATIVE 1A
Add Vertical System to Outside Handrail
(see description on page 6)

ALTERNATIVE 1B
Add Horizontal System to Outside Handrail
(see description on page 6)

ALTERNATIVE 2A
Replace Outside Handrail with Vertical System
(see description on page 7)



ALTERNATIVE 2B
Replace Outside Handrail with Horizontal System
(see description on page 7)

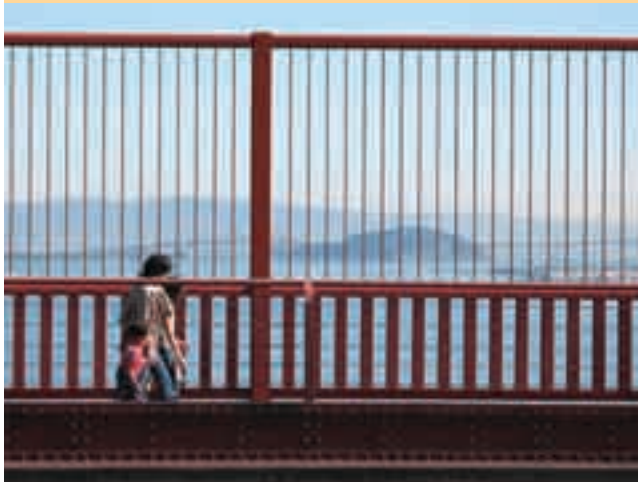
ALTERNATIVE 3
Add Net System
(see description on page 7)

Roadway View – Looking East from the Bridge

The images below represent each alternative from a vehicle occupant's view traveling south on the Bridge and looking east across San Francisco Bay towards the East Bay Hills.

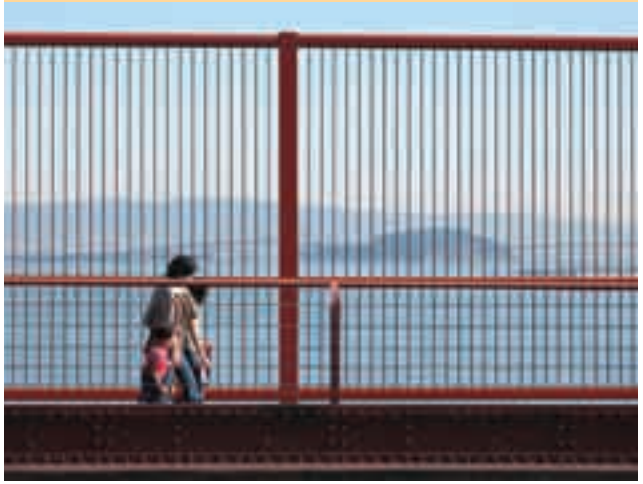
THE NO-BUILD ALTERNATIVE
(see description on page 6)

ALTERNATIVE 1A
Add Vertical System to Outside Handrail
(see description on page 6)



ALTERNATIVE 1B
Add Horizontal System to Outside Handrail
(see description on page 6)

ALTERNATIVE 2A
Replace Outside Handrail with Vertical System
(see description on page 7)



ALTERNATIVE 2B
Replace Outside Handrail with Horizontal System
(see description on page 7)

ALTERNATIVE 3
Add Net System
(see description on page 7)

Roadway View – Looking West from the Bridge

The images below represent a vehicle occupant's view traveling south on the Bridge and looking west towards the Pacific Ocean and the Marin Headlands. The images below include the future west outside handrail that is planned to be replicated to improve the aerodynamic stability of the Bridge as part of the District's Seismic Retrofit Project Phase 3B.

THE NO-BUILD ALTERNATIVE

(see description on page 6)

ALTERNATIVE 1A

Add Vertical System to Outside Handrail

(see description on page 6)

ALTERNATIVE 1B

Add Horizontal System to Outside Handrail

(see description on page 6)

ALTERNATIVE 2A

Replace Outside Handrail with Vertical System

(see description on page 7)

ALTERNATIVE 2B

Replace Outside Handrail with Horizontal System

(see description on page 7)

ALTERNATIVE 3

Add Net System

(see description on page 7)

Roadway View – Looking North from the Bridge

The images below represent each alternative from a vehicle occupant's view traveling north on the Bridge and looking towards the north tower of the Bridge and the Marin Headlands.

THE NO-BUILD ALTERNATIVE
(see description on page 6)

ALTERNATIVE 1A
Add Vertical System to Outside Handrail
(see description on page 6)

ALTERNATIVE 1B
Add Horizontal System to Outside Handrail
(see description on page 6)

ALTERNATIVE 2A
Replace Outside Handrail with Vertical System
(see description on page 7)

ALTERNATIVE 2B
Replace Outside Handrail with Horizontal System
(see description on page 7)

ALTERNATIVE 3
Add Net System
(see description on page 7)

Vista Point View – Looking South towards the Bridge

The images below represent a view of the Bridge as experienced by pedestrians, bicyclists and recreational users at Vista Point in Marin County on the northeast side of the Bridge looking south. Vista Point provides a rest area with parking and access to the Bridge sidewalks.

THE NO-BUILD ALTERNATIVE
(see description on page 6)

ALTERNATIVE 1A
Add Vertical System to Outside Handrail
(see description on page 6)

ALTERNATIVE 1B
Add Horizontal System to Outside Handrail
(see description on page 6)

ALTERNATIVE 2A
Replace Outside Handrail with Vertical System
(see description on page 7)

ALTERNATIVE 2B
Replace Outside Handrail with Horizontal System
(see description on page 7)

ALTERNATIVE 3
Add Net System
(see description on page 7)

Cultural Resources

The cultural resources analysis reports on archaeological and historic resources in the vicinity of the five Build Alternatives, along with governing federal, state and local regulations.

Overview

- In general, the five Build Alternatives would cause direct adverse effects to the Bridge, which has been determined eligible for listing in the National Register of Historic Places. The addition of any of the Build Alternatives would be an alteration to the historic property that is not consistent with the established standard (Secretary of the Interior's Standards for the Treatment of Historic Properties).
- In general, these physical adverse effects include complete or partial removal of character-defining features of the Bridge (existing 4-foot-tall outside handrail), and/or alteration of character-defining features of the Bridge (existing 4-foot-tall outside handrail and exterior truss).
- The five Build Alternatives would also cause indirect adverse effects, including introduction of visual elements out of character with the original character of the historic property; change in the character of its use as a historic property by changing the original design of the 4-foot-tall outside handrail which allow pedestrians and bicyclists to lean over and experience the views; addition of barrier systems where none existed originally; use of non-historic materials (transparent panels, winglets, metal rods and cable netting), as well as alteration of the pedestrian, bicyclist and vehicle occupant experience on the Bridge.

Impact Summary	**Alternative 1A** **Add Vertical System to Outside Handrail** (see description on page 6)	**Alternative 1B** **Add Horizontal System to Outside Handrail** (see description on page 6)
	• Direct adverse effect to Bridge character-defining historic features would be caused by: o Destruction of original posts and portions of the original 4-foot-tall outside handrail where new security/maintenance access gates would be installed every 150 feet. o Installation of 12-foot-high posts that replace the original 4-foot-tall outside handrail posts, installation of 8-foot-tall vertical rods above horizontal top member of the 4-foot-tall outside handrail and into the concrete railing at the north pylon and transparent panels at the east and west belvederes, and maintenance access gates in the outside handrail. • Indirect adverse effect to Bridge character-defining historic features would be caused by: o Change in the character of the design of the existing 4-foot-tall outside handrail that would alter the pedestrian, bicyclist and vehicle occupant experience of the property by preventing visitor use of the space above the original 4-foot-tall outside handrail and reduction of pedestrian, bicyclist and vehicle occupant access to views of and from the property. o Introduction of new visual elements including installation of a new 8-foot vertical rod system above the existing 4-foot-tall outside handrail for a height of 12 feet, and the concrete railing at the north pylon, introduction of security/maintenance access gates in the outside handrail, and installation of transparent panels at belvederes on the handrail.	• Direct adverse effect to Bridge character-defining historic features would be caused by: o Destruction of original posts and portions of the original 4-foot-tall outside handrail where new security/maintenance access gates would be installed every 150 feet. o Installation of 12-foot-high posts that replace the original 4-foot-tall outside handrail posts, installation of 8-foot-tall horizontal cables and a transparent winglet above the horizontal top member of the original outside 4-foot-tall handrail and the concrete railing at the north pylon, transparent panels at the east and west belvederes, and maintenance access gates in the outside handrail. • Indirect adverse effect to Bridge character-defining historic features would be caused by: o Change in the character of the design of the original 4-foot-tall outside handrail that would alter pedestrian, bicyclist and vehicle occupant experience of the property by preventing visitor use of the space above the original 4-foot-tall outside handrail and reduction of pedestrian, bicyclist and vehicle occupant access to views of and from the property. o Introduction of new visual elements including installation of a new 8-foot-tall horizontal cable system above the existing 4-foot-tall outside handrail for a total height of 12 feet and the concrete railing at the north pylon, introduction of security/maintenance access gates in the outside handrail, transparent panels at the belvederes and a winglet at the top of the new 12-foot-tall barrier system.

Cultural Resources

Impact Summary

Alternative 2A Replace Outside Handrail with Vertical System (see description on page 7)	Alternative 2B Replace Outside Handrail with Horizontal System (see description on page 7)	Alternative 3 Add Net System (see description on page 7)
• Direct adverse effect to Bridge character-defining historic features would be caused by: o Destruction of the original 4-foot-tall outside handrail. o Removal of the original 4-foot-tall outside handrail and installation of the new 12-foot vertical rod barrier system. • Indirect adverse effect to Bridge character-defining historic features would be caused by: o Change in the character of the design of the original 4-foot-tall outside handrail which would alter the pedestrian, bicyclist and vehicle occupant experience of the property by preventing visitor use of the space above the new 12-foot-tall barrier system and reduction of pedestrian, bicyclist and vehicle occupant access to views of and from the property. o Introduction of new visual elements including installation of a new vertically oriented 12-foot-tall rod barrier system that replaces the existing 4-foot-tall outside handrail, introduction of transparent panels at the belvederes and security/maintenance access gates in the outside railing.	• Direct adverse effect to Bridge character-defining historic features would be caused by: o Destruction of the original 4-foot-tall outside handrail. o Removal of the original 4-foot-tall outside handrail and installation of the new 10-foot-tall horizontal cable barrier system. • Indirect adverse effect to Bridge character-defining historic features would be caused by: o Change in the character of the design of the original 4-foot-tall outside handrail which would alter the pedestrian, bicyclist and vehicle occupant experience of the property by preventing visitor use of the space above the new 10-foot-tall barrier system and reduction of pedestrian, bicyclist and vehicle occupant access to views of and from the property. o Introduction of new visual elements including installation of a new horizontally oriented 10-foot-tall horizontal cable system that replaces the existing 4-foot-tall outside handrail, introducing transparent panels at the belvederes, a winglet at the top of the new 10-foot-tall barrier system and maintenance access gates in the outside railing.	• Direct adverse effect to Bridge character-defining historic features would be caused through installation of a horizontal net approximately 20 feet below the sidewalk. • Indirect adverse effect to Bridge character-defining historic features would be caused through introduction of new visual elements including installation of 20 feet of a new horizontal cable netting system on both the east and west sides of trusses below the roadway deck level.

Biological Resources

The biological resources analysis describes the regulatory setting and the existing plant and wildlife species in the project area. The location of the wildlife and potential effects that result from the Build Alternatives are evaluated.

Impact Summary

Alternative 1A **Add Vertical System to Outside Handrail** **Alternative 1B** **Add Horizontal System to Outside Handrail** **Alternative 2A** **Replace Outside Handrail with Vertical System** **Alternative 2B** **Replace Outside Handrail with Horizontal System** (see descriptions on pages 6 and 7)	**Alternative 3** **Add Net System** (see description on page 7)
• These alternatives would not impact any federal or state listed species or sensitive biological resources. • These alternatives would not include the development or direct disturbance of plant communities or aquatic habitats. • These alternatives would use construction staging areas within the Golden Gate National Recreation Area (GGNRA). The Mission blue butterfly, a federally Endangered species, as well as other sensitive biological resources are known to occur in areas bordering the staging areas. No direct loss of habitat for these resources would occur. • These alternatives would incorporate the use of transparent panels at the belvederes and around the towers. The transparent panels would be placed on top of existing or modified handrail (which are 4 feet in height) and extend 8 feet above the rails. Transparent panels would also be placed around portions of the two Bridge towers. However, as focused studies have not been conducted to determine if bird collisions would be likely and to what extent they may occur, it is assumed that the use of the transparent panels could adversely affect various bird species. • The Bridge provides potentially suitable nesting habitat for the peregrine falcon, and should an active nest of the species be present, construction-related activities could result in the abandonment of the nest.	• This alternative would not impact any federal or state listed species or sensitive biological resources. • This alternative would not include the development or direct disturbance of plant communities or aquatic habitats. • This alternative would use construction staging areas within the GGNRA. The Mission blue butterfly, a federally Endangered species, as well as other sensitive biological resources are known to occur in areas bordering the staging areas. No direct loss of habitat for this species would occur. • The use of horizontal netting could present a feature in which birds could become entangled or otherwise harmed. However, focused studies have not been conducted to determine if bird collisions would be likely and to what extent they would occur. Therefore, it is assumed that the use of netting could adversely affect various bird species. • The Bridge provides potentially suitable nesting habitat for the peregrine falcon, and should an active nest of the species be present, construction-related activities could result in the abandonment of the nest.

Cumulative Effects

The cumulative effects analysis describes the potential environmental impacts resulting from two or more individual effects which, when contemplated together, are considerable. The evaluation considers past, present and future projects producing related cumulative impacts to the same resource categories as those impacted by the proposed Build Alternatives of the project. The cumulative effects analysis also considers regional growth projections from the metropolitan planning organizations such as the Metropolitan Transportation Commission (Oakland, California) to address regional impacts such as air quality and land use.

Impact Summary

Environmental resources for which no cumulative impacts would occur:

- Land Use and Parks and Recreational Facilities
- Visual and Aesthetics
- Biological Resources

Environmental resources having potential cumulative impacts:

- Cultural Resources: Construction of the Build Alternatives would cause cumulative adverse effects to the Bridge historic property in consideration of past projects that have altered the Bridge property since its construction in 1937.

California Environmental Quality Act (CEQA) Evaluation

CEQA requires the identification of each "significant effect on the environment" resulting from the potential project (Build Alternatives) and ways to mitigate each significant effect. Each significant effect on the environment must be reported on in the draft environmental impact report and an appropriate mitigation identified, if feasible.

Impact Summary

Environmental Resources Identified Having Significant Environmental Effects (see pages 6 and 7 for the Build Alternative descriptions):

- Visual and Aesthetics
  - Substantial Adverse Effect on a Scenic Vista (Views from the Bridge): Construction of any of the five Build Alternatives would cause adverse to strongly adverse visual impacts to views from the Bridge, in particular pedestrian and bicyclist views from the sidewalks and motorist views from the roadway.
- Cultural Resources
  - Construction of any of the five Build Alternatives would generally cause direct adverse effects to the Bridge as it is considered an historic property, which has been determined eligible for listing in the National Register of Historic Places. The five Build Alternatives would cause indirect adverse effects, including introduction of visual elements out of character with the historic property, change in the character of its use as a historic property by changing the original design of the original 4-foot-tall outside handrail which allowed pedestrians and bicyclists to lean over and experience views, addition of physical suicide barrier systems where none were originally, use of non-historic material (glass panels, glass winglets, metal rods and cable netting), as well as alteration of the pedestrian, bicyclist and vehicle occupant experience on the Bridge.
  - The integrity of design would be adversely affected by the five Build Alternatives because they significantly alter the design of the original 4-foot-tall outside handrail and the pedestrian and bicyclist experience from the sidewalks and by Alternative 3 (Add Net System), which would introduce a non-historic visual element to the trusses at the sides of the Bridge.
- Biological Resources
  - Substantial Adverse Effect on Candidate, Sensitive or Special Status Species: Given the proximity of the proposed construction staging areas within GGNRA lands to large expanses of coastal scrub habitat, and the known presence of Mission blue butterfly and the potential presence of special-status plant species within adjacent and nearby areas, the use of the staging areas could result in the loss of special-status species and the degradation of adjacent habitats.
  - Substantially Interfere with the Movement of Migratory Wildlife Species: Four of the Build Alternatives (Alternative 1A, 1B, 2A and 2B) incorporate the use of transparent panels into the barrier systems that could adversely affect various bird species.
  - Should an active nest of the peregrine falcon be present on the Bridge, construction-related activities could result in the abandonment of the nest.

Environmental resources having unavoidable significant environmental effects (see pages 6 and 7 for the Build Alternative descriptions):

- Visual and Aesthetics
  - Substantial Adverse Effect on a Scenic Vista (Views from the Bridge): The five Build Alternatives substantially reduce the views from the Bridge towards both the urban and natural visual environments. Because the heights of four of the five Build Alternatives are necessary to meet the project's purpose and need, the resulting substantial reductions to views from the Bridge would be a significant and unavoidable impact.
- Cultural Resources
  - The five Build Alternatives would all cause a direct adverse effect to Bridge historic property. While mitigation measures would ensure a visual record is provided, physical alteration of the historic property would still occur resulting in a significant and unavoidable impact.

Construction

The construction analysis evaluates the short-term construction impacts and mitigation measures associated with constructing the five Build Alternatives.

All construction activities would take place within the limits of the District's existing right-of-way as permitted by the GGNRA.

TRANSPORTATION

Impact Overview

- Construction activities may require the periodic closures of vehicle lanes during non-peak traffic hours.
- Temporary use of the upper Merchant Road parking area would displace some parking.
- During the movement of construction equipment and materials to/from staging areas and construction areas, the existing pattern of circulation on narrow roads could be temporarily detoured to minimize safety hazards for vehicles, buses, bicyclists and pedestrians.

Avoidance, Minimization and/or Mitigation

- To offset the temporary loss of the parking in the upper Merchant Road staging area during construction, the District intends to identify additional designated parking in existing nearby parking areas.
- Detours would be coordinated with GGNRA at least two weeks in advance of closures, and closures would be of the shortest duration possible to accommodate construction activities.

NOISE

Impact Overview

- Noise from trucks and construction equipment would be above the existing peak traffic noise levels.

Avoidance, Minimization and/or Mitigation

- To protect construction workers who would be exposed to more long-term exposure to high noise levels, noise protection measures for construction workers would be incorporated into the construction contracts and project specifications.

AIR QUALITY

Impact Overview

- Temporary emission of certain air pollutants and dust could occur during construction.
- Construction activities would result in minor and temporary emission of air pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips.

Avoidance, Minimization and/or Mitigation

- Consistent with the Bay Area Air Quality Management District (BAAQMD) Rules and Regulations, dust and diesel emissions would be reduced through site control measures such as watering and covering stockpiles, and reducing construction vehicle idling. These control measures would be incorporated into the construction contracts and project specifications.

SOIL DISTURBANCE AND EROSION CONTROL

Impact Overview

- During construction, there is potential for storm water run-off to carry sediment into San Francisco Bay waters near the Bridge.
- Soil disturbance and the unintentional introduction of seeds by construction equipment could result in the further introduction and spread of invasive plant species.

Avoidance, Minimization and/or Mitigation

- Site preparation at the construction staging areas would include erosion control measures.
- In areas of particular sensitivity, extra precautions would be taken if invasive species are found in construction areas. Precautions could include the inspecting and cleaning of construction equipment and implementing eradication strategies should an invasion occur.

Continued on next page.

Construction *Continued from previous page.*

HAZARDOUS MATERIALS

Impact Overview

- Any work that would disturb the existing paint system could potentially expose construction workers to health hazards and would produce surface preparation debris containing heavy metal in amounts that exceed the hazardous thresholds established in the California Code of Regulations.

Avoidance, Minimization and/or Mitigation

- The project specifications and the construction contracts would require the containment, collection, and appropriate handling and licensed disposal of all removed materials painted with the existing paint system and other debris produced as a result of the work, in accordance with all applicable federal, state, and local hazardous waste laws.
- All of the District's contract specifications for projects that disturb the existing paint system include project-specific provisions informing the contractor of the existing paint systems and require that the contractor follow all applicable laws to ensure that the health of all employees and the public, as well as the environment, are protected during the work.

BIOLOGICAL RESOURCES

Impact Overview

- The proximity of the proposed construction staging areas within GGNRA lands to large expanses of coastal scrub habitat, and the known presence of Mission blue butterfly, a federally Endangered species, and the potential presence of special-status plant species within adjacent and nearby areas, the use of the staging areas could result in the loss of special-status species and the degradation of adjacent habitats.
- The Bridge provides potentially suitable nesting habitat for the peregrine falcon, and should an active nest of the species be present, construction-related activities could result in the abandonment of the nest.

Avoidance, Minimization and/or Mitigation **(See page 23 for additional avoidance measures.)**

- A qualified biologist or biologists would be retained by the District prior to the start of construction to act as a biological Environmental Compliance Monitor (ECM). The biological ECM would implement and oversee tasks such as monitoring construction activities, flagging and staking native vegetation near the staging areas, providing educational materials for workers and monitoring the effectiveness of the avoidance measures being implemented.
- The District would implement the following measures to further protect Mission blue butterflies and associated habitats.
  - The District would provide specifications for erosion and dust control during construction.
  - Construction vehicles traveling on access roads within GGNRA lands would be restricted to a maximum speed of 20 mph during the period of March 15 to July 4, which is the flight season for the Mission blue butterfly.
  - To prevent the introduction of non-native vegetation, the District and contractor would inspect all construction equipment prior to accessing the staging areas. If any vegetation or deleterious materials are present, the contractor would decontaminate its equipment with a high-pressure washer and properly dispose of the wastewater and debris prior to entering GGNRA lands.
- Prior to the implementation of construction activities occurring during the peregrine falcon nesting season (typically February through July), the District would consult with the Golden Gate Raptor Observatory (GGRO) to determine if breeding pairs of peregrine falcon are currently nesting in the vicinity of the Bridge and may be disturbed by the proposed project. This consultation would also serve to determine if surveys for nesting peregrine falcon should be conducted prior to project implementation. If nesting pairs are identified, then a construction exclusion zone would be established around the active nest. Construction activities may commence within the exclusion zone only upon determination by a qualified biologist that the nest is no longer active.

Summary of Build Alternative Mitigation Measures

The Draft EIR/EA presents the environmental existing conditions, impacts from construction and operation of the alternatives and the proposed avoidance, minimization and/or mitigation measures to reduce or eliminate impacts.

This summary provides an overview of the mitigation measures identified in the Draft EIR/EA that would be implemented should any of the five Build Alternatives be constructed. The No-Build Alternative does not present impacts. The District would apply the mitigation measures during design, construction and operation of the project.

Impacts

Mitigation would be implemented for the following impacts identified for the five Build Alternatives under:

- Land Use and Parks and Recreational Facilities
- Visual and Aesthetics
- Cultural Resources
- Biological Resources
- Cumulative Effects

Avoidance, Minimization and/or Mitigation

Draft Memorandum of Agreement (MOA)

A draft Memorandum of Agreement (MOA) would be developed and submitted to Caltrans to document the existing condition of the Bridge. The MOA would stipulate various mitigation activities to address the adverse effects this project would have on the Bridge. Caltrans would be responsible for carrying out these measures, insuring that: a) the Bridge is properly recorded through photography and written documentation; b) this documentation of the Bridge is appropriately distributed; and c) other portions of the historic property within the project limits are protected. Caltrans would not authorize project-related activities that could result in an adverse effect to the historic property until these stipulated measures are completed.

- The Bridge has been the subject of partial recordation by the Historic American Engineering Record (HAER) program, and the recordation conducted for mitigation for this project would be designed to augment this previous work.
- A historical and educational brochure would be prepared to present the history of suicide prevention efforts at the Bridge.
- Interpretive signs or display panels would be installed at the Round House Gift Center and the Vista Point to describe the project for the duration of construction.
- The District would ensure the protection of the remainder of the historic property within the project limits during construction of the suicide barrier, as well as the Fort Point National Historic Site, located below the Fort Point Arch component of the Bridge. The District would ensure against incidental damage to the remainder of the Bridge historic property and the Fort Point property by hiring an independent Environmental Compliance Monitor (ECM).

Biological Resources

- Avoidance measures, which have successfully been implemented as part of the Bridge Seismic and Wind Retrofit Project, would continue to be implemented as part of the proposed project in order to prevent adverse affects to Mission blue butterfly, special-status plant species and coastal scrub habitat (see page 22 for details).
- The District would retain the services of a qualified avian biologist to further evaluate the potential of birds to collide with the transparent panels and netting potentially used as part of the suicide deterrent system. At a minimum, the expected flight patterns of migratory and resident birds relative to the installation locations would be evaluated, as well as the potential of the transparent panels and associated reflections to alter regular flight patterns and encourage collisions. Should it be found that the use of the transparent panels or netting pose a substantial collision risk to birds, appropriate design measures would be implemented.

Draft Environmental Document Availability

The Draft EIR/EA for the Golden Gate Bridge Physical Suicide Deterrent System Project is now available for public review.

Interested citizens and public agencies have until August 25, 2008 at 4:30pm to review the Draft EIR/EA and submit written comments (see how to submit comments on opposite page) for consideration by the District. Public meetings will be held during the review period to receive public comments.

WHERE CAN I GET A COPY OF THE DRAFT EIR/EA?

Download PDF files from the website at: www.ggbsuicidebarrier.org

Review a hard copy at the following libraries:

Caltrans Transportation Library
111 Grand Avenue, Room 12-639
Oakland, CA 94612

MTC-ABAG Library
Joseph P. Bort MetroCenter
101 8th Street
Oakland, CA 94607

San Francisco Main Library
Government Information Center
100 Larkin Street at Grove Street
San Francisco, CA 94102

Mill Valley Public Library
375 Throckmorton Avenue
Mill Valley, CA 94941

Petaluma Regional Library
100 Fairgrounds Drive
Petaluma, CA 94952

Marin County Public Library
3501 Civic Center Drive
San Rafael, CA 94903

Presidio Trust Library
34 Graham Street
(on the Main Post)
San Francisco, CA 94129

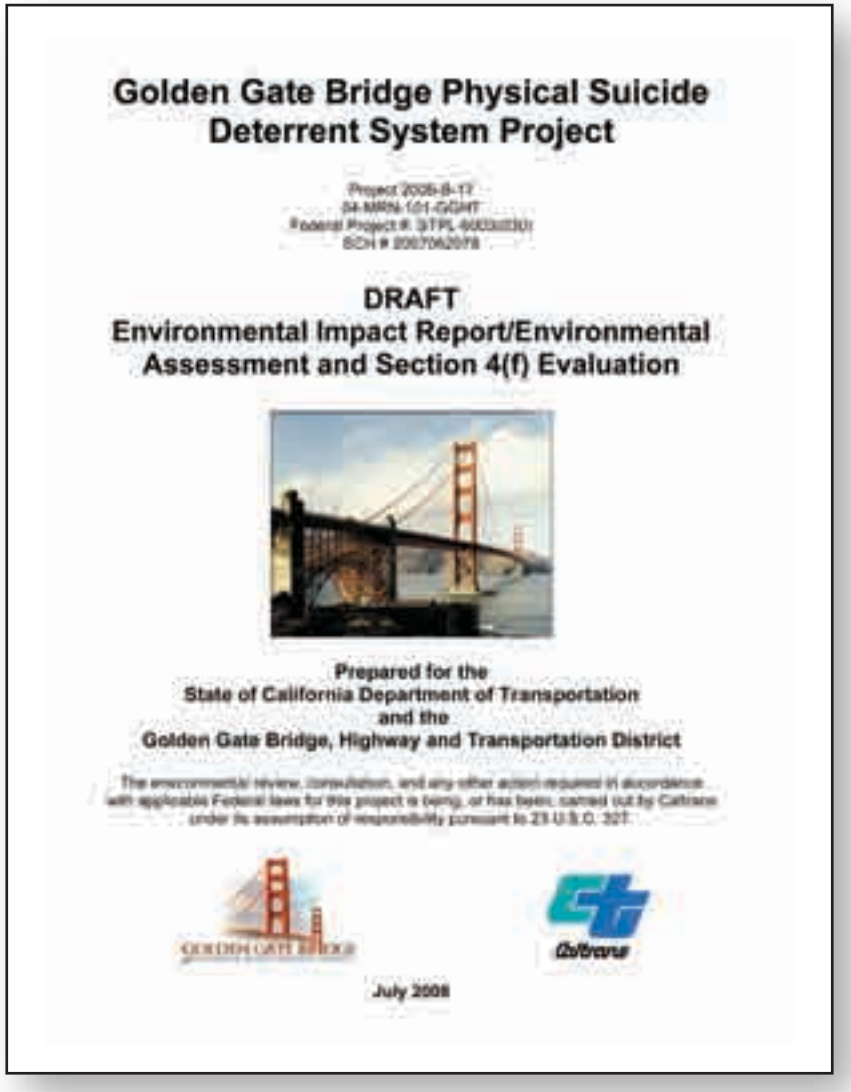
Santa Rosa Central Library
3rd and E Streets
Santa Rosa, CA 95404

Contra Costa County Library
1750 Oak Park Boulevard
Pleasant Hill, CA 94523

Alameda Library
2400 Stevenson Boulevard
Fremont, CA 94538

Request a CD:
Email suicidebarrier@goldengate.org or call the project office at (415) 351-3800, for TDD call 711.

Review Technical Documents:
Visit the District Administration Building to view the technical documents by appointment, submit requests by email to suicidebarrier@goldengate.org or call (415) 351-3800 (TDD 711.



How to Submit Comments

Comments on the Draft EIR/EA may be made in a number of ways which are listed below. Public comments must address the contents of the Draft EIR/EA and not the contents of this guide.

HOW DO I SUBMIT COMMENTS ON THE DRAFT EIR/EA?

Website comment form: www.ggbsuicidebarrier.org/getinvolved.asp

E-mail: suicidebarrier@goldengate.org

FAX: (415) 563-0809

Attend a public meeting in July 2008:

Date: Tuesday, July 22, 2008
Time: 3:30 – 7:30 pm (open house format)
Location: Embassy Suites
Mill Valley and Sausalito Conference Rooms
101 McInnis Parkway
San Rafael, CA 94903

Date: Wednesday, July 23, 2008
Time: 3:30 – 7:30 pm (open house format)
Location: San Francisco Ferry Building, Pier 1
Port Commission Hearing Room
Second Floor
San Francisco, CA 94105

Disabled individuals who require special accommodations are required to contact the District Secretary at least three days before the meeting at 415-923-2223 (TDD 711).

U.S. Mail:

Physical Suicide Deterrent System Project
Golden Gate Bridge
Highway & Transportation District
P.O. Box 9000, San Francisco, CA 94129

All comments must be received no later than 4:30 pm on August 25, 2008.

Next Steps

The Draft EIR/EA is being circulated for public comments until August 25, 2008. Two public meetings will be held to take comments from interested parties and the public regarding the alternatives, impacts and proposed mitigation measures.

Comments received in writing prior to the close of the public comment period, and any comments submitted at the public meetings, will be responded to in writing in the Final EIR/EA. The District and Caltrans will consider the public comments in concert with the information presented in the Final EIR/EA. Following the comment period, a preferred alternative will be identified and a Final EIR/EA will be prepared. The preferred alternative will be selected based on collaboration with and input from the District, Caltrans, findings from the Draft EIR/EA and input received during the comment period.

Following circulation of the Final EIR/EA, the lead agencies will be required to take actions regarding the environmental document in order to implement the project.

The District will determine whether to certify that the EIR complies with the California Environmental Quality Act (CEQA) and issue Findings and a Statement of Overriding Considerations and Caltrans as assigned by FHWA will decide whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA).

Golden Gate Bridge
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