

VISUAL IMPACT ASSESSMENT

**Yerba Buena Island
Ramps Improvement Project**

**District 04-SF-80
KP 12.3/13.2
EA 04-3A640**

**Caltrans District 4
Landscape Architecture**

December 17, 2009

Visual Impact Assessment
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I. PURPOSE OF VISUAL IMPACT ASSESSMENT

The purpose of this Visual Impact Assessment (VIA) is to assess the visual impacts of the proposed project and to propose measures to mitigate any adverse visual impacts associated with the construction of the proposed Yerba Buena Island (YBI) Ramps Improvement Project on the surrounding visual environment. The location of the project site is shown in **Figure 1**.

II. PROJECT DESCRIPTION

YBI is located in the San Francisco Bay approximately halfway between Oakland and San Francisco. YBI is only accessible to vehicular traffic via the San Francisco Oakland Bay Bridge (SFOBB) stretch of Interstate 80 (I-80). The SFOBB is considered a “lifeline structure” and is a critical link between the East Bay and San Francisco. It provides the only vehicle access to YBI, the active U.S. Coast Guard (USCG) facilities located on the south side of the island, and Treasure Island, located immediately north of YBI.

The proposed project would replace the existing westbound on- and off-ramps located on the east side of YBI with new westbound on- and off-ramps. The new ramps would maintain the functional role of the current ramps while satisfying seismic requirements, highway design standards, traffic operations, and improve safety. The YBI Ramps Improvement Project is independent of both the SFOBB East Span Seismic Safety Project (SFOBB East Span Project), currently under construction, and the Treasure Island and Yerba Buena Island (TI/YBI) Redevelopment Plan, currently undergoing its own environmental review process.

The purpose of the project is to improve the safety of the westbound on- and off-ramps to the extent physically and economically feasible. The current ramps do not meet current Caltrans design standards. The proposed project would provide standard deceleration length for the off-ramp and improved acceleration/merging length for the on-ramp. In addition, the project would improve traffic operations to and from YBI.

Alternatives have been proposed to address the geometric deficiencies of the existing on- and off-ramps. The project site is located between post-mile (PM) 7.6 and 8.1¹ beginning at the east portal of the YBI tunnel and ending at the east side of the Transition Structure portion of the new SFOBB. The SFOBB Transition Structure is located between PM 7.9 and 8.1 between the YBI tunnel and the SFOBB Self-Anchored Suspension (SAS) span. The SFOBB Transition Structure is the name of a section of the new Bay Bridge. The Transition Structure will connect the SAS span to Yerba Buena Island, and will transition the East Span’s side-by-side road decks to the upper and lower decks of the YBI tunnel and West Span.

Three alternatives are currently under consideration,² including:

¹ Kilometer Post (KP) 12.3 and 13.2

² A Conceptual Feasibility Report for the YBI interchange was prepared by Caltrans in 2002. The project development team and Caltrans, utilizing preliminary Caltrans geometrics, developed eight build alternatives and one no-build alternative. Various stakeholders were invited to several meetings to provide input on the design alternatives. The alternatives were discussed in detail, along with any non-standard design features. A selection process concluded that six build alternatives were nonviable, while Alternative 2B and Alternative 4 were viable.

**Figure 1:
Regional Location**

**Yerba Buena Island
Ramps Improvement Project**



Source: ESRI, USGS, DMJM Harris, EDAAW

No Build Alternative

This Alternative assumes that the existing on- and off-ramps would remain in place and no further action or improvements would occur. Given that existing conditions would remain in place, the No Build Alternative will not be evaluated in this VIA.

Alternative 2B

The Alternative 2B design, shown in **Figure 2**, would include removal of the existing westbound on- and off-ramps on the east side of YBI, construction of a westbound loop on-ramp from Macalla Road on the east side of YBI, and construction of a westbound off-ramp to Macalla Road on the east side of YBI.

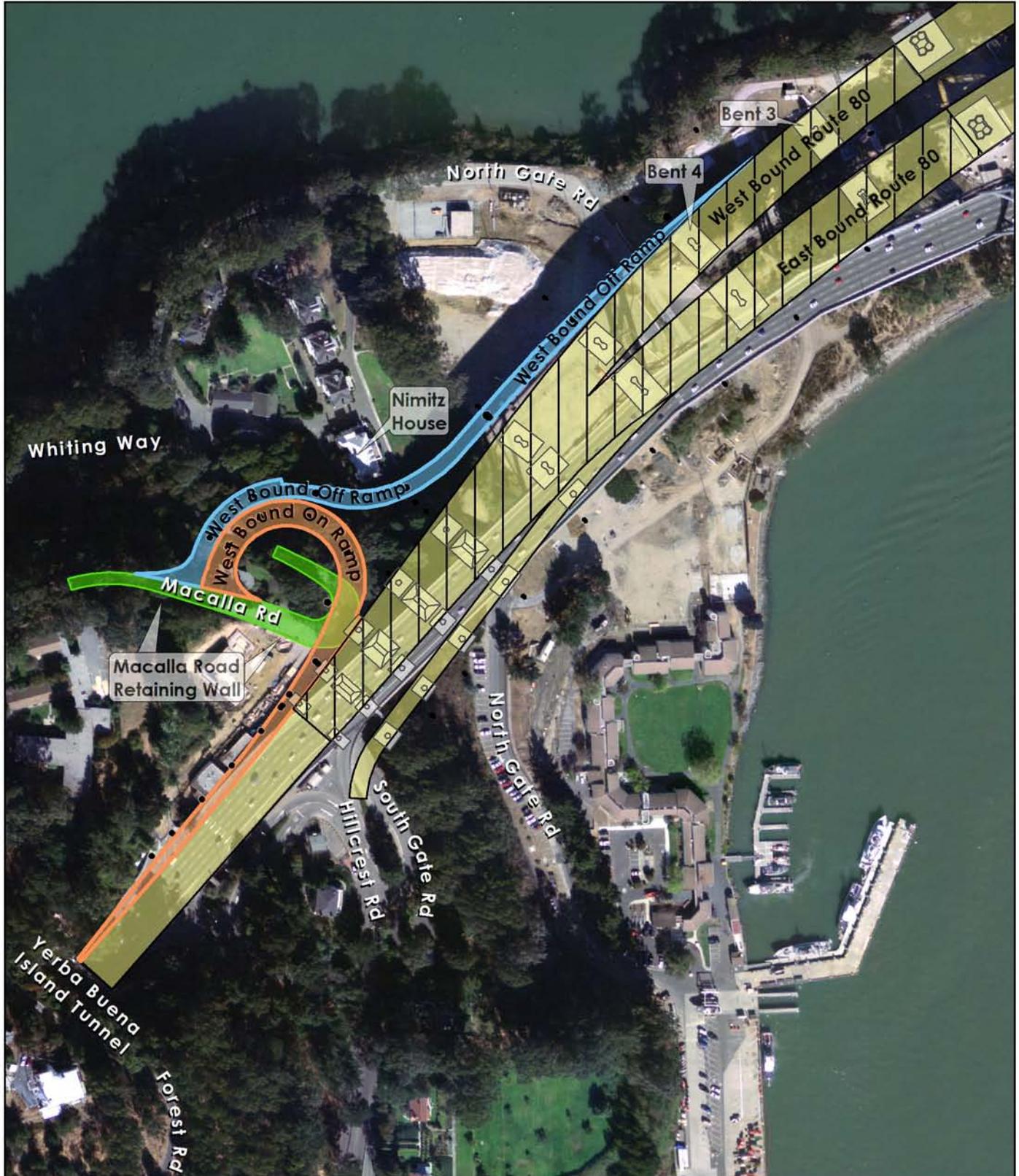
This alternative proposes to reconstruct two of the existing six on- and off-ramps at the I-80/YBI interchange. The proposed on- and off-ramps would provide standard 8-foot shoulder widths, and would include the following features:

- Westbound on-ramp on the east side of YBI- This ramp would begin at a “T” intersection at Macalla Road, loop south with a tight radius, and merge on to the north side of the Bay Bridge. The length of this ramp would be approximately 876 feet (267 meters). This ramp would have two traffic lanes, merging into one as it connects to the SFOBB. One lane would be a high occupancy vehicle (HOV) lane³ and the other a mixed-flow⁴ lane.
- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W3 and W4 curving around the Nimitz House and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,115 feet (340 meters). A stop sign is proposed at the ramp terminus at Macalla Road.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on- and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The stairway adjacent to the Caltrans Substation would be relocated to the west side of the building to make room for the new retaining wall. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.

³ Under the Treasure Island Transportation Management Act (Assembly Bill 981, signed into law in September 2008), high occupancy vehicles would be able to exit or enter Treasure Island free of charge.

⁴ A mixed-flow lane is a general purpose travel lane with no traffic restrictions.

**Figure 2:
Alternative 2b**



Alternative 2b Proposed Ramps

- Proposed West Bound Off-Ramp
- Proposed West Bound On-Ramp
- Proposed Macalla Road Improvements

Separate Project Currently Under Construction

- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

Other Features

- Bent
- Column

7/09

Image: Nima/ USGS 2004
Data: DMJM Harris, EDAAW

This map is a graphical representation and for general locating purposes only.



Yerba Buena Island Ramps Improvement Project
Visual Impact Assessment

- Under Alternative 2B, the westbound on- and off-ramps would terminate at Macalla Road where Quarters 10 and Building 267 are currently located.⁵ Quarters 10 and Building 267 would be relocated prior to construction of the ramps at Macalla Road. The relocation site for these buildings would be on YBI and would be determined under the Section 106 mitigation development process.

Alternative 4

The Alternative 4 design, shown in **Figure 3**, would include the removal of the existing westbound on- and off-ramps on the east side of YBI, construction of westbound on-ramp from South Gate Road, and construction of westbound off-ramp to Macalla Road on the east side of YBI.

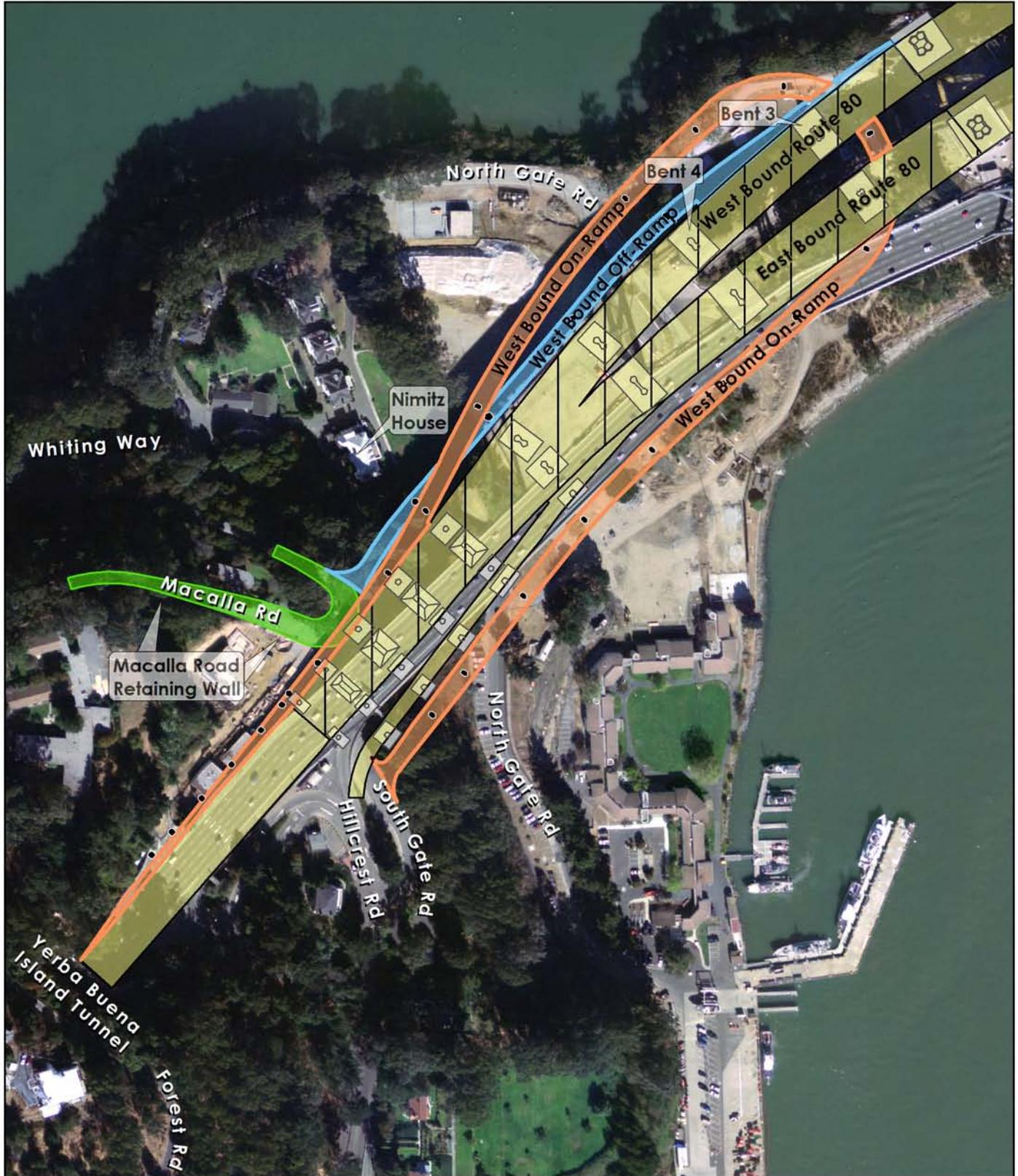
This alternative proposes to reconstruct two of the existing six on- and off-ramps at the I-80/YBI interchange. The proposed on- and off-ramps would provide standard 8-foot shoulder widths, and would include the following features:

- Westbound on-ramp on the east side of YBI - This ramp would begin at South Gate Road, proceed east paralleling the eastbound on-ramp, loop under the new SFOBB Transition Structure near its eastern end to provide adequate merging distances, cross over the westbound off-ramp along the north side of the Bay Bridge. The length of this ramp would be approximately 2,883 feet (879 meters). HOV lane would not be provided under Alternative 4.
- Westbound off-ramp on the east side of YBI - This ramp would diverge from the new SFOBB Transition Structure between bents W2 and W3, parallel the Transition Structure, cross under the westbound on-ramp and terminate at a “T” intersection at Macalla Road. The length of this ramp would be approximately 1,168 feet (356 meters). A stop sign is proposed at the ramp terminus at Macalla Road.
- Macalla Road would be widened for approximately 660 feet adjacent to the terminus of the westbound on- and off-ramps. The existing roadway is about 20 feet wide near the ramp terminus. The roadway widening is required to accommodate a 12-foot wide multi-use pedestrian/bike path and two 12-foot wide lanes within the Caltrans right-of-way. A retaining wall would be constructed adjacent to Macalla Road to provide the required width. The height of the retaining wall would vary from 4 to 16 feet and would retain the hillside above Macalla Road. The roadway width would vary around the curve at South Gate Road to provide proper width for truck turning movements.

Under Alternative 4, Quarters 10 and Building 267 and its associated landscaping would remain in place.

⁵ Quarters 10 and Building 267 (a contributing garage) are listed in the National Register of Historic Places and are significant at the local level under Criterion C, as a significant example of mid-twentieth century residential architecture.

**Figure 3:
Alternative 4**



Alternative 4 Proposed Ramps

- Proposed West Bound Off-Ramp
- Proposed West Bound On-Ramp
- Proposed Macalla Road Improvements

Separate Project Currently Under Construction

- San Francisco-Oakland Bay Bridge East Span Seismic Safety Project
- Transition Structure Portion of SFOBB

Other Features

- ◆ Bent
- Column

7/09

III. ASSESSMENT METHOD

The process used in this visual impact study generally follows the guidelines outlined in the publication "Visual Impact Assessment for Highway Projects", Federal Highway Administration (FHWA), March 1981.

Six steps required to assess visual impacts were performed. They are as follows:

- A. Define the project setting and viewshed.
- B. Identify key viewpoints for visual assessment.
- C. Analyze existing visual resources and viewer response.
- D. Depict the visual appearance of project alternatives.
- E. Assess the visual impacts of project alternatives.
- F. Propose methods to mitigate adverse visual impacts.

IV. VISUAL ENVIRONMENT OF THE PROJECT

A. Project Setting

The regional landscape establishes the general visual environment of the project, but the specific visual environment upon which this assessment will focus is determined by defining landscape units and the project viewshed.

The San Francisco Bay Area extends over sixty miles from the Sacramento River Delta in Benicia to the marshlands of Santa Clara County, a total of more than 1,000 square kilometers (386 square miles). The Bay is a rich marine resource providing navigable waterways for commerce, and habitat for countless wildlife species. The Bay Area combines water, islands, skylines, bridges, and mountains into vistas both picturesque and impressive. Seven different bridges span the Bay, each one constituting a significant visual resource in its own right. The Golden Gate Bridge is known around the world for its grace and beauty. However, all seven bridges span significant stretches of open water and are highly visible from vantage points around the Bay.

Roughly mid-way between the northern and southern ends of the Bay, the Cities of Oakland and San Francisco are located across the Bay from one another. For viewers both on and off the water, the area between these two cities is particularly scenic. Four major islands (Alcatraz, Angel, Treasure, and Yerba Buena) are found in this region, while Mt. Tamalpais and the hills of Marin County tower to the west. The skylines of Oakland and San Francisco provide a vivid and unique visual image. Preservation of this region's aesthetic quality is of particular importance to the millions of people who live in and visit the Bay Area each year.

YBI is a 147 acre natural island that sits in San Francisco Bay between San Francisco and Oakland. The island's high point is located 338 feet above mean sea level, and large portions of it are undeveloped, with steep wooded hillsides leading down to the shoreline.

A large amount of the island's surface area is covered with thick vegetation consisting mostly of stands of large, mature eucalyptus trees, smaller ornamental landscape trees, shrubs and lawn areas. Developed areas of the island are scattered throughout, almost "embedded" within its less developed areas. Consequently, when a person is located in a developed area of YBI, it appears that

much of the surrounding area is undeveloped, though other buildings and/or roads are located nearby but views to these visual elements are obstructed by existing thick vegetation.

However, the eastern fringe of the island, where the USCG installation is located, is mostly flat and open with less vegetation cover. The USCG buildings, mostly small one and two story structures, are clustered in groups along the eastern shore of the island. This part of the island, more so than the western side of YBI, is visually dominated by the western terminus of the SFOBB East Span. Users of the island situated in this area are able to see the elevated roadway superstructure of the western terminus in almost any direction they look.

B. Project Viewshed

A viewshed is a subset of a landscape unit and is comprised of all the surface areas visible from an observer's viewpoint. The limits of a viewshed are defined as the visual limits of the views located from the proposed project. The viewshed also includes the locations of viewers likely to be affected by visual changes brought about by project features.

Due to the location of YBI at the geographical center of the Bay Area, the project's conceptual viewshed is vast. The project area is visible from many Bay Area locations at sea level, and from locations at higher elevations. Similarly, YBI offers vast and often unobstructed view opportunities of large parts of the Bay Area. For practical purposes, this VIA focuses on three primary viewing distance viewshed zones; immediate, moderate and long distance. These distance zones are subsets of the larger conceptual project viewshed.

The immediate distance viewshed zone encompasses the project site and the area of YBI immediately around it. This area offers close views of the SFOBB and the YBI ramps, as well as isolated views to the Bay. From the moderate distance viewshed zone, which extends up to one half mile away from YBI, the project area is still visible though less well defined. The island's vegetation begins to obscure some project features and the island as a whole appears as a singular, intact landmass. From the long distance viewshed zone, which extends up to two miles away to the Oakland Touchdown area, project site features are not clearly defined. Sightlines to the various viewsheds from the project site are for the most part unobstructed.

C. Landscape Units

A landscape unit is a portion of the regional landscape and can be thought of as an outdoor room that exhibits a distinct visual character. A landscape unit will often correspond to a place or district that is commonly known among local viewers. The following three landscape units have been identified for the project site and its vicinity:

Northeast Yerba Buena Island Landscape Unit. The SFOBB touches down on the northeastern tip of YBI. This location is visually distinct from other parts of the island, due to the bridge structure's dominating effect on views toward the area as well as on views from the area. The area's topography is mostly flat relative to the rest of the island, and is also less vegetated. Current SFOBB East Span project construction activity and construction staging areas associated with that project have affected the area's visual character, in that views of construction materials and equipment are common in this part of the island. Views visible from this landscape unit include Bay waters, Treasure Island and the East Bay.

Greater Yerba Buena Island Landscape Unit. This landscape unit is visually distinct from the Northeast Yerba Buena Island landscape unit. Though from some locations the SFOBB has a strong visual presence, it is less dominant when compared to its effect in the northeastern part of the island. This area is vegetated predominantly with mature eucalyptus trees that grow across the island's hilly landform. Views visible from this landscape unit are expansive and include Bay waters, Treasure Island, the East Bay, South Bay, San Francisco and Marin.

Bay Water/Shoreline Landscape Unit. This landscape unit encompasses Bay waters near YBI, as well as the shorelines of Treasure Island and the Oakland Touchdown area, from which views of YBI are proximate and clear. The visual character of this area is influenced by the expanse of Bay waters that is visible from many vantage points, as well as by the shorelines of nearby land masses.

V. EXISTING VISUAL RESOURCES AND VIEWER RESPONSE

A. FHWA Method of Visual Resource Analysis

Identify Visual Character – Visual character is descriptive and non-evaluative, which means it is based on defined attributes that are neither positive nor negative. A change in visual character cannot be described as having positive or negative attributes until it is compared with the viewer response to that change. If there is public preference for the established visual character of a regional landscape and resistance to a project that would contrast with that character, then changes in the visual character can be evaluated.

Assess Visual Quality – Visual quality is evaluated by identifying the vividness, intactness and unity present in the viewshed. The FHWA states that this method should correlate with public judgments of visual quality well enough to predict those judgments. This approach is particularly useful in highway planning because it does not presume that a highway project is necessarily an eyesore. This approach to evaluating visual quality can also help identify specific methods for mitigating each adverse impact that may occur as a result of a project. The three criteria for evaluating visual quality can be defined as follows:

Vividness is the visual power or memorability of landscape components as they combine in distinctive visual patterns.

Intactness is the visual integrity of the natural and man-built landscape and its freedom from encroaching elements. It can be present in well-kept urban and rural landscapes, as well as in natural settings.

Unity is the visual coherence and compositional harmony of the landscape considered as a whole. It frequently attests to the careful design of individual manmade components in the landscape.

B. Existing Visual Resources

1. Existing Visual Character

The YBI landscape unit has a certain visual character based upon the land uses that comprise it. These smaller scale uses and distinct landforms within the landscape unit are called image types. These image types give the landscape unit its character. A cross section of image types found on

YBI is shown in photographs presented in **Figure 4**. The following four general image types can be identified on YBI:

Residential

Older Residential – Refers to various single family residential structures built on the island during the early to middle part of the 20th Century, and includes historically significant buildings.

High Density Residential – Refers to newer late 20th Century residential buildings.

Woodland/Open Space

This image type refers to the many areas of the island covered in vegetation. Vegetation includes open lawns, ornamental shrubbery and ornamental trees, to large stands of mature eucalyptus and pine trees.

Infrastructure

This image type refers to bridge and surface road facilities on YBI.

Institutional

This image type refers to USCG property on YBI. Due to security concerns, no close range photographs of this property are shown, with the exception of one key viewpoint analyzed in this VIA.

Photos “A” and “B” and “C” in Figure 4 illustrate views of residential, woodland/open space and infrastructure image types. The photographs show older single family residential buildings initially used by the US Navy during the early part of the 20th Century. The buildings are situated along narrow roads, in an area where the undulating landform is covered by low shrubs, mature trees, lawn areas, and non-native stands of mature eucalyptus woodland.

Photo “D” in Figure 4 illustrates an example of the type of high density residential structures found on YBI, many of which were built during the 1960s and 1970s.

In terms of infrastructure, several of the photos in Figure 4 provide examples of infrastructure image types on YBI. Photos “D”, “E” and “F” illustrate the undulating landforms that exist on YBI, a landform that predominates on the island. Owing to this natural landform, roads often undulate and curve as they travel throughout the island, and much of the island’s developed areas conform to the island’s natural topography.

Figure 4:
Yerba Buena Island Image Types



A



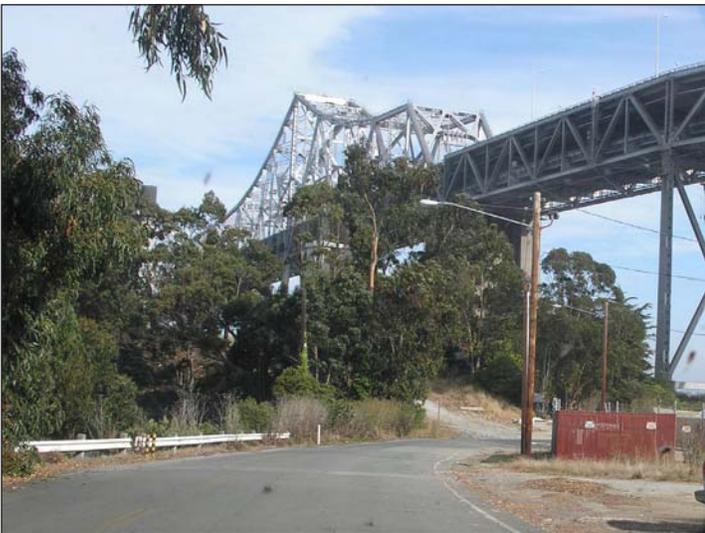
B



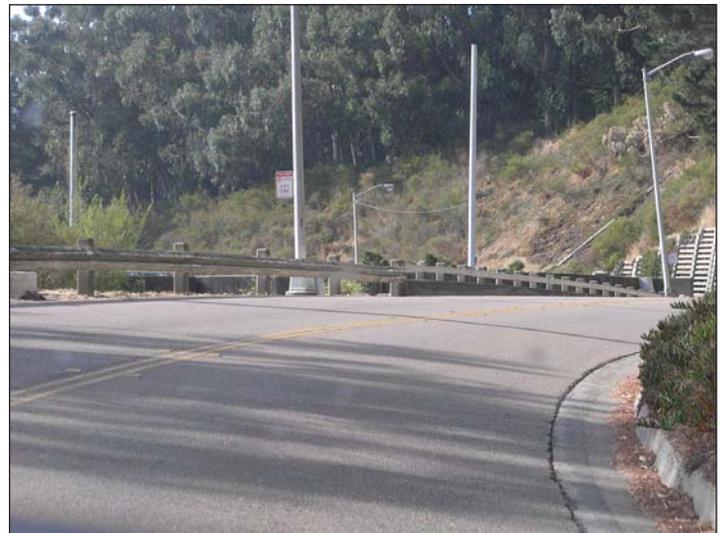
C



D



E



F

2. Existing Visual Quality

Existing visual quality on YBI is moderately high. The island is located in a natural setting that is very vivid when seen from a variety of vantage points. Simply due to being one of a few islands located on San Francisco Bay, YBI is a very vivid landform that is memorable to people that observe it from near and far. People viewing YBI as they approach the island from the East Bay, or from San Francisco while traveling on the SFOBB, will note the strikingly dense land cover found on the island, as well as how it visually interacts with the SFOBB. Other human made development on the island, such as the well preserved distinctive early 20th Century US Navy structures are quite memorable to island visitors. Viewers located on the San Francisco mainland and to a greater degree, viewers in the East Bay, see YBI in a less defined manner. It is more difficult for these distant viewers to discern the island's variations in topography, its varied vegetation types and developed areas that contain its residential and institutional buildings.

The overall visual intactness of YBI is moderate, given the effect the SFOBB has had on the island's natural state. In some areas of YBI, the bridge is quite omnipresent, and visually dominates other features on the island such as vegetated open spaces and human made development. Visual intactness of these areas is therefore considered low. From other locations on YBI, the bridge is not visible at all, since it is obstructed by hilly landforms and vegetation, lending these areas a higher degree of intactness. Though these areas may be developed with residential structures and/or infrastructure, these objects blend in with the natural environment to a greater degree than does the SFOBB. When viewed from a distance, or from areas of YBI that are at a higher elevation than the SFOBB, the visual intactness and unity of YBI is higher than when viewed from the island's lower elevations. From higher elevations, the island's landform interacts elegantly with surrounding Bay waters, and the SFOBB gracefully meets the YBI land mass. In views from the San Francisco mainland, YBI and the SFOBB together form an intact and unified image consisting of two large structures, one natural and one human made.

C. Methods of Predicting Viewer Response

Viewer response is composed of two elements: viewer sensitivity and viewer exposure. These elements combine to form a method of predicting how the public might react to visual changes brought about by a highway project.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals. Analysts can learn about these special resources and community aspirations for visual quality through citizen participation procedures, as well as from local publications and planning documents.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

D. Existing Viewer Groups, Viewer Exposure, and Viewer Awareness

Freeway Travelers

Approximately 275,000 vehicles that use the SFOBB each day pass through YBI.⁶ A large portion of these vehicles contain commuters that are traveling between San Francisco and the East Bay. Daily commuters may have an increased awareness of views from the road due to their frequency of travel through YBI. Those that experience congested traffic conditions as they travel through YBI will tend to focus on views of the island itself. Drivers traveling at normal freeway speeds usually focus attention on long range non-peripheral views. This viewer group has a heightened awareness of a wide range of views.

YBI Residents (including USCG personnel stationed on island)

Upon decommissioning of the Naval base on YBI by the United States Navy in 1996, much of the housing stock on the island became occupied by civilian, rather than military residents. Currently, residents that live on YBI in housing of various types are located throughout the island. These residents use the existing YBI on-ramp and off-ramp infrastructure relatively frequently as they arrive at and leave the island, and therefore constitute an important viewer group. Some YBI residents also have views from their homes toward the YBI on-ramp and off-ramp infrastructure. USCG personnel are stationed on YBI for extended periods of time, and are therefore also an important viewer group.

Recreational Users and Event Attendees

Recreational opportunities abound around the Bay and many of them center upon either the use of the Bay or upon views of the Bay. Activities such as sailing, kayaking, windsurfing, and fishing make use of the Bay itself, while activities such as sightseeing, hiking, biking and walking often incorporate a view of the Bay. Recreationalists involved in these activities may at various times experience views of YBI and its features. The island is also host to events such as weddings, which bring visitors to YBI.

VI. VISUAL IMPACT ASSESSMENT

A. Method of Assessing Project Impacts

The methodology used to assess visual impacts is also taken from the FHWA guidelines. The impact assessment process incorporates and combines the two principal visual impact components: visual resource change and viewer response to that change. Visual resource change is analyzed in terms of visual dominance and other specific visual effects of alternatives, together with change in visual quality. Viewer responses to these changes are interpreted on the basis of viewer types identified in this Assessment. Visual simulations were prepared to assist the analysis, using computer generated information overlaid on photographic images from actual site photos at six (6) selected viewpoints. Renderings were prepared for two (2) viewpoints wherein a “before” image differs from, or does

⁶ California Department of Transportation, Toll Bridge Seismic Retrofit Program Report: Finding and Recommendation for Completion of the Main Span of the San Francisco-Oakland Bay Bridge East Span Seismic Safety Project, p. iii, December 8, 2004.

not accurately reflect, the image that currently physically exists. In addition, the relationship of the project to applicable plans and policies is examined, and any inconsistencies between potential impacts and adopted policies are highlighted.

B. Visual Impact Types and Assessment Criteria

Visual impacts were categorized into general types, and separate criteria apply to each different visual impact type.

Criteria Specific Effects on Viewers

The criteria used to determine effects on viewers include: visual dominance of the project; view obstruction or view expansion; effects on community disruption; viewer orientation; and design quality issues, such as changes in vividness, intactness and unity.

Visual Dominance

Visual dominance refers to the contrast between the proposed improvements and their setting described in terms of vegetation, landform, and structural changes. Dominance is a function of how potentially noticeable the project is to the viewer, ranging from:

- In-evident: Project is visible but generally not noticeable.
- Subordinate: Project is noticeable, but attracts less attention than other components of the setting.
- Co-dominant: Project attracts attention equally with other components of the setting.
- Dominant: Project dominates the view and attracts more attention than other components of the setting.

Visual elements of scale, form, line, and position, as seen from representative sensitive viewing locations, determine the degree of contrast and dominance.

It is possible to determine the expected degree of visual dominance for the project from a given viewpoint. The determination involves an evaluation of the visibility and visual contrast of project components within their surroundings, together with viewing distance and degree of visual exposure for the viewer.

A visually dominant project represents a more substantial visual change if it occurs in areas such as an intact natural landscape. In general, if the project would cause the YBI ramps to change from a more dominant to a less dominant level, the effect is generally considered to be beneficial. Conversely, if the dominance of the ramps increases because of the project, the effect is generally considered to be adverse.

It is important to stress that visual dominance is only one of the criteria which may be considered in evaluating visual quality. The visual effect may be altered considerably by other criteria, including view obstruction/expansion; vividness; intactness; unity; and community disruption/privacy/orientation and loss or addition of attractive landscape features (e.g., trees).

View Obstruction or Expansion

View obstruction or expansion is a criterion that may modify the degree of adverse effect expected from the dominance evaluation. In terms of view blockage, existing views may be eliminated as a result of structural or landform additions that may block visual access. Conversely, views may be improved or made newly available as a result of existing structural and landform elements being moved or removed. View obstruction or expansion is categorized as follows:

- **Obstructed view:** Project fully or largely blocks views of notable landscape features or vistas.
- **Partial view obstruction:** Project interrupts or partly screens views of notable landscape features or vistas, but some experience of viewing features or vistas remains.
- **New or expanded view:** Project opens up views of notable landscape features or vistas.

In this Assessment, notable landscape features may include either positive visual elements with high visual unity and intactness (views of the Bay, ridgelines, open space, historic landmark buildings) or negative ones with low unity and intactness (substations, construction sites and construction staging areas). Therefore, whether the effect on view obstruction is considered adverse or beneficial depends on the object being viewed. This criterion has been applied only where important views or viewing directions toward notable features are affected; it is not applied in situations where general or unspecified views may be blocked.

Community Disruption, Orientation and Privacy

Considerations of community disruption, viewer orientation, and privacy represent a set of criteria, which reflects typical viewer responses and perceptions about the relationship of transportation corridors to the surrounding neighborhood.

Community Disruption: Changes in both physical and visual conditions can influence the degree of community disruption perceived by local residents because of a project. This report considers only the visual evidence of community disruption and not access or land-use effects. Changes that make the project more visible and more obstructive tend to increase perceived community disruption. This criterion applies mainly to views to the road from residential, recreational, and office commercial viewer groups.

Orientation or “way-finding”: Pertains to visual information (landmarks, signage, indicators of local character) along the freeway or other travel routes, which may cue travelers to their regional and local position, and which potentially improve a sense of direction or perceived safety. Orientation is evaluated as either being improved (when views to recognized landscape features are opened up, or viewing sequences along important entry routes become less confusing) or worsened (when continuous view blockage along travel routes prevent orientation to surrounding communities and natural features, or when a complicated travel path leads to frequent changes in view direction).

Privacy: An important consideration in residential neighborhoods where direct sight-lines from roadways to adjacent homes and gardens are perceived as adverse to the inhabitants.

Overall Effects on Viewers

An overall determination of adverse and beneficial effects on viewers is based on a combined evaluation of all the criteria described above. Impacts are categorized as:

An overall determination of adverse and beneficial effects on viewers is based on a combined evaluation of all the criteria described above. Impacts are categorized as:

- **Strongly Beneficial:** substantial visual change and considerable increase in the overall visual quality, with the likelihood of strongly positive viewer responses.
- **Beneficial:** moderate degrees of visual change and an increase in the overall visual quality, with the likelihood of positive viewer responses.
- **Minimally Beneficial:** tangible visual changes and a minimal increase in overall visual quality, with the likelihood of moderately positive viewer responses.
- **Negligible:** little or no visual change and no tangible reduction or increase in visual quality, without negative or positive viewer responses expected.
- **Minimally adverse:** a tangible degree of visual change and a minimal reduction in overall visual quality, with the likelihood of some moderately negative viewer responses.
- **Adverse:** moderate degrees of visual change and a reduction in the overall visual quality, with the likelihood of negative viewer responses.
- **Strongly Adverse:** substantial visual change and considerable reduction in the overall visual quality, with the likelihood of strongly negative viewer responses.

In the absence of a formal viewer response survey on reactions to predicted visual impacts, the evaluation of viewer responses is based on the following: general criteria of visual sensitivity derived from FHWA guidance; and past visual studies conducted by Caltrans.

Effects on viewers are further subdivided by viewer type, since different viewer groups may have different levels of sensitivity to visual issues. For the purposes of impact documentation, viewer types are classified as:

- Freeway travelers
- YBI residents (including USCG personnel)
- Recreational users (bicyclists, pedestrians, and boaters)

Change in Visual Quality

Change in visual quality addresses the effect of the project on overall visual quality at the landscape unit scale. This can be determined by reevaluation of the vividness, unity, and intactness criteria for the unit with the post-project condition, noting both specific changes and overall changes in visual character. This analysis reflects the cumulative effects of the project on views as documented for particular viewpoints and image types, as well as inherent changes in visual character regardless of specific existing viewpoints.

Conformance with Applicable Policies

Policies governing aesthetics and related issues concerning the project study area have been reviewed in relation to the project description for conformance. Potential conflicts with these policies are described in the impact assessment.

C. Analysis of Key Viewpoints

Because it is not feasible to analyze all the views in which the proposed project would be seen, it is necessary to select a number of key viewpoints that would most clearly display the visual effects of the project. Key viewpoints also represent the primary viewer groups that would potentially be affected by the project.

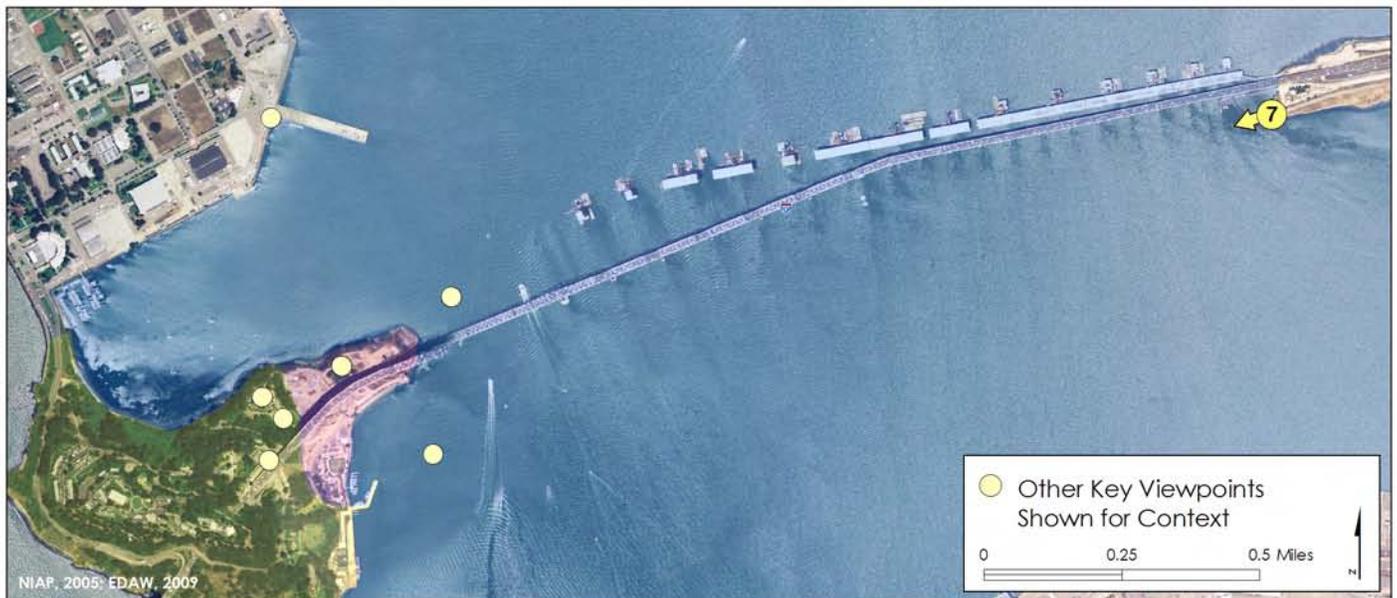
A total of eight key viewpoint locations were identified for analysis in this VIA. The viewpoints are identified in this document as the following:

1. Macalla Road at North Gate Road Intersection
2. Nimitz House
3. Officers Quarters Open Space
4. North Gate Road Staging Area
5. Treasure Island
6. Eastern YBI Waterborne Approach
7. SFOBB Oakland Touchdown
8. SFOBB Transition Structure

The VIA discusses two renderings prepared for the Alternative 2B design pertaining to Key Viewpoints 1 and 8, and a discussion of six photo-simulations prepared for the Alternative 2B design related to Key Viewpoints 2 through 7. This will be followed by a discussion of two renderings prepared for the Alternative 4 design pertaining to Key Viewpoints 1 and 8, and a discussion of six photo-simulations prepared for the Alternative 4 design related to Key Viewpoints 2 through 7. Key viewpoint locations are shown in **Figure 5**.

In addition to “before and after” images of the viewpoints that are illustrated through the use of photo-simulations, this VIA also illustrates where a hypothetical observer of each viewpoint would be located geographically relative to the YBI ramps. The VIA also helps the reader distinguish between structural elements associated with the YBI Ramps Improvement Project and elements of the separate SFOBB East Span Project. When evaluating the potential visual impacts of the proposed YBI ramps, it is important to recognize to what degree visual impacts in the project area would be caused by the YBI Ramps Improvement Project compared to impacts resulting from the separate SFOBB East Span project. This is done through the use of graphical insets that clearly distinguish what structures in each viewpoint are associated with the YBI Ramps Improvement Project and which are a part of the SFOBB East Span Project. In these insets, structures associated

**Figure 5:
Key Viewpoint Locations**



with the YBI Ramps Improvement Project appear in color (blue for Alternative 2B insets, orange for Alternative 4 insets), while the rest of the image is shown in black and white.

The photo-simulations and renderings presented for Alternative 2B illustrate ramp designs that incorporate ribbing on road deck undersides, while Alternative 4 photo-simulations and renderings present ramp designs without ribbing. A ribbed design is dramatically distinct from a non-ribbed design. Therefore, it is necessary to separately consider the visual effects of each design technique. To facilitate analysis of this design feature in an effective manner, the ribbed design technique is presented only for Alternative 2B, while the non-ribbed design technique is presented only for Alternative 4.

Rather than compare the visual effects of a ribbed design with a non-ribbed design for each alternative and each viewpoint, it is useful to discuss the effects of each technique on a more holistic scale that would apply to both alternatives and all viewpoints.

The rib design technique proposed for the YBI ramps involves installation of semi-rectangular shaped concrete elements on the lateral undersides of the road decks. Each rib would measure about 30 feet in length from the ramp's outside edge to near its center, and two feet wide when viewed in profile from below the ramp. The ribs would be spaced about 10 feet apart from each other.

The use of ribs in the ramp design is consistent with the architectural vocabulary of the new SFOBB East Span. Both the eastbound on-ramp at YBI and the bicycle/pedestrian facility utilize a rib design to support the structure. The exposed ribs indicate to viewers a change in scale and speed, and create visual interest. They give an added impression of depth, yet also make the ramp appear sinuous and lighter in weight.

Alternative 2B

Key Viewpoint 1 – Macalla at North Gate Intersection

Analysis of this viewpoint is based on a rendering rather than a photo-simulation. Implementation of Alternative 2B would require removal of Quarters 10 (a US Navy residential structure) and Building 267 (a garage associated with Quarters 10), in order to provide right-of-way for the YBI ramps. Quarters 10 is not visible from this vantage point. Therefore, it would be inaccurate to present a “before” image of the vantage point when a structure that would be drastically affected by the project is not visible in the image. For this reason, a rendering was chosen as a means to illustrate the visual effect of the ramps at the intersection of Macalla Road and North Gate Road.

Orientation

This key viewpoint is toward the northeast from the intersection of Macalla Road and North Gate Drive. **Figure 6** depicts a rendering of Alternative 2B. In order to provide site context, the figure also presents photos of Quarters 10 and Building 267.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents.

Existing Visual Quality/Character

This area of the island is dominated by the presence of the double deck structure of the SFOBB East Span as it nears the YBI tunnel. The view presented in this viewpoint is a vivid microcosm of the island itself, in that on YBI there is often an inter-play between the natural environment and the SFOBB. In this view, the bridge's intactness and unity are relatively low, due to the large scale and omnipresence of the road decks when viewed from such close proximity. Overall unity and intactness of the view is low when all of its elements are taken together. The substation on the left side of the view, Building 267, the mature vegetation and the road decks present a cluttered image in which natural features and human made features do not visually complement each other.

Proposed Project Features

Implementation of Alternative 2B would require the removal of some vegetation currently visible in the view (in the area immediately right of Building 267), in order to provide right-of-way for the ramps. A viewer at this location would see the on-ramp overhead as it descends toward Macalla Road.

Change to Visual Quality/Character

Visual Dominance: Though the ramps would be somewhat obstructed by existing foreground vegetation, it nevertheless would be the dominant visual feature of this viewpoint. From this vantage point, the ramps' massing would be visible immediately overhead as well as in the distance as they loop across the viewer's line of sight, though portions would be obscured by existing vegetation and the existing substation building.

View Obstruction: Construction of the ramps would involve clearing of some vegetation from the area, which would open up partial views of San Francisco Bay. Though this clearing would provide new views of the Bay, the ramps would also partially obstruct these views.

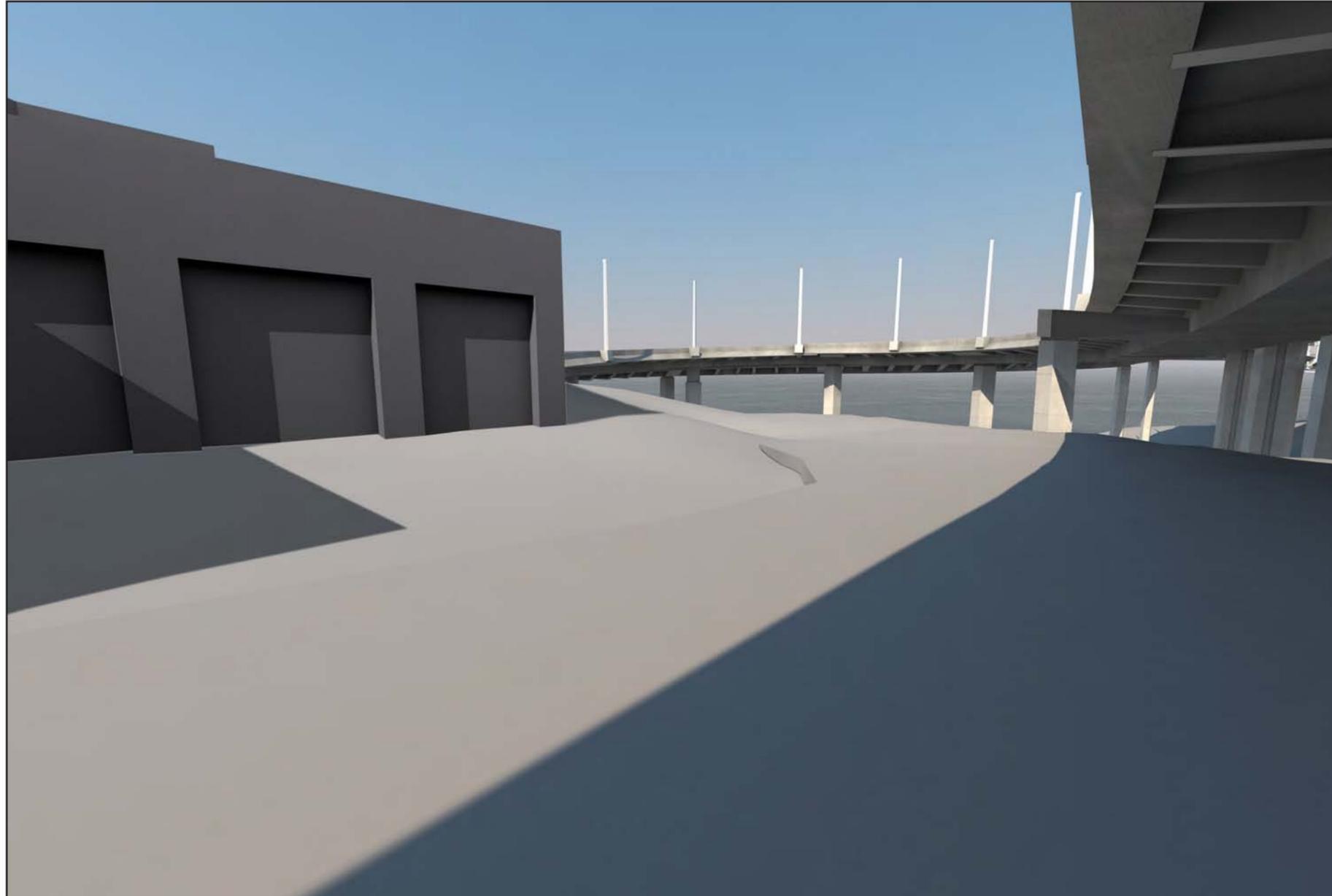
Community Disruption/Orientation/Privacy: This alternative would have a negligibly disruptive effect. Though the ramps' massing would be considerable, they would not be out of character with the current visual setting. In addition, construction of the ramps would also result in the opening of partial San Francisco Bay views.

Overall Visual Quality: On the whole, this alternative would have a minimally adverse effect on the viewpoint's visual quality. Construction of the ramps would do little to harmonize the relationship between the transportation infrastructure of YBI and its surrounding natural environment. Though new views of the Bay would become available and the ramps would be partially obstructed by the site's existing vegetation, a significant portion of their massing would tower over viewers situated at this location.

Resulting Visual Impact: Overall viewer response would be minimally adverse, as would the change in visual quality and character. The resulting visual impact would be minimally adverse.

Figure 6: Alternative 2B
Key Viewpoint 1: Macalla Road at North Gate Road Intersection

Yerba Buena Island
Ramps Improvement Project



Rendered View



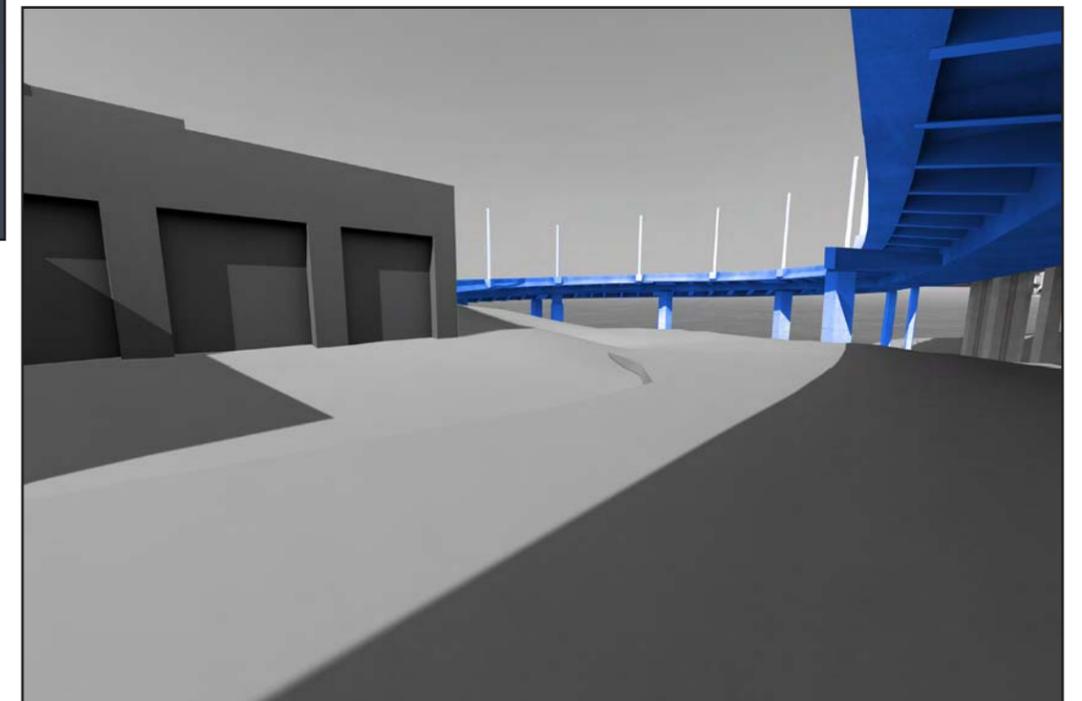
Quarters 10
to be relocated as part of Alt. 2B



Building 267
to be relocated as part of Alt. 2B



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

Key Viewpoint 2 – Nimitz House

Orientation

This key viewpoint looks northeast from the patio of the Nimitz House, one of the historic US Navy structures located on the island. **Figure 7** depicts a photo-simulation of Alternative 2B from this viewpoint.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users and event attendees.

Existing Visual Quality/Character

Like Viewpoint 1, Viewpoint 2 also illustrates a close up of the SFOBB alongside mature vegetation. However, this viewpoint has higher vividness than the image presented in Viewpoint 1. In this view, the bridge's structural lines combine in distinct visual patterns, contrasting dramatically with the foliage of the mature eucalyptus trees nearby, the San Francisco Bay, and portions of the East Bay Hills somewhat visible in the background.

From this viewpoint the bridge and trees frame a distant view of the East Bay Hills. This view illustrates a low degree of unity and intactness, given that since construction of the SFOBB East Span Project began, it has been markedly diminished by the presence of SFOBB Transition Structure construction activity occurring in the center of the view.

Proposed Project Features

Project features visible in this view would include two columns in the right foreground that would support the off-ramp. A portion of the off-ramp would also be visible overhead.

Change to Visual Quality/Character

Visual Dominance: The structural elements added under Alternative 2B would contribute to the overall dominance of the new SFOBB Transition Structure. However, elements of the new SFOBB Transition Structure would comprise most of the new right-of-way visible from this viewpoint, while a smaller visually subordinate portion, visible in the foreground, would form a part of the YBI off-ramp. The off-ramp would be visually subordinate to other elements in the setting.

View Obstruction: Implementation of Alternative 2B would result in a partial increase in view obstruction. Two new support columns for the off-ramp and a portion of the off-ramp roadway would partially obstruct views to the east. However, this obstruction would only be minimal relative to elements of the SFOBB Transition Structure that will also obstruct eastward views.

Community Disruption/Orientation/Privacy: From this viewpoint, visual changes resulting from implementation of Alternative 2B would be minimally adverse in terms of community disruption, orientation or privacy.

Overall Visual Quality: Changes to the vividness of the scene resulting from construction of the off-ramp would be minimal compared to the effect the future SFOBB Transition Structure will have on this viewpoint's vividness. Changes to the view resulting from Alternative 2B would not significantly

affect the compositional harmony of the larger viewshed, and very little change in the unity and intactness of the area would result.

Viewers at this location would tend to linger for relatively extended periods of time, given that a good number of them would be at the location in order to attend special events such as weddings. However, this alternative's relatively minor effect on the view's visual quality would result in only a minimally adverse visual experience.

Resulting Visual Impact: Overall viewer response and change in visual character would be minimally adverse. The resulting visual impact would be minimally adverse.

Key Viewpoint 3 – Officers Quarters Open Space

Orientation

This key viewpoint looks southeast from a large open space area between Quarters 4 and Quarters 7 toward other historic US Navy structures that include the Nimitz House (Quarters 1), Quarters 2, Building 83 and Building 205. **Figure 8** depicts a photo-simulation of Alternative 2B from this viewpoint.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents and recreational users.

Existing Visual Quality/Character

This viewpoint presents a moderate to highly vivid scene. Various former US Navy structures stand among lush vegetation, while a segment of the SFOBB East Span is visible in the background. In the view, design elements of the Navy structures can be clearly distinguished and the lines of the SFOBB East Span structure are also vivid.

From this viewpoint, the US Navy structures and the SFOBB East Span are moderately intact and unified. They overlap and obscure each other in space, but not in a way that is inharmonious. The existing vegetation also significantly obscures the buildings and the SFOBB East Span, but the result is that these objects appear to visually complement each other. The area's visual quality is also enhanced by a large open space area, visible in the viewpoint's foreground.

Proposed Project Features

Project features visible in this view include a northern portion of the on-ramp, a southern portion of the off-ramp and a total of eight support columns.

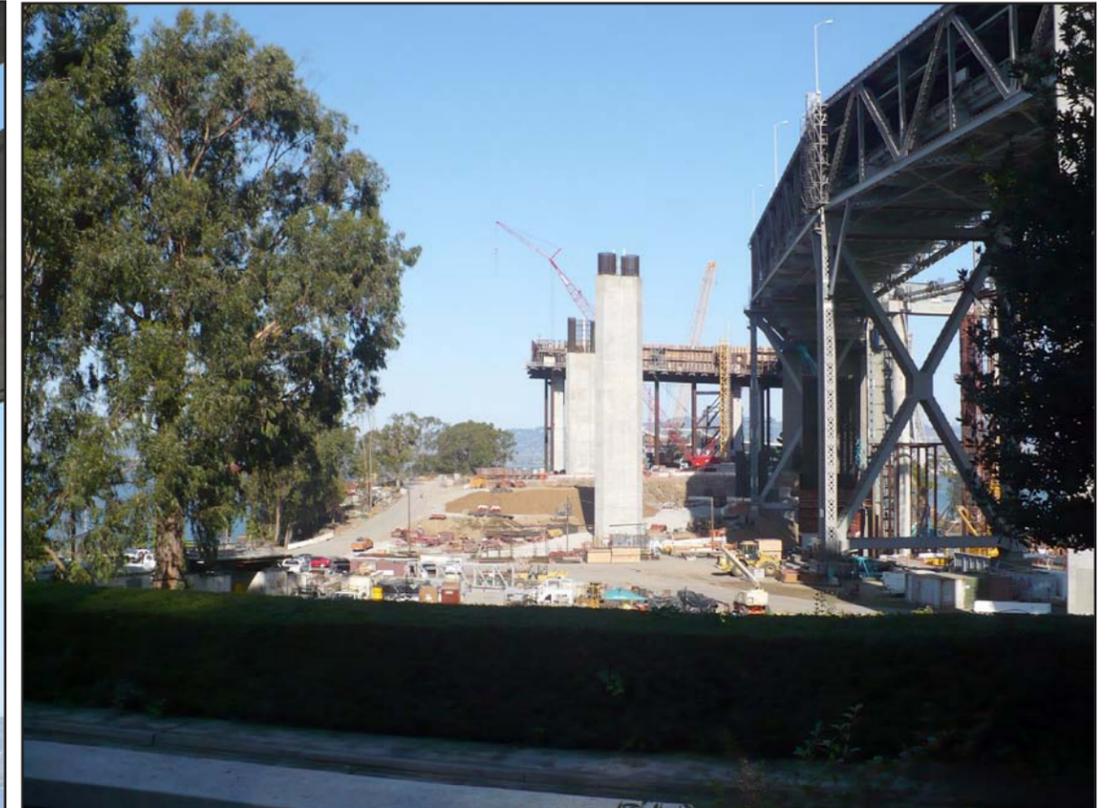
Change to Visual Quality/Character

Visual Dominance: The structural elements added under Alternative 2B would contribute to the overall dominance of the new SFOBB Transition Structure. The project's on-ramp and off-ramp structures would visually dominate other objects in the setting.

Figure 7: Alternative 2B
Key Viewpoint 2: Nimitz House



Simulated View



Existing View



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components

Figure 8: Alternative 2B
Key Viewpoint 3: Officers' Quarters Open Space



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

View Obstruction: New columns and other structural elements of the on-ramp and off-ramp built as part of this alternative would obstruct views of the SFOBB East Span structure, but would not obstruct views of the US Navy structures, which would remain visible in the foreground.

Community Disruption/Orientation/Privacy: Changes to the area shown in this viewpoint would result in a moderately high level of community disruption, given that the visual experience for viewers driving, bicycling or walking in this area would be negatively affected by the scale of the ramp structures. No orientation or privacy related effects would occur.

Overall Visual Quality: Changes associated with this alternative would result in a negative effect on the existing vividness of the area, due to the necessary removal of mature vegetation that would be replaced by the ramp structures. The addition of the off-ramp and on-ramp to this view would result in a lowering of the view's intactness and unity. The on-ramp and off-ramp structures would reduce the level of visual harmony that is currently visible from this viewpoint, resulting in an overall strongly adverse change to visual quality. Viewers at this location would tend to travel through the area at a relatively slow speed, given that they would be walking, bicycling or would remain relatively stationary as they recreate in the open space area. Therefore, this alternative's adverse visual effects would be felt strongly by people at this location.

Resulting Visual Impact: Overall viewer response and change in visual character would be strongly adverse. The resulting visual impact would be strongly adverse.

Key Viewpoint 4 – North Gate Road Staging Area

Orientation

This key viewpoint looks southwest across a construction staging area just northeast of North Gate Road that is being used for the SFOBB East Span construction project. The Nimitz House and thick vegetation in its vicinity are visible in the background. **Figure 9** depicts a photo-simulation of Alternative 2B from this viewpoint.

Landscape Unit

Northeast YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents and recreational users.

Existing Visual Quality/Character

Viewpoint 4 presents a low to moderately vivid image of a construction staging area in the foreground and the Nimitz House situated among mature vegetation visible in the background. Though the image of the Nimitz House and thick vegetation is scenic, the scattered construction materials in the foreground detract from the more vivid features of the scene. The new piling visible in the left side of the frame and the fragmented view of the East Span also detract from the more scenic parts of the view.

In its present state, this viewpoint is characterized as having low unity and intactness. The disturbed nature of the area, due to the presence of the SFOBB East Span construction staging area, has degraded the intactness and unity of the view.

Proposed Project Features

Project features that would be visible from this viewpoint include large portions of the semi-circular on-ramp and off-ramp structures, along with seven ramp support columns placed in the near vicinity of the Nimitz House. The Macalla Road retaining wall would not be visible from this viewpoint due to the viewer's low viewing angle relative to Macalla Road.

Change to Visual Quality/Character

Visual Dominance: The structural elements of the off-ramp and on-ramp would be co-dominant with elements of the SFOBB East Span. The YBI ramp structures would tower over and visually overshadow the Nimitz House.

View Obstruction: The proposed ramps would result in a partial obstruction of views toward the Nimitz House, but none of the ramps' structural elements would obstruct the Nimitz House.

Community Disruption/Orientation/Privacy: Changes to the area would result in an adverse visual disruption to viewers driving, bicycling or walking in this area, but no orientation or privacy related effects would occur.

Overall Visual Quality: Changes associated with this alternative would moderately affect the area's existing vividness, due to the partial blockage of views toward the Nimitz House and the loss of a significant amount of mature vegetation behind the Nimitz House. The ramp structures associated with this alternative would further reduce the already low level of intactness and unity in this area. This alternative would result in an overall adverse change to the area's visual quality.

Resulting Visual Impact: Overall viewer response and change in visual character would be adverse. The resulting visual impact would be adverse.

Currently, relatively few people observe this view. However, over the long term, once construction activity ends and the area is converted to other uses, more people may see the area from this viewpoint, and these viewers would be adversely affected by the low visual quality of the area.

Key Viewpoint 5 – Treasure Island

Orientation

Viewpoint 5 is a view of YBI looking southeast from the southern shore of Treasure Island.

Figure 10 depicts a photo-simulation of Alternative 2B from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users (users of Treasure Island marina).

Existing Visual Quality/Character

The view from Treasure Island to YBI from this location is moderately vivid. Due to the distance from the bridge, its structural lines are not as evident compared to views seen from locations on YBI. Also, the island's vegetation appears more homogeneous because it isn't possible to

Figure 9: Alternative 2B
Key Viewpoint 4: North Gate Road Staging Area



Simulated View



Existing view is a composite of two images, resulting in natural lens and perspective distortion. Perspective correction was used to produce the simulated view.



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

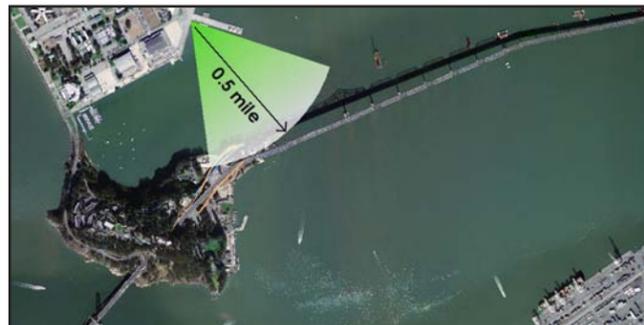


Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components

Figure 10: Alternative 2B
Key Viewpoint 5: Treasure Island



Simulated View



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components



Existing View



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

distinguish between different types of vegetation from this distance. However, the contrast between the form of YBI and the line of the Bay shore touching the island is a vivid characteristic of this view, as is the image of the SFOBB touching down on the island.

From this viewpoint, the island has moderate intactness and unity. Only portions of the island and the SFOBB East Span are visible to the viewer. However, the Bay waters do provide a sense of visual coherence and compositional harmony, balancing the lack of complete images of the island and the SFOBB.

Proposed Project Features

From this vantage point, about half a mile from the project site, visible project features would include a thin ribbon-like portion of the off-ramp and four support columns. From this perspective, it would not be possible to see features of the on-ramp.

Change to Visual Quality/Character

Visual Dominance: The off-ramp would be visually subordinate in this viewpoint when compared to other elements in the area, and the on-ramp would be in-evident. Though the off-ramp support columns and road deck would be noticeable, they would be less dominant than the future SFOBB Transition Structure, the temporary Transition Structure, SFOBB East Span, San Francisco Bay waters and the YBI land mass.

View Obstruction: The ramp structures proposed as part of Alternative 2B would result in a minimal obstruction of elements currently visible from this vantage point. The ramps and columns would be situated such that their profile would nearly mirror the profile of the future SFOBB Transition Structure. To the casual observer, the YBI ramps would not stand out in a distinctive way.

Community Disruption/Orientation/Privacy: Alternative 2B would have a negligible effect related to community disruption, orientation or privacy.

Overall Visual Quality: This alternative would have a negligible effect on the area's overall visual quality.

Resulting Visual Impact: Overall viewer response and change in visual character would be negligible. The resulting visual impact would be negligible.

Key Viewpoint 6 – Eastern YBI Waterborne Approach

Orientation

This viewpoint illustrates a westward view of YBI as if on a waterborne approach to the island. This viewpoint is based about 500 feet east of the island. **Figure 11** depicts a photo-simulation of Alternative 2B from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users and USCG personnel.

Existing Visual Quality/Character

This view of a waterborne approach to the part of YBI occupied by the USCG provides a high level of vividness for the viewer. From this vantage point, it is possible to very clearly see the structural lines of the SFOBB East Span as it connects to YBI, and it is also possible to observe the structural lines of the temporary Transition Structure currently being built as part of the SFOBB East Span project. This is a dramatic view of the connection between YBI and the SFOBB.

However, this view does not offer the observer a very unified or intact image of the island, of the bridge, or of the USCG facility. Each of these objects is truncated for the viewer, with little visual context to provide information about what lies beyond the frame.

Proposed Project Features

From this vantage point, a viewer would see a portion of the future SFOBB East Span Transition Structure in the foreground as it approaches the northeastern tip of YBI. In the background, behind the Transition Structure and its support columns, some portions of the YBI off-ramp and on-ramp and several columns would be visible.

Change to Visual Quality/Character

Visual Dominance: The YBI ramps design for Alternative 2B would be visually subordinate in this viewpoint when compared to other elements in the area. Though the YBI ramp columns and road decks would be noticeable, they would be less dominant than the future SFOBB Transition Structure, primarily because the ramps would be partially obstructed by it.

View Obstruction: From this viewpoint, the ramp structures would be largely obstructed by the island's landmass and by the SFOBB Transition Structure. The ramps would obstruct existing vegetation and the US Navy buildings in the background.

Community Disruption/Orientation/Privacy: This alternative would have no effect related to community disruption, orientation or privacy.

Vividness: Implementation of this alternative would not result in a high degree of change to the area's vividness.

Overall Visual Quality: The YBI ramps would be noticeable but not dominant from this viewpoint. They would have a minimally adverse effect on the area when observed from this viewpoint.

Resulting Visual Impact: Overall change in viewer response and visual character would be minimally adverse. The resulting visual impact would be minimally adverse.

Key Viewpoint 7 – SFOBB Oakland Touchdown

Orientation

This key viewpoint looks west toward YBI from the SFOBB Oakland Touchdown area, which is located at a distance of about 1.25 miles from the island. **Figure 12** depicts a photo-simulation of Alternative 2B from this viewpoint.

Figure 11: Alternative 2B
Key Viewpoint 6: Eastern Yerba Buena Island Waterborne Approach



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

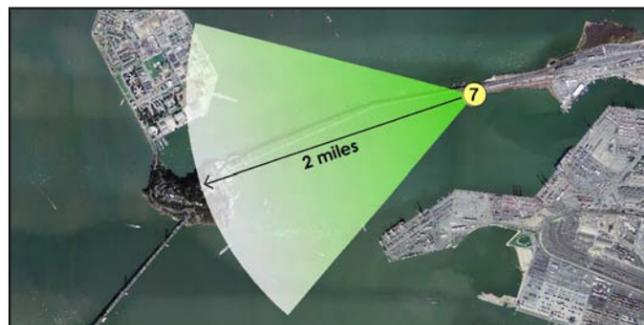
Figure 12: Alternative 2B
Key Viewpoint 7: Oakland Touchdown



Simulated View



View prior to SFOBB east span and Alternative 2B construction



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users.

Existing Visual Quality/Character

This long range view of the project site from the SFOBB Oakland Touchdown is a vivid perspective of YBI in the context of its surroundings. From this vantage point, the viewer's attention is focused in large part on the SFOBB East Span crossing the Bay from Oakland to San Francisco. YBI is visible, but only as a distant landmass at the end of the SFOBB East Span. From this point of view it is not even clear that YBI is an island, but it is possible to place it visually in the context of setting elements in its vicinity.

This is a highly unified and intact perspective of YBI. From the Oakland Touchdown, an observer can clearly see a large part of the island's landmass, though as mentioned before, an uninitiated viewer would not necessarily realize it is an island. Nevertheless, the presence of a large part of the SFOBB East Span in the frame, as well as small glimpses of the West Span, downtown San Francisco skyscrapers and buildings on Treasure Island result in a very intact and unified scene.

Proposed Project Features

At such a distance from YBI, viewers at the Oakland Touchdown area would have difficulty discerning the ramp project's features, though some ramp features would be slightly visible among a grouping of SFOBB Transition Structure columns and the SFOBB East Span.

Change to Visual Quality/Character

Visual Dominance: Alternative 2B's ramps would be in-evident from the Oakland Touchdown area, due to the relatively long distance to YBI. From this vantage point, the ramps would be difficult to discern by the casual viewer. As shown in the Alternative 2B Ramp Components inset of Figure 12, the ramps would be so indiscernible that the blue highlighting used to distinguish the ramps is not visible.

View Obstruction: The ramp structures designed for this alternative would result in very minimal view obstruction. From this vantage point, the ramps would be difficult to discern by the casual viewer, yet they would nevertheless contribute to the partial obstruction of YBI that the SFOBB produces for Oakland Touchdown viewers. From this vantage point, elements of the YBI ramps and the SFOBB, especially their support columns, appear to meld together in a dense cluster, making it difficult to distinguish elements of the ramps from elements of the SFOBB. Obstruction that is attributable to the YBI ramps would be minimal.

Community Disruption/Orientation/Privacy: Because structural elements of this alternative would be difficult to identify from this distance, the project's effect would be negligible.

Overall Visual Quality: From this vantage point, the structural elements associated with Alternative 2B would be difficult for the casual viewer to discern. Therefore, the overall change in visual quality resulting from this alternative would be negligible.

Resulting Visual Impact: Overall change in viewer response and visual character would be negligible. The resulting visual impact would be negligible.

Key Viewpoint 8 – SFOBB Transition Structure

Given that construction of the new SFOBB East Span has not been completed, and this viewpoint does not yet physically exist, analysis of this viewpoint is based on a rendering rather than a photo-simulation.

Orientation

This viewpoint is toward the southwest from the future roadway of the SFOBB East Span as it approaches the YBI tunnel. **Figure 13** depicts a rendering of Alternative 2B from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by freeway travelers.

Existing Visual Quality/Character

Because construction of the new SFOBB East Span is not yet complete, and this vantage point is from the future East Span roadway, it is not possible to describe the existing visual character of this viewpoint. Therefore, Figure 13 shows only a rendering of the future vantage point, rather than a before image and a photo-visual simulation of the viewpoint.

Proposed Project Features

From this vantage point, a motorist approaching YBI would see only a very small portion of the off-ramp and five of its light standards near the viewer's line of sight vanishing point. No portion of the on-ramp would be visible.

Expected Visual Quality/Character

Visual Dominance: The project would have a subordinate visual effect when viewed from this vantage point. A small sliver of the off-ramp would be visible in the center of the view, as would associated amenities such as crash barrels and exit signage. However, the most dominant features visible to the viewer would be the SFOBB Transition Structure roadway as it extends into the distance, as well as the YBI landmass.

View Obstruction: The off-ramp would be almost imperceptible from this vantage point and any view obstruction attributable to the ramp would be negligible.

Community Disruption/Orientation/Privacy: Because structural elements of this alternative would be difficult to discern, the project's effect would be negligible.

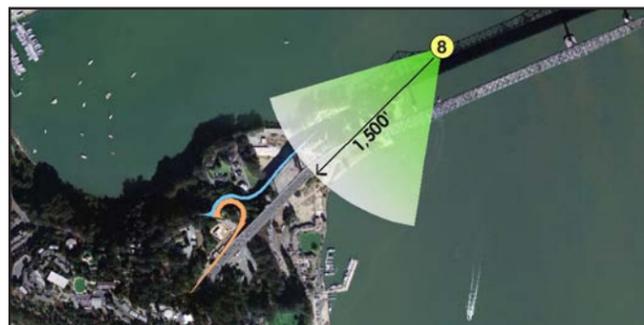
Overall Visual Quality: This is a view illustrating the perspective of a motorist crossing the SFOBB East Span Transition Structure and approaching the YBI Tunnel. From this location, the off-ramp would not be a prominent element of the view seen by motorists. The off-ramp would be a subordinate element in the view, and any effect this alternative would have on the overall visual quality of the area would be negligible.

Figure 13: Alternative 2B
Key Viewpoint 8: San Francisco-Oakland Bay Bridge Transition Structure



Alternative 2B Ramp Components: Blue highlighting distinguishes Alternative 2B ramp components from SFOBB East Span project components

Rendered View



Geographic Context
Indicates distance from viewpoint to
Alternative 2B ramp components

Resulting Visual Impact: Overall change in viewer response and visual character would be negligible. The resulting visual impact would be negligible.

Alternative 4

Key Viewpoint 1 – Macalla at North Gate Intersection

Analysis of this viewpoint is based on a rendering rather than a photo-simulation. As discussed at the beginning of the Alternative 2B analysis, implementation of that alternative would require removal of Quarters 10 (a US Navy residential structure) and Building 267 (a garage associated with Quarters 10), in order to provide right-of-way for the YBI ramps. Quarters 10 is not visible from this vantage point. Therefore, it would be inaccurate to present a “before” image of the vantage point when a structure that would be drastically affected by the project is not visible in the image. For this reason, a rendering was chosen as a means to illustrate the visual effect of the ramps at the intersection of Macalla Road and North Gate Road.

Implementation of the Alternative 4 design would not require removal of Quarters 10 or Building 267. However, in order to ensure analytical consistency in this visual impact assessment, a rendering was also chosen as a tool to illustrate the visual effect of the Alternative 4 design as experienced from this viewpoint.

Orientation

This key viewpoint looks northeast from the intersection of Macalla Road and North Gate Drive. **Figure 14** depicts a rendering of Alternative 4. Implementation of this alternative would not affect Quarters 10 or Building 267, as would occur if Alternative 2B is implemented.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents.

Existing Visual Quality/Character

This area of the island is dominated by the presence of the double deck structure of the SFOBB East Span structure as it nears the YBI tunnel. The view presented in this viewpoint is a vivid microcosm of the island itself, in that on YBI there is often an inter-play between the natural environment and the SFOBB. In this view, the bridge’s intactness and unity are relatively low, due to the large scale and omnipresence of the road decks when viewed from such close proximity. Overall unity and intactness of the view is low when all of its elements are taken together. The substation on the left side of the view, Building 267, the mature eucalyptus trees and the road decks present a cluttered scene where natural features and human made features do not visually complement each other.

Proposed Project Features

Project features visible from this vantage point include the terminus of the off-ramp as it touches down onto the island at the intersection of Macalla Road and North Gate Road, as well as a short stretch of the on-ramp running over the off-ramp’s terminus.

Change to Visual Quality/Character

Visual Dominance: The ramp elements associated with Alternative 4 would be co-dominant in the view relative to other area features, in that the substation, existing vegetation and the ramps would all vie for the viewer's attention.

View Obstruction: Construction of the ramps would involve clearing of some vegetation from the area, which would open up partial (very minimal) views of San Francisco Bay. Though this clearing would provide new views of the Bay, the ramps would also partially obstruct these views.

Community Disruption/Orientation/Privacy: This alternative would have a negligibly disruptive visual effect on the community, and would not impair orientation or privacy. The opening of partial San Francisco Bay views would be a beneficial though slight effect of this alternative.

Overall Visual Quality: On the whole, this alternative would have a minimally adverse effect on visual quality. Construction of the ramps would do little to harmonize the relationship between the transportation infrastructure of YBI and its surrounding natural environment, but the ramps would not reduce existing visual quality. In addition, new views of the Bay would become available, though these would be quite minimal.

Resulting Visual Impact: Overall change in viewer response and visual character would be minimally adverse. The resulting visual impact would be minimally adverse.

Key Viewpoint 2 – Nimitz House

Orientation

This key viewpoint looks northeast from the patio of the Nimitz House, one of the historic US Navy structures located on the island. **Figure 15** depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users and event attendees.

Existing Visual Quality/Character

Like Viewpoint 1, Viewpoint 2 illustrates a close up of the SFOBB alongside mature vegetation. However, this viewpoint exhibits higher vividness than the image presented in Viewpoint 1. In this view, the bridge's structural lines combine in distinct visual patterns, contrasting dramatically with the foliage of the mature eucalyptus trees nearby, and portions of the East Bay Hills somewhat visible in the background.

From this viewpoint the bridge and tree frame a distant view of the East Bay hills, providing a low degree of unity and intactness, given that this view is now markedly diminished as a result of the SFOBB Transition Structure construction activity occurring in the center of the view.

Figure 14: Alternative 4
Key Viewpoint 1: Macalla Road at North Gate Road Intersection



Rendered View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

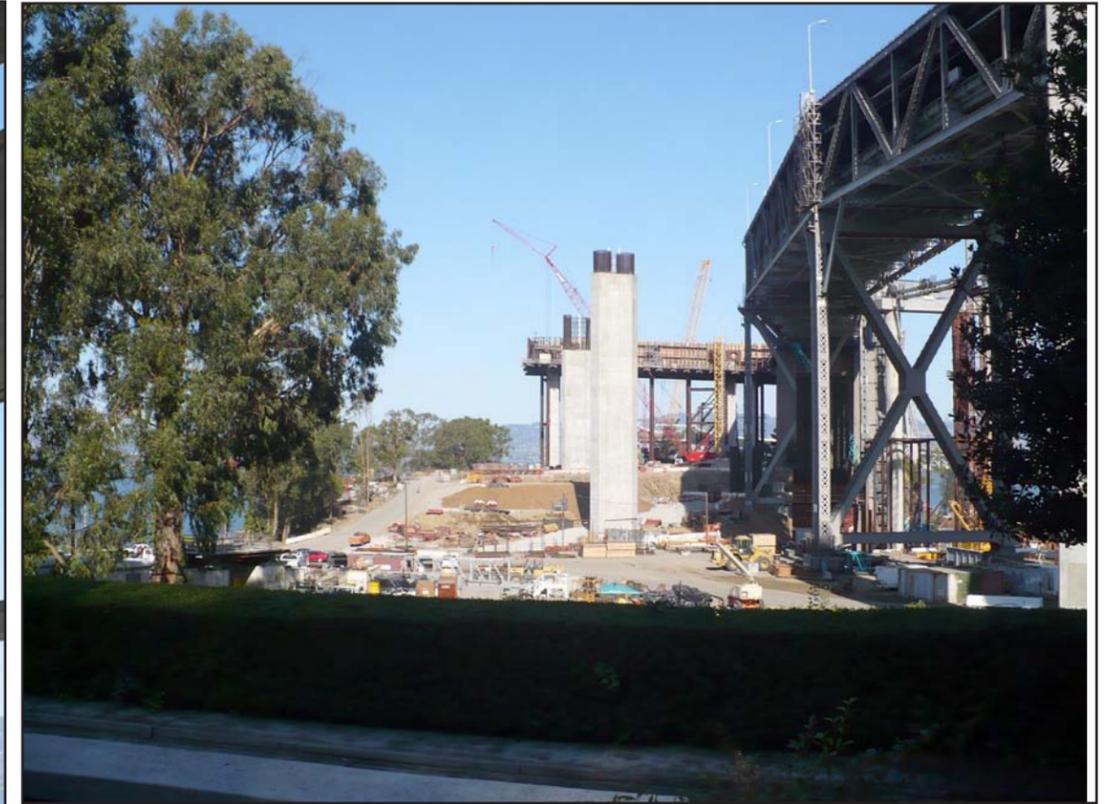


Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

Figure 15: Alternative 4
Key Viewpoint 2: Nimitz House



Simulated View



Existing View



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Proposed Project Features

Project features visible in this view include a large portion of the on-ramp as it passes underneath the future SFOBB Transition Structure from right to left making its way toward the Nimitz House. Also visible is a short stretch of the off-ramp as it descends on its path to the intersection of Macalla Road and North Gate Road, out of view behind the Nimitz House. The on-ramp is the left-most road deck visible in the viewpoint, while the off-ramp is situated immediately to the right of the on-ramp.

Change to Visual Quality/Character

Visual Dominance: The future SFOBB Transition Structure would extend further left into the viewer's line of sight than the existing SFOBB East Span structure. The YBI on-ramp would loop under the SFOBB Transition Structure and travel toward the viewer as it makes its way in a southwesterly direction toward an eventual connection with the Transition Structure. (The viewer would need to turn completely around to see this connection.) From this viewpoint, the off-ramp and on-ramp would be co-dominant with the future SFOBB Transition Structure.

View Obstruction: This alternative would result in a partial obstruction of views toward the East Bay Hills. However, the level of obstruction would be considered less than that caused by the road decks and columns of the SFOBB East Span project visible from this vantage point.

Community Disruption/Orientation/Privacy: This is not a viewpoint that people experience for extended periods of time, given that the Nimitz House is no longer used as a residence, but rather for public events such as weddings. Visitors to the house are not generally passing through on their way to another location, but instead find themselves at their final destination. In general, people would experience this view on a short term basis when compared to the length of viewer exposure if the Nimitz House had permanent residents. Given the scale of the proposed ramps, and the nature of the special events that bring people to the location, the visual effect of the YBI ramps on viewers would be adverse.

Overall Visual Quality: This alternative would result in an overall adverse effect on the visual quality of the viewpoint. Though most viewers observing this viewpoint would experience it on a temporary basis, the type of special events they would attend at the Nimitz House would usually benefit from an ambience of high visual quality. This alternative would lead to a further reduction of visual quality beyond the reduction that is attributable to the physical elements of SFOBB East Span project.

Resulting Visual Impact: Overall change in viewer response and visual character would be minimally adverse. The resulting visual impact would be minimally adverse.

Key Viewpoint 3 – Officers Quarters Open Space

Orientation

This key viewpoint looks southeast from a large lawn area between Quarters 4 and 7 toward the other historic US Navy structures, including the Nimitz House (Quarters 1), Quarters 2, Building 83 and Building 205. **Figure 16** depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Greater YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents and recreational users.

Existing Visual Quality/Character

This viewpoint presents a moderate to highly vivid scene of typical image types that can be found on YBI. Various former US Navy structures stand among lush vegetation, while a segment of the SFOBB East Span is present in the background. Design elements of the Navy structures can be clearly distinguished and the lines of the East Span structure are also vivid.

The US Navy structures and the SFOBB East Span are moderately intact and unified. They overlap and obscure each other in space, but not in a way that is inharmonious. The existing vegetation also significantly obscures the buildings and the SFOBB East Span, but as a result, these objects appear to co-exist in a complementary manner.

Proposed Project Features

Project features visible in this view include a short stretch of the on-ramp as it passes over North Gate Road on the east side of the SFOBB Transition Structure. A larger portion of the on-ramp located west of the Transition Structure would also be visible, as would a small stretch of the off-ramp as it nears its terminus at North Gate Road and Macalla Road. Portions of three YBI ramp columns supporting the ramps would also be visible.

Change to Visual Quality/Character

Visual Dominance: The structural additions associated with this alternative would be co-dominant with other features of the view. The massing of the off-ramp and on-ramp would pass across the viewer's line of sight, roughly paralleling the massing of the double decked SFOBB Transition Structure. The visual dominance of the YBI ramps would be fairly equal to the dominance of the Transition Structure.

View Obstruction: New columns and other structural elements of the on-ramp and off-ramp would obstruct views of the SFOBB East Span structure, but would not obstruct views of the US Navy structures, which would remain visible in the foreground.

Community Disruption/Orientation/Privacy: Changes to the area shown in this viewpoint would result in a low level of community disruption. The visual experience for viewers driving, bicycling or walking in this area would not be negatively affected by the scale of the ramp structures, and no orientation or privacy related effects would occur.

Overall Visual Quality: This alternative would result in an overall minimally adverse effect on the visual quality of the viewpoint. Under current conditions, the SFOBB East Span passes over and behind the US Navy structures, with a left to right movement of massing that appears to float elegantly in mid air. The Alternative 4 design would involve construction of ramp road decks and columns behind and in front of the SFOBB Transition Structure that would not on the whole present a bulkier image. However, elements of the new design would lend it an overall wider vertical (ramp decks) and horizontal (columns) profile when compared to the image presented by the current bridge structure.

Figure 16: Alternative 4
Key Viewpoint 3: Officers' Quarters Open Space



Simulated View



Existing View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

Resulting Visual Impact: Overall change in viewer response and visual character would be strongly adverse. The resulting visual impact would be strongly adverse.

Key Viewpoint 4 – North Gate Road Staging Area

Orientation

This key viewpoint is toward the southwest across a construction staging area located northeast of North Gate Road that is being used for the SFOBB East Span construction project. The Nimitz House and thick vegetation in its vicinity are visible in the background. **Figure 17** depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Northeast YBI landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by YBI residents and recreational users.

Existing Visual Quality/Character

Viewpoint 4 presents a low to moderately vivid image of a construction staging area in the foreground and the Nimitz House situated among mature vegetation visible in the background. Though the image of the Nimitz House and the thick vegetation in its vicinity is scenic, the scattered construction materials in the foreground detract from more vivid features. The new piling that is associated with the SFOBB project and is visible in the left side of the frame, along with the fragmented view of the SFOBB East Span, all adversely counteract the more scenic elements of the view.

In its present state, this viewpoint is characterized as having low unity and intactness. The disturbed nature of the area, which is attributed to construction of the SFOBB East Span, degrades the intactness and unity of the scene.

Proposed Project Features

This viewpoint presents a southwestern view of project features, including nine columns that would support portions of the on-ramp and off-ramp. Portions of the ramp decks are visible, though less prominent, than the dominant massing of the columns.

Change to Visual Quality/Character

Visual Dominance: Compared to the existing view, the structures proposed in this alternative would markedly dominate the viewer's line of sight. As described above, the ramp support columns would have the most visually dominating effect, while the ramp decks would play a less dominant role.

View Obstruction: This alternative would result in a partial, though very large obstruction of the view. The currently unobstructed view of the Nimitz House and the mature vegetation in its vicinity would be considerably obstructed by the columns supporting the proposed ramp decks.

Community Disruption/Orientation/Privacy: This viewpoint presents a view of the project site that encompasses an area currently used for SFOBB East Span construction staging, and is therefore not a place where many users of the island tend to linger for long periods of time. However, the viewpoint is near North Gate Road, which is a public right-of-way that is accessible to automobiles,

bicycles and pedestrians. Over the long term, after SFOBB East Span construction activities end, the construction staging area would be converted to another use. If the new use facilitates or encourages the presence of motorists, bicyclists, pedestrians, or permanent residents, users would be considerably affected by the visually disruptive and strongly adverse effects of Alternative 4.

Overall Visual Quality: The ramp structures would result in a strongly adverse visual effect for viewers observing the area. The scene's visual quality is already at a low level, given the adverse effect produced by the SFOBB project's construction staging area. The view's vividness, intactness and unity would decline further upon implementation of Alternative 4. Over the long term, the construction staging area would be converted to another use. Whatever that new use will be, it is unlikely that visitors to the area would be able to avoid views of the YBI ramps. Therefore, it is expected that visual quality in this area would remain at a low level over the long term. Future users of the area would be adversely affected, especially if they spend relatively long periods of time at the location.

Resulting Visual Impact: Overall change in viewer response and visual character would be adverse. The resulting visual impact would be adverse.

Key Viewpoint 5 – Treasure Island

Orientation

Viewpoint 5 is a view of YBI looking southeast from the southern shore of Treasure Island.

Figure 18 depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users (users of the Treasure Island marina).

Existing Visual Quality/Character

The view from Treasure Island to YBI from this location is moderately vivid. Due to the distance from the bridge, its structural lines are not as evident compared to views seen from locations on YBI. However, the contrast between the form of YBI and the line of the Bay shore touching the island is a vivid characteristic of this view, as is the image of the SFOBB touching down on the island.

From this viewpoint, the island has moderate intactness and unity. Only portions of the island and the SFOBB East Span are visible to the viewer. However, the Bay waters do provide some sense of visual coherence and compositional harmony, balancing the lack of complete images of the island and the SFOBB.

Figure 17: Alternative 4
Key Viewpoint 4: North Gate Road Staging Area



Simulated View



Existing view is a composite of two images, resulting in natural lens and perspective distortion. Perspective correction was used to produce the simulated view.



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

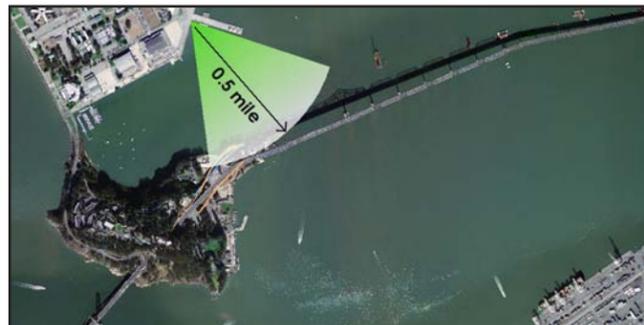


Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Figure 18: Alternative 4
Key Viewpoint 5: Treasure Island



Simulated View



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components



Existing View



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components

Proposed Project Features

This viewpoint, compared to others that illustrate the proposed Alternative 4 ramp designs, allows the viewer to observe the ramps nearly in their entirety. From this perspective, the viewer would see almost the entire profile of the off-ramp as it descends from the Transition Structure, as well as almost the entire profile of the on-ramp as it loops underneath the Transition Structure.

Change to Visual Quality/Character

Visual Dominance: The ramp structures associated with Alternative 4 would be co-dominant in the visual setting. From the southern shore of Treasure Island, the viewer would have a nearly “head-on” perspective of the ramps and the ramps would be as visually dominant from this perspective as the SFOBB East Span and the YBI land mass.

View Obstruction: The ramp structures would partially obstruct views of the mature vegetation located on the northeastern tip of YBI and would also partially block views of the future SFOBB Transition Structure.

Community Disruption/Orientation/Privacy: This alternative would have no effect related to orientation or privacy, but would have an adverse effect related to community disruption. From this vantage point, a viewer observing the SFOBB East Span would see the thin bands of the Transition Structure decks crossing the near horizon from left to right as they connect to YBI. If Alternative 4 were built, the viewer would see a more cluttered horizon; the YBI ramps cluttering the simple lines of the Transition Structure.

Overall Visual Quality: Alternative 4 would adversely affect the visual quality of the area as seen from this vantage point. The view is currently considered moderately vivid, and its unity and intactness are low. As discussed above, the view’s positive attributes are counteracted by its negative characteristics, resulting in a relatively neutral level of visual quality. However, the ramp structures associated with this alternative would tip the balance, lessening the area’s visual quality. Viewers in this area currently consist of people that work at the Sailing Center facility located along the shoreline and other visitors that pass through this publicly accessible location. The former group would have frequent, long duration views of the project area, and would be susceptible to the adverse effects of this alternative. Visitors would be more transient, though it is assumed they would most likely be in the area for recreational purposes, and would also be adversely affected by the view’s low visual quality. Over the long term, this area is designated by the Treasure Island Development Plan to be the site of recreational open space and residential land uses. These future uses would be adversely affected by the project’s visual impact, given that viewers at this location would tend to spend long amounts of time viewing the YBI ramps.

Resulting Visual Impact: Overall change in viewer response and visual character would be negligible. The resulting visual impact would be negligible.

Key Viewpoint 6 – Eastern YBI Waterborne Approach

Orientation

This viewpoint illustrates a westward view of YBI as if on a waterborne approach to the island, from about 500 feet offshore. **Figure 19** depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users and USCG personnel.

Existing Visual Quality/Character

This view of a waterborne approach to the area of YBI occupied by the USCG provides a high level of vividness for the viewer. From this vantage point, it is possible to very clearly see the structural lines of the SFOBB East Span as it connects to YBI, and it is also possible to observe the structural lines of the temporary Transition Structure currently being built as part of the SFOBB East Span project. This is a dramatic view of the connection between YBI and the SFOBB.

However, this view does not offer the observer a very unified or intact image of the island, of the bridge, or of the USCG facility. Each of these objects is truncated for the viewer, with little visual context providing information about what lies beyond the frame.

Proposed Project Features

Project features visible from this viewpoint include a section of the on-ramp located on the southern side of the Transition Structure, a section of the off-ramp structure, located on the northern side of the Transition Structure and support columns. From this viewpoint it is possible to see the on-ramp passing alongside and just below the level of the Transition Structure. The small section of the off-ramp that is visible is descending from the Transition Structure as it makes its way to the intersection of Macalla and North Gate Road.

Change to Visual Quality/Character

Visual Dominance: On a waterborne approach to the USCG facility at YBI, the ramp structures would be co-dominant with other elements of the setting. The on-ramp, visible in front of the SFOBB Transition Structure, and the off-ramp, visible behind it, would visually parallel the equally dominant Transition Structure.

View Obstruction: The ramp structures would partially obstruct views of the Transition Structure and would also partially obstruct scant existing views of the Nimitz House and Quarters 2.

Community Disruption/Orientation/Privacy: This alternative would have no effect related to orientation or privacy, but would have an adverse effect related to community disruption. In general, people observing this view would be preparing to dock at the USCG facility, or would be engaged in recreational boating activities. As in the case of Viewpoint 5, the massing of the ramps would clutter the visual horizon.

Overall Visual Quality: Alternative 4 would adversely affect the visual quality of the area. From a viewer's perspective, the on-ramp would cross their line of sight from left to right in front of the SFOBB Transition Structure while the off-ramp would pass behind the Transition Structure. The movement of the ramps has the effect of cluttering and "crowding out" the thin, simple lines of the Transition Structure. Compared to other viewpoints, relatively few people would observe this view. However, a number of these people would be involved in recreational boating activities that

Figure 19: Alternative 4
Key Viewpoint 6: Eastern Yerba Buena Island Waterborne Approach



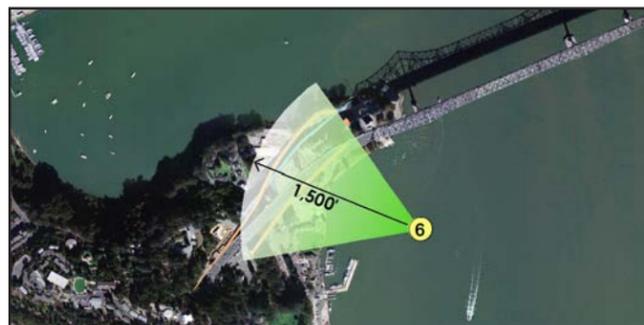
Simulated View



Existing View



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

would necessitate relatively long exposure to views of the ramps, and their enjoyment of the area would be diminished by the structural elements of Alternative 4.

Resulting Visual Impact: Overall change in viewer response and visual character would be minimally adverse. The resulting visual impact would be minimally adverse.

Key Viewpoint 7 – SFOBB Oakland Touchdown

Orientation

This key viewpoint looks west toward YBI from the SFOBB Oakland Touchdown area, which is located at a distance of about 1.25 miles from the island. **Figure 20** depicts a photo-simulation of Alternative 4 from this viewpoint.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by recreational users.

Existing Visual Quality/Character

From this vantage point, the viewer's attention is focused in large part on the SFOBB East Span crossing the Bay from Oakland to San Francisco. YBI is visible, but is not at the center of a viewer's attention. The overall vividness of the view is quite high. From this vantage point, the viewer's line of sight encompasses various notable features, including the SFOBB East Span, YBI, the San Francisco skyline partially visible behind YBI, Treasure Island, a portion of Angel Island and the San Francisco Bay.

This view is a highly unified and intact perspective of YBI. From the Oakland Touchdown, an observer can clearly see a large part of the island's landmass, though a casual viewer would not necessarily realize it is an island. Nevertheless, the presence of a large part of the SFOBB East Span in the view, as well as glimpses of other notable area features, produce a very intact and unified scene.

Proposed Project Features

Alternative 4 project features are somewhat difficult to discern from features of the SFOBB and its Transition Structure, due to the relatively long distance between the viewer and the YBI ramp structures. Nevertheless, a viewer would be able to identify the on-ramp as it loops underneath and around the Transition Structure.

Change to Visual Quality/Character

Visual Dominance: From this viewpoint, the Alternative 4 ramp structures would be in-evident to the casual viewer. Though the ramps would be visible, the viewer's attention would be drawn to more dominant features of the view, including the SFOBB East Span, YBI, the San Francisco skyline partially visible behind YBI, Treasure Island, a portion of Angel Island and San Francisco Bay.

View Obstruction: The ramp structures would minimally obstruct views of the northeastern tip of YBI, but not to a greater extent than obstruction attributable to the existing SFOBB East Span or the future SFOBB East Span structure.

Community Disruption/Orientation/Privacy: Given that the ramps would be difficult for the casual viewer to discern, this alternative would have no effect related to community disruption, orientation or privacy.

Overall Visual Quality: The ramp structures would have an overall negligible effect on the visual quality of the view from the SFOBB Oakland Touchdown. Though the ramps would be visible, they would result in little or no visual change and no tangible reduction or increase in visual quality. No negative or positive viewer response would be expected.

Resulting Visual Impact: Overall change in viewer response and visual character would be negligible. The resulting visual impact would be negligible.

Key Viewpoint 8 – SFOBB Transition Structure

Given that construction of the new SFOBB East Span has not been completed, analysis of this viewpoint is based on a rendering rather than a photo-simulation.

Orientation

This key viewpoint is toward the southwest from the future roadway of the SFOBB East Span as it approaches the island.

Landscape Unit

Bay Water/Shoreline landscape unit.

Viewer Groups

This viewpoint represents a typical view experienced by freeway travelers.

Existing Visual Quality/Character

Because construction of the SFOBB East Span is not complete, and this viewpoint is from the roadway of the future East Span, it is not possible to describe the existing visual character of this viewpoint. Therefore, **Figure 21** shows only a rendering of the future view from this vantage point, rather than an image of an existing view followed by a photo-visual simulation as it would look after project implementation.

Proposed Project Features

As motorists approach the YBI tunnel while driving in a westerly direction, from this viewpoint they would see a small portion of the on-ramp as it ascends onto the SFOBB.

Expected Visual Quality/Character

Visual Dominance: The on-ramp would be visible on the right side of the view as a motorist travels on the SFOBB East Span. From this location, the ramp would be visible but subordinate to other elements of the setting.

Figure 20: Alternative 4
Key Viewpoint 7: Oakland Touchdown



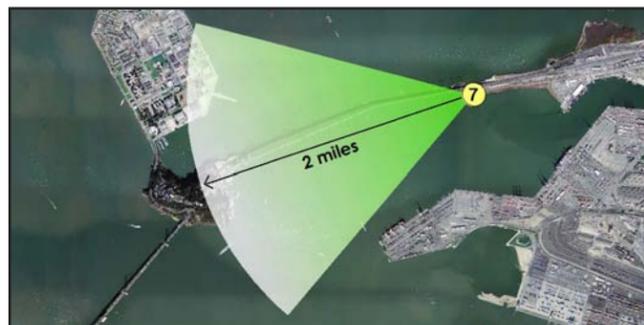
Simulated View



View prior to SFOBB east span and Alternative 4 construction



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Figure 21: Alternative 4
Key Viewpoint 8: San Francisco-Oakland Bay Bridge Transition Structure



Rendered View



Alternative 4 Ramp Components: Orange highlighting distinguishes Alternative 4 ramp components from SFOBB East Span project components



Geographic Context
Indicates distance from viewpoint to
Alternative 4 ramp components

Yerba Buena Island Ramps Improvement Project
 Visual Impact Assessment

View Obstruction: The on-ramp would partially obstruct views toward YBI. However, the level of obstruction attributable to the ramp would be relatively minimal compared to the obstruction caused by the SFOBB East Span.

Community Disruption/Orientation/Privacy: Alternative 4 would have a negligible effect related to community disruption, orientation and privacy.

Overall Visual Quality: The on-ramp would have an overall negligible effect on the visual quality of the view. Though the ramp would be visible, it would result in little or no visual change and no tangible reduction or increase in visual quality.

Resulting Visual Impact: Overall change in viewer response and visual character would be negligible. The resulting visual impact would be negligible.

D. Consistency with Local Plans and Policies

This section provides a review of applicable plans and policies that affect development on YBI and relate to potential aesthetic effects associated with the proposed project.

Table 1: Project Consistency with Local Plans & Policies	
San Francisco General Plan	
The San Francisco General Plan was reviewed for policies that would apply to the proposed project and its potential aesthetic impacts. The following policies relate to aesthetic issues as applicable to the project:	
Environmental Protection Element	
Policy 1.4: Assure that all new development meets strict environmental quality standards and recognizes human needs.	Alternative 2B: This alternative would be inconsistent with Policy 1.4, given that the proposed ramps would have adverse visual impacts on people in the vicinity of the project site. Alternative 4: This alternative would be inconsistent with Policy 1.4, given that the proposed ramps would have adverse visual impacts on people in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.
Policy 7.2: Protect land from changes that would make it unsafe or unsightly.	Alternative 2B: This alternative would be inconsistent with Policy 7.2, given that the proposed ramps would have adverse visual impacts on the land in the vicinity of the project site. Alternative 4: This alternative would be inconsistent with Policy 7.2, given that the proposed ramps would have adverse visual impacts on the land in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.
Recreation and Open Space Element	
Policy 2.3: Preserve sunlight in public open spaces.	Alternative 2B: This alternative would be inconsistent with Policy 2.3, given that the proposed ramps would block sunlight in open spaces in the vicinity of the project site. Alternative 4: This alternative would be inconsistent with Policy 2.3, given that the proposed ramps would block sunlight in open spaces in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and would block more sunlight than those of Alternative 2B.

Yerba Buena Island Ramps Improvement Project
 Visual Impact Assessment

Table 1: Project Consistency with Local Plans & Policies	
Transportation ElementP	
Policy 2.3: Design and locate facilities to preserve the historic city fabric and the natural landscape, and to protect views.	<p>Alternative 2B: This alternative would be inconsistent with Policy 2.3, given that the proposed ramps would have adverse visual impacts on historic structures and the natural landscape in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 2.3, given that the proposed ramps would have adverse visual impacts on historic structures and the natural landscape in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.</p>
Urban Design Element	
Policy 1.1: Recognize and protect major views in the city, with particular attention to those of open space and water.	<p>Alternative 2B: This alternative would be inconsistent with Policy 1.1, given that the proposed ramps would have adverse visual impacts on views of open space and water in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 1.1, given that the proposed ramps would have adverse visual impacts on views of open space and water in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive on views of open space and water than those of Alternative 2B.</p>
Policy 2.7: Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.	<p>Alternative 2B: The proposed ramp structures associated with this alternative would not conflict with Policy 2.7. Though the ramp structures would have adverse visual impacts on the project site and its vicinity, the ramps would not destroy unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.</p> <p>Alternative 4: The proposed ramp structures associated with this alternative would not conflict with Policy 2.7. Though the ramp structures would have adverse visual impacts on the project site and its vicinity, the ramps would not destroy unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.</p>
Development Plan & Term Sheet for Redevelopment of Naval Station Treasure Island	
This Plan includes discussion about the need to reestablish the shorelines of Treasure Island and YBI as more publicly oriented features. These policies indicate a desire to orient activities toward areas of the islands that would have prominent views of the proposed YBI ramps.	
Page 53: Preserve and reinforce Yerba Buena Island's natural setting with a development carefully integrated to the site.	<p>Alternative 2B: This alternative would be inconsistent with the Development Plan, given that the proposed ramps would have adverse visual impacts on the natural setting of YBI in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with the Development Plan, given that the proposed ramps would have adverse visual impacts on the natural setting of YBI in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive on the natural setting than those of Alternative 2B.</p>
Page 53: Create a regional public park at the top of the island and set heights and placement of adjacent buildings to preserve major view panoramas and corridors to the Bay from the park.	<p>Alternative 2B: The proposed ramp structures associated with this alternative would not conflict with this policy.</p> <p>Alternative 4: The proposed ramp structures associated with this alternative would not conflict with this policy.</p>
Page 55: Design sculptural landforms, pathways, overlooks, and shoreline reinforcements to create a definitive and vibrant edge for the island.	<p>Alternative 2B: The proposed ramp structures associated with this alternative would not conflict with this policy.</p> <p>Alternative 4: The proposed ramp structures associated with this alternative would not conflict with this policy.</p>

Table 1: Project Consistency with Local Plans & Policies	
San Francisco Bay Conservation and Development Commission: San Francisco Bay Plan	
The Bay Conservation and Development Commission (BCDC), a state agency, adopted the San Francisco Bay Plan in 1968 and has subsequently amended its content. The Bay Plan was reviewed for policies that might affect the proposed project. The section concerning "Appearance, Design, and Scenic Views of Development around the Bay" is most relevant to the Visual Analysis of the project.	
<p>Policy 4: 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.</p>	<p>Alternative 2B: This alternative would be inconsistent with Policy 4, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain waterfront locations in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 4, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain locations in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.</p>
<p>Policy 7: 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). Similar consideration should be given to the design of highway and mass transit routes paralleling the Bay (by providing frequent views of the Bay, if possible, so the traveler knows which way he or she is moving in relation to the Bay). 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. New or rebuilt roads in the hills above the Bay and in areas along the shores of the Bay should be constructed as scenic parkways in order to take full advantage of the commanding views of the Bay.</p>	<p>Alternative 2B: This alternative would be consistent with Policy 7. The ramps associated with this alternative would provide motorists good, though fleeting views of the Bay.</p> <p>Alternative 4: This Alternative would be consistent with Policy 7. The ramps associated with this alternative would provide motorists good views of the Bay. These views would be observable for longer periods of time under this alternative, compared to views under Alternative 2B.</p>
<p>Policy 14: Views of the Bay from vista points and from roads should be maintained by appropriate arrangements and heights of all developments and landscaping 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 (shown in Bay Plan Map No. 8, Natural Resources of the Bay).</p>	<p>Alternative 2B: This alternative would be inconsistent with Policy 14, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain waterfront locations in the vicinity of the project site.</p> <p>Alternative 4: This alternative would be inconsistent with Policy 14, given that the proposed ramps would have adverse visual impacts on views toward the Bay from certain locations in the vicinity of the project site. However, the ramp structures associated with this Alternative would be more extensive and visually intrusive than those of Alternative 2B.</p>

E. Summary of Project Impacts

The following table provides a concise description of the visual impacts associated with Alternative 2B and Alternative 4 for each viewpoint evaluated in this VIA. Visual quality impacts were discussed as they relate to visual dominance, view obstruction, community disruption/ orientation/privacy, and overall visual quality. Review of the overall visual quality column in the

table indicates that Alternative 2B would have a less adverse visual impact on the project area than Alternative 4.

Table 2: Summary of Project Impacts – Alternative 2B				
	Visual Dominance of YBI Ramps	View Obstruction	Community Disruption/ Orientation / Privacy	Overall Visual Quality Impact
Viewpoint 1	Dominant	Partial	Negligible	Minimally Adverse
Viewpoint 2	Subordinate	Partial	Minimally Adverse	Minimally Adverse
Viewpoint 3	Dominant	Large	Adverse	Strongly Adverse
Viewpoint 4	Dominant	Partial	Adverse	Adverse
Viewpoint 5	Subordinate	Partial	Negligible	Negligible
Viewpoint 6	Subordinate	Partial	Negligible	Minimally Adverse
Viewpoint 7	In-evident	Partial	Negligible	Negligible
Viewpoint 8	Subordinate	Partial	Negligible	Negligible

Table 3: Summary of Project Impacts – Alternative 4				
	Visual Dominance of YBI Ramps	View Obstruction	Community Disruption/ Orientation / Privacy	Overall Visual Quality Impact
Viewpoint 1	Co-dominant	Partial	Negligible	Minimally Adverse
Viewpoint 2	Co-dominant	Partial	Adverse	Adverse
Viewpoint 3	Co-dominant	Partial	Minimally Adverse	Minimally Adverse
Viewpoint 4	Dominant	Large	Strongly Adverse	Strongly Adverse
Viewpoint 5	Co-dominant	Partial	Adverse	Adverse
Viewpoint 6	Co-dominant	Partial	Adverse	Adverse
Viewpoint 7	In-evident	Partial	Negligible	Negligible
Viewpoint 8	Subordinate	Partial	Negligible	Negligible

F. Cumulative Impacts

The area surrounding the proposed project will undergo change during the coming years due to construction of the SFOBB East Span project, which will be a visually prominent project in the area. Development associated with the SFOBB will contribute to the changing character of the landscape. The SFOBB project would generally have the effect of reducing the impact of the proposed YBI ramps, with the former being considerably more visually prominent from various viewpoints than the latter. However, in some instances, the YBI Ramps Project’s contribution to changes to the area-wide visual setting would be equal to changes attributable to the SFOBB project. In general, ramp features associated with Alternative 2B would have a lesser cumulative impact on the area’s visual setting than the ramp features associated with Alternative 4.

VII. VISUAL MITIGATION

Caltrans and the FHWA mandate that a qualitative/aesthetic approach should be taken to mitigate for visual quality loss in the project area. This approach fulfills the letter and the spirit of FHWA requirements because it addresses the actual cumulative loss of visual quality that would occur in the project viewshed if the project is implemented. It also constitutes mitigation that can more readily generate public acceptance of the project.

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Visual mitigation for adverse project impacts addressed in the key viewpoint assessments and summarized in the previous section will consist of adhering to the following design requirements in cooperation with the District Landscape Architect.

Alternative 2B

Construction of the Alternative 2B design would in some cases have adverse impacts on the visual quality of some areas when these areas are observed from certain viewpoints. This would occur most dramatically in cases where views toward or from the Senior Officers' Quarters Historic District would be dominated and/or obstructed by the ramp structures.

This alternative would require the removal of woodland vegetation, mostly mature eucalyptus trees, within the project's construction limits. Most of the trees that would be removed are located in the area southwest of the Nimitz House, which is where the off-ramp would end and the on-ramp would begin. The height of these mature trees is dramatic; they soften the island's appearance and contribute to pleasant views on the island. The removal of this vegetation would constitute a substantial visual impact, and a number of years would be required before the vegetation could reestablish itself to the density that exists today.

Design requirements that promote a softening of the visual environment in the wake of the new YBI ramps will be implemented. If this alternative is implemented, vegetation removed during construction will be replaced, to the extent feasible, in areas that will aesthetically enhance the project site, and new vegetation will be planted in appropriate locations elsewhere on site. However, given the large scale of the ramps, it would not be feasible to screen or sufficiently offset their visual effects without in the process causing secondary negative visual effects.

In order to promote a seamless interaction between the ramps and the SFOBB Transition Structure, the ramps will utilize a ribbed design that is consistent with the structural form and architectural vocabulary of the new SFOBB East Span.

Alternative 4

Implementation of Alternative 4 would require less vegetation removal than Alternative 2B. However, the sheer mass and extent of the design would produce an overall more visually dominant effect relative to Alternative 2B. If Alternative 4 is implemented, design requirements that promote a softening of the visual environment after ramp construction will be followed. However, given the large scale of the ramps, it would not be feasible to screen or sufficiently offset their visual effects without in the process causing secondary negative visual effects.

In order to further mitigate the visual impact of the ramp structures associated with this alternative, the use of a ribbed design such as the one presented for Alternative 2B shall be implemented.

VIII. LIST OF PREPARERS

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