

3.0 RESPONSES TO WRITTEN COMMENTS ON THE EA

This section includes responses to those written comments received during the 30-day public review period of the EA. Where responses have resulted in changes to the text of the EA, these changes also appear in Section 2.0 of this revised EA. A copy of each letter is provided, and responses to each comment immediately follow.

3.1 AGENCIES AND ORGANIZATIONS COMMENTING IN WRITING

The following table presents a list of agencies and organizations that submitted written comments on the EA during the 30-day public review period (August 28, 2005, through September 27, 2005).

Public Comments Received on the EA

<i>Letter Code</i>	<i>Date</i>	<i>Individual</i>	<i>Organization</i>
<i>Federal Agencies</i>			
A	9/28/05	Rodney McInnis	National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries Services
<i>State Agencies</i>			
B	9/23/05	Robert W. Floerke	California Department of Fish and Game
C	9/28/05	Michelle Burt Levenson	San Francisco Bay Conservation and Development Commission
D	9/29/05	Terry Roberts	California State Clearinghouse
<i>Local Agencies</i>			
E	9/26/05	William Kirkpatrick	East Bay Municipal Utility District
F	9/27/05	Celia Kupersmith	Golden Gate Bridge, Highway and Transportation District
G	9/28/05	Roberta L. Reinstein	Port of Oakland
H	9/28/05	Steve Castleberry	Water Transit Authority
I	9/30/05	Byron Rhett	Port of San Francisco
J	10/13/05	Ernest Sanchez	City of Alameda
<i>Organizations</i>			
K	9/28/05	Laurence Young	Chan, Doi & Leal, LLP, on behalf of Ferry Plaza Limited Partnership and World Trade Club
L	9/28/05	Jane Connors	Ferry Building, Equity Office

Additional comment letters on the project were received from the following three parties after the close of the 30-day comment period:

1. Center for Urban Education about Sustainable Agriculture (CUESA), December 8, 2005
2. Golden Gate Bridge Highway and Transportation District, December 14, 2005
3. World Trade Club, December 20, 2005

1 To adhere to the project schedule for completing the environmental document, formal
2 responses to their comments are not included in the EA. However, BART has assured each
3 party that their comments will be addressed in writing and with further consultation as needed.

4 **3.2 PERSONS COMMENTING AT THE PUBLIC HEARING**

5 BART, in cooperation with Caltrans and FHWA, conducted a public open forum hearing held at
6 the Joseph B. Bort Metrocenter on Wednesday, September 14, 2005, to provide the public and
7 responsible agencies an opportunity to comment on the EA. No one in attendance provided
8 formal testimony or written submittals. Thus, responses to comments at the public hearing on
9 the EA are not required.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE

Southwest Region
 501 West Ocean Boulevard, Suite 4200
 Long Beach, California 90802-4213

In Reply, Refer to:
 151405SWR2005PR00708:MLD

SEP 28 2005

Janie Layton
 BART Environmental Compliance
 P.O. Box 12688, Mail Stop LKS-18
 Oakland, California 94604-2688

Dear Ms. Layton,

This letter is in response to your request for NOAA's National Marine Fisheries Service (NMFS) to review the Bay Area Rapid Transit District (BART) Seismic Retrofit Project Environmental Assessment (EA), dated August 2005. The San Francisco BART, in cooperation with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), propose to seismically strengthen a portion of the BART system between Berkeley Hills Tunnel in Oakland, to the Montgomery Street Station, in San Francisco. The project will retrofit several facilities, one of which is the Transbay tube, the portion of the BART system located beneath San Francisco Bay. Proposed seismic retrofits of the Transbay tube include either micropile anchorage, or vibro-replacement, or stitching, or installing a tunnel sleeve at one of the seismic joints. The EA indicates that measurements shall be taken of noise levels generated by impact hammer and oscillation equipment during a pile installation demonstration that will be completed before construction begins. The project would require approximately 6 years to complete.

A-1

NMFS is concerned that sounds introduced into the sea by man-made devices could have a deleterious effect on marine mammals by causing stress, interfering with communication and predator/prey detection, and changing behavior. More significantly, acoustic overexposure to loud sounds can lead to a temporary or permanent loss of hearing (termed a temporary (TTS) or permanent (PTS) threshold shift). NMFS is currently in the process of determining safety criteria for marine species exposed to underwater sound. Based on past projects involving pile-driving, consultations with experts, and on published studies, we have preliminarily determined that pinnipeds can be safely exposed to impulse sound pressure levels not greater than 190 decibels referenced to 1 microPascal root mean square (dB re 1 μ PaRMS). However, marine mammals have shown behavioral changes when exposed to impulse sound pressure levels of 160 dB re 1 μ PaRMS.

A-2

Pacific harbor seals (*Phoca vitulina richardsi*), California sea lions (*Zalophus californianus*), gray whales (*Eschrichtius robustus*), and the harbor porpoise (*Phocoena phocoena*) commonly occur in the San Francisco Bay area. Harbor seals are present in the San Francisco Bay area year-round and use it for foraging and reproduction. The three closest harbor seal haul out sites to the proposed BART project are at Yerba Buena Island, Angel Island, and Castro Rocks. An important harbor seal haul out site is located on a rocky beach on the southwest side of Yerba

A-3



A-3 Buena Island. California sea lions have been observed on a regular basis in the shipping channel to the south of Yerba Buena Island. Gray whales have been sighted more frequently in recent years and although the harbor porpoise is found in high densities just offshore and within San Francisco Bay, the harbor porpoise is not expected to be abundant in the proposed project area.

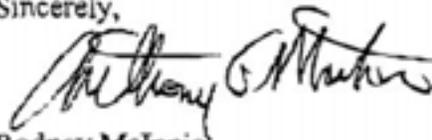
A-4 All marine mammals are protected under the Marine Mammal Protection Act (MMPA). Under the MMPA, it is illegal to "take" a marine mammal without prior authorization from NOAA Fisheries. "Take" is defined as harassing, hunting, capturing, or killing, or attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as any act of pursuit, torment, or annoyance which has the potential to injure a marine mammal in the wild, or has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

A-5 A demonstration project, similar to the one described in this EA, was conducted by Caltrans for the San Francisco-Oakland Bay Bridge (SF-OBB) seismic retrofit project. On November 22, 1999, NMFS received an application from the FHWA on behalf of Caltrans, requesting an Incidental Harassment Authorization (IHA) for the possible harassment of small numbers of harbor seals and California sea lions incidental to conducting a pile installation demonstration project (PIDP) at the SF-OBB. NMFS issued an IHA permit to Caltrans for the PIDP and then issued an IHA permit for the seismic retrofit construction for the SF-OBB project. The SF-OBB overlaps the area of the Transbay tube section of the BART, adjacent to Yerba Buena Island.

A-6 Pile driving noise and human activity associated with the proposed project could impact marine mammals swimming in the project vicinity or hauled out at nearby areas. Based on the information provided in the EA and the location of the proposed project, it may be necessary to receive authorization from NMFS for this proposed project.

We appreciate your efforts to comply with Federal regulations and to conserve and protect marine mammals. Please contact Monica DeAngelis at 562-980-3232 or Monica.DeAngelis@noaa.gov if you have any questions concerning this letter or if you require additional information.

Sincerely,



for
Rodney McInnis
Regional Administrator

1 **Rodney McInnis, NOAA National Marine Fisheries Service, September 28, 2005**

2 **A-1.** Comment noted.

3 **A-2.** Comment noted. The underwater noise criteria used to assess impacts of the proposed
4 project on pinnipeds and marine mammals in the EA (page 3.9-10, line 12) is consistent
5 with the impulse sound pressure levels identified in this comment.

6 **A-3.** The EA beginning on page 3.9-3, line 14, provides identical background information on
7 these marine mammals, including Pacific harbor seals, California sea lions, gray whales,
8 and the harbor porpoise, which is consistent with this comment.

9 **A-4.** The EA has been revised to include the legal definitions of “take” and “harassment”
10 identified in this letter (see revised EA section 2.3.3).

11 **A-5.** The EA (page 3.9-15, line 28) states that based on the results of recent, Bay Area Bridge
12 retrofit noise demonstrations, including the SF-OBB Seismic Retrofit Project identified by
13 National Marine Fisheries Service (NMFS), the proposed project would be expected to
14 impact marine mammals and fish during pile driving. Accordingly, the EA (page 3.9-16,
15 line 20) identifies mitigation measures to avoid impacts, including conducting noise
16 monitoring during a pile installation pilot demonstration prior to project construction,
17 and obtaining authorization from NMFS.

18 Based on further design review, BART estimates that 6 of the 116 piles associated with the
19 Pile Array may require installation with an impact hammer. The remaining piles would
20 be installed with oscillating or rotating techniques that produce minimal noise or vibration
21 effects. The tubular sheet piles associated with the containment structures would be
22 installed using hydraulic push methods, which would also result in minimal noise or
23 vibration impacts. In consultation with NOAA/NMFS pursuant to federal ESA Section 7
24 and the Magnuson-Stevens Act, BART has agreed to implement restrictions to avoid
25 impacts to listed salmonid species during seasonal migrations, and will not conduct any
26 pile driving or dredging activities outside of the work window (June 1 to November 30).
27 See also revised EA section 2.2.5.

28 **A-6.** BART, in cooperation with Caltrans and FHWA, will work with NMFS to obtain the
29 required project authorizations to ensure compliance with Federal regulations.

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DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>

POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500



September 23, 2005

Ms. Janie Layton
BART Environmental Compliance
Post Office Box 12688, Mail Stop LKS-18
Oakland, CA 94604-2688

Dear Ms. Layton:

Environmental Assessment
BART Seismic Retrofit Project (Earthquake Safety Program)
Berkeley Hills Tunnel to Montgomery Street Station

Department of Fish and Game (DFG) staff has reviewed the subject document. Page 5-2, starting at line 34, incorrectly cites the California Endangered Species Act (CESA) permit authority as "PRC Section 2080.1." Incidental take of State threatened, endangered, or candidate species by a project must be handled through a CESA Incidental Take Permit or Consistency Determination process addressed in Fish and Game Code Section 2081(b) and Section 2080.1, respectively.

B-1

In addition, page 5-3 lines 1-10, states that according to Section 2080.1(c), if a Federal Incidental Take Statement is obtained and the species is also threatened or endangered pursuant to CESA, no further authorization or approval is necessary provided the recipient notifies the Director and includes a copy of the Federal Incidental Take Statement with the notification. Section 2080.1 allows an applicant who has obtained a Federal Incidental Take Statement pursuant to a Federal Section 7 consultation or a Federal Section 10(a) Incidental Take Permit to notify the Director in writing that the applicant has been issued an Incidental Take Statement or an Incidental Take Permit pursuant to the Federal Endangered Species Act of 1973. The applicant must submit the Federal Incidental Take Statement or Permit to the DFG Director for a determination as to whether the Federal document is "consistent" with CESA. Receipt of the application by the Director starts a 30-day clock for processing the Consistency Determination. In order for DFG to issue a Consistency Determination, DFG must determine that the conditions specified in the Federal Incidental Take Statement or the Federal Incidental Take Permit are consistent with CESA. If DFG determines that the Federal Incidental Statement/Permit is not consistent with CESA, the applicant must apply for a State Incidental Take Permit under Section 2081(b) of the Fish and Game Code.

B-2

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B-3

The exception provided in Fish and Game Code Section 2080.1 to CESA's take prohibition can be used only for species that are listed under both Federal Endangered Species Act and CESA, and cannot be applied to species that are listed by the State but not Federally listed.

B-4

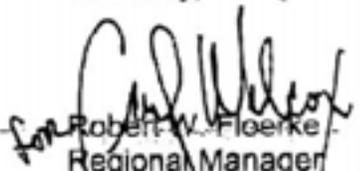
Section 2081(b) permits are usually preferable to 2080.1 Consistency Determinations for the reasons listed below. Under a Consistency Determination:

- DFG cannot add any conditions to the Federal Incidental Take Statement/Permit or biological opinion to meet the full mitigation standard, and must accept it as is, when determining if it is consistent with CESA,
- Often the biological opinion does not contain enough details describing mitigation measures,
- The Federal standard for including plants is jeopardy,
- If pertinent sections of the Endangered Species Act change, a Consistency Determination could become invalid, and we would have to issue 2081(b) incidental take permits for those projects.

More information can be found on the DFG website at
<http://www.dfg.ca.gov/hcpb/ceqacesa/cesa/cesa.shtml>.

If you have questions or comments, please contact Ms. Marcia Grefsrud, Environmental Scientist, at (707) 944-5559; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,


Robert W. Floerke
Regional Manager
Central Coast Region

1 **Robert W. Floerke, California Department of Fish and Game, September 23, 2005**

2 **B-1.** The EA has been modified to add the following: “California Endangered Species Act
3 (CESA) permit authority is pursuant to Fish and Game Code Section 2081(b) (Incidental
4 Take Permit) and/or Section 2080.1 (Consistency Determination), if a state-listed species
5 would be adversely affected.” See revised EA section 2.3.1.

6 **B-2.** The EA has been revised to clarify the CESA Consistency Determination process
7 addressed in Fish and Game Code Section 2080.1 (see revised EA section 2.3.1). BART,
8 in cooperation with Caltrans, will ensure compliance with CESA for proposed project
9 actions affecting state-listed species, and will work with CDFG to obtain the required
10 authorizations, whether this is determined to be a CESA Incidental Take Permit (Fish
11 and Game Code Section 2081[b]), or a Consistency Determination (Section 2080.1).

12 **B-3.** The EA has been revised to indicate that all state-listed species potentially occurring in
13 the project vicinity are also federally-listed species (see revised EA section 2.3.1);
14 therefore, Section 2080.1 is applicable.

15 **B-4.** BART, in cooperation with Caltrans, will ensure project compliance with CESA, and will
16 determine through further consultation with CDFG the proper permitting vehicle for the
17 proposed project.

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Making San Francisco Bay Better

September 28, 2005

Ms. Janie Layton
Bay Area Rapid Transit District (BART)
300 Lakeside Drive, 18th Floor
Oakland, California 94612

SUBJECT: Environmental Assessment (EA) for the BART Seismic Retrofit Project (Earthquake Safety Program), Berkeley Hills, Tunnel to the Montgomery Street Station, State Clearinghouse Number 2005082116

Dear Ms. Layton:

On August 30, 2005, San Francisco Bay Conservation and Development Commission staff received the Environmental Assessment (EA) for the BART Seismic Retrofit Project (Earthquake Safety Program), from the Berkeley Hills Tunnel to the Montgomery Street Station, proposed in Alameda County and the City and County of San Francisco. The project involves a comprehensive seismic retrofit program of several BART facilities including the Transbay Tube, the San Francisco Transition Structure, the aerial guideways that carry the BART tracks between the western portal of the Berkeley Hills Tunnel to the Oakland Transition Structure, the Rockridge Station, the MacArthur Station and the West Oakland Station.

C-1

The Commission's staff has reviewed the EA and is submitting its comments regarding the document. Although the Commission itself has not reviewed the EA, the staff comments are based on the McAteer-Petris Act, the Commission's *San Francisco Bay Plan* (Bay Plan), the Commission's federally-approved management program for the San Francisco Bay, and the federal Coastal Zone Management Act (CZMA).

Jurisdiction

The Commission's jurisdiction includes all tidal areas of the Bay up to the line of mean high tide (the inland edge of marsh vegetation in marshlands), all areas formerly subject to tidal action that have been filled since September 17, 1965, and the "shoreline band," which extends 100 feet inland from and parallel to the Bay shoreline.

C-2

Commission permits are required for certain activities, including construction, changes of use, dredging, and dredged material disposal, within its area of jurisdiction. Permits are issued if the Commission finds the activities to be consistent with the McAteer-Petris Act and the policies and findings of the Bay Plan. In addition to any needed permits under its state authority, federal actions, permits, and grants that affect the Commission's jurisdiction are subject to consistency review by the Commission, pursuant to the federal Coastal Zone

C-3

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 Bay Area Rapid Transit District
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C-3 Management Act (CZMA), for their consistency with the Commission's federally-approved management program for the Bay. Portions of the project, specifically those activities proposed along the Transbay Tube, the San Francisco Transition Structure and activities at the Transition Structure in the City of Oakland, appear to be within the Commission's jurisdiction, therefore these project activities would require Commission authorization.

Ferry Plaza Platform

C-4 The EA states that either a marine-based operation or a plaza-based operation would be used to conduct retrofit activities. If the marine-based option is employed, an approximately 70,000-square-foot portion of the Ferry Plaza platform that currently supports pedestrian viewing and Golden Gate Ferry terminal activities would be removed and Golden Gate Ferry Terminal operations would be temporarily relocated. If the plaza-based operation is employed, approximately 65,000 square feet of the existing platform would be removed and Golden Gate Ferry terminal activities would be maintained throughout construction activities.

C-5 A large portion of the Ferry Plaza Platform that would be removed is dedicated as public access under BCDC Permit No's. 1-00 and 10-73. Additionally, it would appear that retrofit activities would result in closures to dedicated public access areas on portions of the platform that would not need to be removed and that adjoining public access areas to the Ferry Building would be adversely impacted due to construction activities. In order to assess the potential public access impacts associated with the project, the EA should describe the areas that would be unavailable for public access use during construction activities (including those portions of the plaza that would remain closed due to safety concerns) and the anticipated duration of public access closures. It is likely that alternative public access areas and routes, or other mitigation for public access impacts would be required to offset impacts associated with public access closures on the Plaza Platform. Such mitigation for the long-term, temporal loss of public access areas may include providing public access enhancements either at the Ferry Plaza when the seismic work is completed or elsewhere along the San Francisco Waterfront.

C-6 More information should be provided in the EA regarding the relocation of the Golden Gate Ferry Terminal if the marine-based operation is used to construct the seismic improvements. Table 3.4-7 in the EA describes potential measures if the ferry terminal needs to be relocated (e.g., utilizing a ferry berth at Pier 27 and Pacific Bell Park, adjusting ferry schedules and building a new float at Pier 1/2). The EA should provide more information and expand upon the potential ferry terminal relocation options and should include an analyses of potential impacts associated with terminal relocation. Potential impacts associated with terminal relocation may include construction impacts (e.g., dredging, pile driving and other construction-related activities potentially affecting aquatic species), visual impacts and public access impacts, in particular those associated with queuing ferry passengers in dedicated public access areas. Additionally, the EA should analyze the potential effects associated with permanently relocating the Ferry Platform should the Commission determine that the entire platform be reserved for public access as mitigation for the public access impacts of the project.

Impacts on Bay Resources

The Bay Plan contains several policies that are relevant to the proposed project. Such policies include the following:

- C-7
1. "...Fish, Other Aquatic Organisms and Wildlife...give appropriate consideration to the recommendations of the California Department of Fish and Game, the National Marine Fisheries Service or the United States Fish and Wildlife Service in order to avoid possible adverse effects of a proposed project on fish, other aquatic organisms and wildlife habitat...";

2. "...Dredging...Dredging should be authorized when the Commission can find: (a) the applicant has demonstrated that the dredging is needed to serve a water-oriented use or other important public purpose, such as navigational safety; (b) the materials to be dredged meet the water quality requirements of the San Francisco Bay Regional Water Quality Control Board; (c) important fisheries and Bay natural resources would be protected through seasonal restrictions established by the California Department of Fish and Game, the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service, or through other appropriate measures; (d) the siting and design of the project will result in the minimum dredging volume necessary for the project..."; and
3. "...Mitigation... Projects should be designed to avoid adverse environmental impacts to Bay natural resources such as to water surface area, volume, or circulation and to plants, fish, other aquatic organisms and wildlife habitat, subtidal areas, or tidal marshes or tidal flats. Whenever adverse impacts cannot be avoided, they should be minimized to the greatest extent practicable. Finally, measures to compensate for unavoidable adverse impacts to the natural resources of the Bay should be required. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act...."

C-7

The EA describes several different construction methods that may be employed to conduct seismic retrofit activities. Selection of final construction methods will be based on on-going feasibility testing and effectiveness. Depending on the construction methods selected, between 152,300 to 221,100 cubic yards of material would be dredged from the Bay, covering an eight-acre area and up to 2,512 to 2,598 pilings would be installed. Construction activities proposed in the Commission's jurisdiction could potentially occur over a four-year period.

C-8

The EA describes several mitigation measures that would be implemented to reduce potential impacts to Bay resources. Such mitigation measures include conducting a pilot study to assess the effects of pile driving noise on aquatic species, installing a bubble curtain during pile driving activities and using biological monitors during herring spawning season (December 1 through February 28). Once a final construction method is selected, the staff will be more informed and better able to advise the project proponents on additional appropriate mitigation requirements. However, based on the information provided in the EA it appears that additional time restrictions on in-Bay construction activities to protect listed salmonid species and mitigation to offset the impacts associated with the placement of Bay fill may be required. The EA should evaluate the impacts of such restrictions on construction timing.

C-9

Engineering Criteria Review Board

The Bay Plan policies on safety of fills state that, "...The Commission has appointed the Engineering Criteria Review Board consisting of geologists, civil engineers specializing in geotechnical and coastal engineering, structural engineers, and architects competent to and adequately-empowered to: (a) establish and revise safety criteria for Bay fills and structures thereon; (b) review all except minor projects for the adequacy of their specific safety provisions, and make recommendations concerning these provisions; (c) prescribe an inspection system to assure placement of fill according to approved designs... and (f) gather, and make available performance data developed from specific projects...". To ensure that the proposed project would be constructed consistent with the Bay Plan policies on fill in the Bay, review of the

C-10

Ms. Janie Layton
Bay Area Rapid Transit District
September 28, 2005
Page 4

C-10 project by the Commission's Engineering Criteria Review Board (ECRB) would likely be required. Once a final construction method has been selected, the staff will be able to schedule a project review by the ECRB.

C-11 It is our understanding that the project proponents have provided the Dredged Material Management Office (DMMO) with an initial review of the project. The staff encourages the project proponents to continue to work with the DMMO to determine the appropriate pollutant testing standards and disposal options for the project.

C-12 Thank you for providing staff with the opportunity to review the Environmental Assessment for the proposed project. We recognize the importance of this project and are looking forward to working with your staff to develop the final document and any subsequent permit application materials. Please feel free to contact me at (415) 352-3659, or email me at michelle@bcd.ca.gov if you should have questions regarding this letter, the ECRB or the Commission's policies and permitting process.

Sincerely,



MICHELLE BURT LEVENSON
Permit Analyst

MBL/mbi

cc: Ms. Kari Kilstrom, Port of San Francisco
Mr. Dennis Mulligan, Golden Gate Bridge Highway and Transportation District
Mr. George Lu, Bay Corporation and Ferry Plaza Limited Partnership

1 **Michelle Burt Levenson, San Francisco Bay Conservation and Development Commission,**
2 **September 28, 2005**

3 **C-1.** Comment noted.

4 **C-2.** As stated in the EA on page C-3, lines 6-14 (summarized), BCDC has jurisdiction over all
5 areas of the Bay that are subject to tidal action up to the line of mean high tide, and the
6 shoreline band, which is consistent with this comment. However, the EA has been
7 revised to indicate BCDC's jurisdiction also covers all areas formerly subject to tidal
8 action that have been filled since September 17, 1965 (see revised EA section 2.3.3).

9 **C-3.** As stated in the EA (see Chapter 5 and Appendix C), a BCDC permit and a Coastal Zone
10 Management Act (CZMA) Federal Consistency Determination are required for the
11 proposed project, which is consistent with this comment.

12 **C-4.** Based on further design review, the plaza-based construction operation, in which
13 construction equipment would be placed directly on top of the Platform, will be
14 implemented. Removal of up to 59,000 sf of total Platform area will be needed to
15 accommodate equipment and construction, although the maximum Platform area that
16 would be restricted from public use during any of the construction phases would be
17 39,000 sf. The proposed construction phases at the Platform are described in revised EA
18 section 2.1.2 and depicted on Figures 2 through 7. Additionally, BART proposes to
19 temporarily relocate the Golden Gate Ferry Terminal to future Gate C to ensure
20 continual ferry operations throughout the duration of construction in accordance with
21 the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as
22 amended (42 U.S.C. §4601 *et seq.*), as applicable. Details of the conceptual temporary
23 terminal are discussed in revised EA section 2.2.3, and on Figure 8.

24 **C-5.** The comment suggests that alternative public access areas and routes or other mitigation
25 are necessary to offset impacts of public access closures on the Platform. Dedicated
26 public access areas within or adjacent to the project area include approximately 58,000 sf
27 composed of the BART platform, east promenade, two east-west pass-through corridors,
28 and restrooms (BCDC Permit No. 1-00); and approximately 19,232 sf along the northern,
29 southern and eastern sides of the World Trade Club (BCDC Permit No. 10-73). "Public
30 access" values relating to the Platform include access to views of waters of the San
31 Francisco Bay and shoreline, and physical access to dedicated areas of the Platform itself.
32 Existing public use of the Platform includes waiting for ferries by ferry passengers;
33 loading and unloading activities at the Golden Gate Ferry Terminal; freight unloading
34 into the Ferry Building; vehicular ingress to and egress from the World Trade Club and
35 for maintenance workers and vehicles; and the Farmers Market two days per week. (See
36 Port of San Francisco, *Phased Public Access Plan and Program for Ferry Platform Area* (Draft
37 August 1, 2005), pages 3-4.) However, although pedestrians traverse the Platform, it is
38 hidden from public view behind the Ferry Building and generally is not a destination
39 (*Id.*, page 4.) Furthermore, according to the *Phased Public Access Plan* (page 1), much of
40 the existing seating in the Ferry Plaza area remains underutilized. Accordingly, the
41 existing conditions of public access should not be overstated. Nevertheless, the
42 temporary closure of public access areas is recognized as an impact, and the proposed

1 project design and mitigation have been modified to minimize this impact as discussed
2 below.

3 To address public access issues, BART has conducted further design review of proposed
4 retrofit techniques at the Ferry Plaza Platform. Based on subsequent technical analysis,
5 BART has eliminated the marine-based construction option (Construction Method 1) as
6 a feasible retrofit technique. Accordingly, the plaza-based construction method
7 (Construction Method 2), in which construction equipment would be placed directly on
8 top of the Platform, will be implemented as part of the proposed project. Use of the
9 plaza-based construction method will affect some of the areas designated for public
10 access pursuant to Permit Nos. 1-00 and 10-73, including temporary closures of portions
11 of the area along the north side of the Ferry Plaza Platform, and temporary preclusion of
12 access to the existing Golden Gate Ferry Terminal. To maximize public access to these
13 dedicated public areas during project construction, BART has modified the construction
14 program to proceed in up to six phases, ensuring that portions of the Platform remain
15 publicly accessible throughout the duration of construction activities. Phased
16 construction at the Ferry Plaza Platform will require reconstruction of the removed
17 portions of the Platform prior to commencement of subsequent construction phases.
18 The EA has been revised to identify those portions of the Platform area that would be
19 restricted and the uses and tenants affected (see revised EA section 2.1.2, Figures 2
20 through 7, and section 2.2.7). The total platform area is 108,000 sf, and the total
21 maximum area of the Platform to be removed and replaced is approximately 59,000 sf.
22 However, the maximum Platform area that would be restricted from physical public
23 access during any of the construction phases would be 39,000 sf, which represents
24 approximately half of the currently accessible area (80,000 sf).

25 During these temporary physical closures, the public will have uninterrupted visual
26 access to waters of the Bay from adjoining and other vantage points along the
27 waterfront. In addition, the following new mitigation measures (summarized) have
28 been added in the EA to offset impacts associated with temporary public access closures
29 at the Platform (see revised EA section 2.2.7):

- 30 • Temporary relocation of the Farmers Market area, including operational, staging,
31 and parking areas to a nearby publicly-accessible area, as well as replacement at
32 the Platform following project completion;
- 33 • Provision of information signs leading visitors to other nearby publicly-
34 accessible scenic destinations along the waterfront; and
- 35 • Installation of an interpretive display/kiosk explaining the project's history in
36 the context of recent seismic upgrades completed in the Downtown Waterfront
37 District.

38 Additionally, the EA has been revised to describe the temporary relocation and
39 reconstruction of the Golden Gate Ferry Terminal at the Platform; see revised EA section
40 2.2.3 and responses to Comment Letter F (Golden Gate Bridge, Highway and
41 Transportation District) and Comment Letter I (Port of San Francisco). As provided in
42 the revised description, temporary ferry facilities and entrance(s) to the World Trade
43 Club on the Platform will be maintained throughout the six construction phases.

1 Furthermore, a 40-foot wide corridor located at the rear of the Ferry Building will be
2 provided to ensure continuous access for ferry riders and general public throughout the
3 project construction period (see revised EA section 2.2.3, Ground Transportation).

4 The comment expresses specific concerns regarding (1) the proposed removal of a
5 portion of Ferry Plaza Platform that has been designated as “public access” under BCDC
6 Permits No. 1-00 and 10-73; (2) closure of dedicated public access areas on portions of
7 the platform that do not need to be removed (including portions that would remain
8 closed due to safety concerns); and (3) construction-related impacts on adjoining public
9 access areas to the Ferry Building. Regarding the first two points, those portions of the
10 Platform that would be removed temporarily and those portions that would be closed
11 (although they do not need to be removed) are shown in the revised EA, Figures 2
12 through 7. No additional areas on the Platform would need to be closed due to safety
13 concerns. Regarding the third point, adjoining public access to the Ferry Building will
14 not be adversely impacted by construction, and access will be maintained through the
15 40-foot wide corridor described above. During construction of the temporary Golden
16 Gate Ferry Terminal deck, however, a narrow strip (about 5-feet wide) along the
17 Promenade would require temporary closure to provide a buffer between the public
18 during pile installation, as well as construction of connections from the Promenade to
19 the fixed deck. The closure would occur for a few weeks, and only during work hours.

20 With the phased construction program, temporary ferry passenger facilities and the
21 availability of public access for viewing and seating in nearby areas, the project will not
22 have substantial adverse effects on public access. Subsequent to reconstruction of
23 Golden Gate District’s Ferry Plaza Terminal based on plans resulting from further
24 consultation among BART, Caltrans, FHWA, the Golden Gate District, and other
25 responsible agencies (e.g., Port of San Francisco, and BCDC), BART will be responsible
26 for the removal and disposal of all temporary facilities. These measures are sufficient to
27 mitigate impacts on dedicated public access to a less than substantial level during the
28 term of retrofit activities; existing access conditions will be fully replaced at the
29 conclusion of construction. Accordingly, no post-construction mitigation would be
30 necessary or appropriate.

- 31 **C-6.** Based on further design analysis, the marine-based construction option (Construction
32 Method 1) has been eliminated from further consideration. Therefore, no further
33 analysis relating to this option is necessary. Impact analysis associated with relocation
34 of the Golden Gate Ferry Terminal under the plaza-based construction option is
35 discussed in the revised EA, sections 2.2.1 through 2.2.8.

36 The project description and mitigation measures described above provide for
37 resumption of Golden Gate Ferry service at its current location at the conclusion of the
38 project. As noted above, the mitigation measures in the revised EA are sufficient to
39 mitigate impacts on dedicated public access to a less than substantial level during the
40 term of retrofit activities; existing access conditions will be fully replaced at the
41 conclusion of construction. Accordingly, permanent relocation of the Golden Gate Ferry
42 Terminal would not be necessary or appropriate as mitigation for project impacts.
43 Subsequent to completion of the EA, it is possible that the Port of San Francisco and the

1 Golden Gate District may decide to redesign and permanently relocate the Golden Gate
2 Ferry Terminal to an as-yet undetermined location. At the present time, that possibility
3 is too speculative for analysis in this document. Environmental review of any
4 permanent relocation plans subsequently developed by the Port and the Golden Gate
5 District would be the responsibility of those agencies. In the event that the Port and the
6 Golden Gate District complete the necessary environmental review and receive funding
7 for such relocation, BART will coordinate with them to avoid duplication of efforts to
8 restore full access to Golden Gate Ferry berths.

9 **C-7.** Comment noted.

10 **C-8.** Based on further design analysis, the following seismic retrofit techniques have been
11 determined technically infeasible and/or ineffective, and therefore, will not be
12 implemented as part of the project: stitching the Tube; piles and collar anchorage; and
13 the Isolation Wall Retrofit Concept. Elimination of these retrofits reduces the total
14 project dredge volume to 5,000 cy, as dredging would only be required for installation of
15 the containment structures. As a result, the overall construction period is expected to be
16 completed in 2 to 3 years (see revised EA sections 2.1.3 and 2.1.4 for additional details).

17 **C-9.** FHWA, on behalf of BART and Caltrans, initiated formal consultation with NOAA
18 Fisheries/NMFS and CDFG pursuant to federal ESA Section 7 (regarding impacts on
19 marine mammals and fish) and the Magnuson-Stevens Act (regarding impacts on
20 Essential Fish Habitat). BART agreed to NOAA's recommendation to limit in-Bay pile
21 driving and dredging activities to within NOAA's approved work window (June 1 -
22 November 30) to avoid impacts to listed salmonid species. Please see revised EA section
23 2.2.5 for additional details.

24 As BART has determined the pile array and containment structures will be implemented
25 at the San Francisco Transition Structure, the total estimated project fill has also been
26 reduced to a maximum of 5,000 cy (see Section 2.1.3). BART, in cooperation with
27 Caltrans and FHWA, will work with BCDC to develop appropriate measures related to
28 Bay fill to ensure compliance with applicable Bay Plan regulations.

29 **C-10.** BART, in cooperation with Caltrans and FHWA, will continue to work with BCDC to
30 schedule any required project reviews, including the Engineering Criteria Review, and
31 to implement appropriate measures related to Bay fill to ensure compliance with the
32 applicable Bay Plan regulations.

33 **C-11.** BART will continue to work with the DMMO to ensure project dredged material is
34 handled according to applicable regulations.

35 **C-12.** Comment noted.



Arnold
Schwarzenegger
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Sean Walsh
Director

September 29, 2005

Janie Layton
Bay Area Rapid Transit District
300 Lakeside Drive, 18th Floor
Oakland, CA 94612

Subject: BART Seismic Retrofit Project (Earthquake Safety Program) - Berkeley Hills Tunnel to the
Montgomery Street Station
SCH#: 2005082116

Dear Janie Layton:

The State Clearinghouse submitted the above named Environmental Assessment to selected state agencies for review. The review period closed on September 28, 2005, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts
Director, State Clearinghouse

D-1

**Document Details Report
State Clearinghouse Data Base**

SCH# 2005082116
Project Title BART Seismic Retrofit Project (Earthquake Safety Program) - Berkeley Hills Tunnel to the Montgomery
Lead Agency Street Station
 Bay Area Rapid Transit District

Type EA Environmental Assessment
Description BART is conducting a comprehensive seismic retrofit program of its system in anticipation of a potential future major earthquake. The project area is located in the cities of Oakland and San Francisco, California. There would be no increase in capacity (number of BART trains or ridership) as a result of the seismic retrofit, and substantial changes in BART service are not expected to result during or as a result of the retrofit.

Lead Agency Contact

Name Janie Layton
Agency Bay Area Rapid Transit District
Phone (510) 874-7423 **Fax**
email
Address 300 Lakeside Drive, 18th Floor
City Oakland **State** CA **Zip** 94612

Project Location

County Alameda, Contra Costa, San Francisco
City Oakland, San Francisco
Region
Cross Streets
Parcel No. Various
Township

	Range	Section	Base

Proximity to:

Highways SR 24, I-880
Airports
Railways UPRR, Amtrak
Waterways San Francisco Bay, Temescal Creek
Schools Rockridge ES
Land Use Transportation Facility

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Social; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

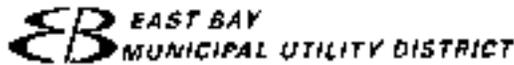
Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 2; Department of Parks and Recreation; Native American Heritage Commission; Public Utilities Commission; Office of Emergency Services; Office of Historic Preservation; Department of Fish and Game, Region 3; Department of Conservation; California Highway Patrol; Caltrans, District 4; Department of Boating and Waterways; San Francisco Bay Conservation and Development Commission; State Lands Commission

Date Received 08/29/2005 **Start of Review** 08/29/2005 **End of Review** 09/28/2005

- 1 **Terry Roberts, California State Clearinghouse, September 29, 2005**
- 2 **D-1.** Comment noted.

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September 26, 2005

Janie Layton, Manager of Environmental Compliance
BART Environmental Compliance
P.O. Box 12638, Mail Stop LKS-18
Oakland, CA 94604-2638

Re: Environmental Assessment – BART Seismic Retrofit Project (Earthquake Safety Program) – Berkeley Hills Tunnel to Montgomery Street Station

Dear Ms. Layton:

East Bay Municipal Utility District (EBMUD) appreciates the opportunity to comment on the BART Seismic Retrofit Project (Earthquake Safety Program) – Berkeley Hills Tunnel to Montgomery Street Station. EBMUD has no comments regarding environmental issues this project.

If you have any questions concerning this response, please contact David J. Rehnstrom, Senior Civil Engineer, Water Service Planning, at (510) 237-1365

Sincerely,

A handwritten signature in black ink, appearing to read 'W.R. Kirkpatrick', is written over a horizontal line.

William R. Kirkpatrick
Manager of Water Distribution Planning

WKK:JLM:sb
3:09_271.doc

E-1

- 1 **William Kirkpatrick, East Bay Municipal Utility District, September 26, 2005**
- 2 **E-1.** Comment noted.

1

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September 27, 2005

Via e-mail and DHL

Janie Layton
BART Environmental Compliance
P.O. Box 12688, Mail Stop LKS-18
Oakland, CA 94604-2688



Re: Environmental Assessment BART Seismic Retrofit Project (Earthquake Safety Program) – Berkeley Hills Tunnel to Montgomery Street Station

Dear Ms. Layton:

The Golden Gate Bridge, Highway and Transportation District (District) wishes to thank the San Francisco Bay Area Rapid Transit District (BART) for the opportunity to review the Environmental Assessment (EA) for the BART Seismic Retrofit Project – Berkeley Hills Tunnel to the Montgomery Street Station (BART Retrofit). The District supports BART in its efforts to seismically strengthen its system, but notes that BART must thoroughly examine and mitigate the impacts the BART Retrofit will have on the District's ferry operations and facilities, as more fully described in this letter.

F-1

Introduction

The District's comments are limited in scope to those components of the project that are in proximity to our ferry operations and the Stephen C. Leonoudakis Ferry Terminal (Ferry Terminal) in San Francisco. Fundamentally, the purpose of the EA is to determine whether the proposed action has the potential to significantly affect the quality of the human environment. Although the EA, as currently proffered, indicates that the BART Retrofit will significantly impact the District's ferry operations in and around the Ferry Terminal, it does not adequately describe or address the requisite mitigation, including the temporary relocation of the District's ferry facilities and operations that will be required to accommodate the BART Retrofit. While this relocation may be temporary, it is expected to last at least 3 to 12 months, potentially longer, and would significantly impact the District's ferry operations if not properly mitigated.

F-2

Since the impacts of the BART retrofit upon the District's ferry operations and facilities, including the relocation of the Ferry Terminal operations, are not adequately described, the EA does not begin to address the specific mitigating steps necessary to avoid significant impacts. As a result, the EA fails to fulfill its fundamental purpose of determining whether the impacts of the BART Retrofit are significant or not. While the District is optimistic that the impacts of the BART Retrofit can be adequately mitigated, the absence of information in the EA concerning the impacts on District's ferry operations leaves the District no choice but to request that BART and FHWA delay issuing a Finding of No Significant Impact (FONSI) until the agencies have had the opportunity to adequately explore the issues raised in this letter. The District requests that BART and FHWA promptly commence discussions with the District to develop tangible and specific mitigation measures that will address the impacts of the BART Retrofit on the District's ferry operations.

F-3

Discussion of Impacts

F-4 The EA clearly reassures BART riders regarding the impacts of the BART Retrofit, stating: "No disruption to BART service is anticipated during any retrofit method associated with the Transbay Tube" on page 2-2, line 27. Nowhere does the EA make an explicit statement reassuring the thousands of transit users that rely on our ferry service daily that there will be no disruption to ferry operations during the entire construction period for the BART Retrofit. In fact, the EA, on page 3.4-31, expressly states that construction work will preclude the use of some of the vessel infrastructure and that this impact "would disrupt ferry service for approximately 5,500 daily ferry passengers," and page 3.7-4 states that construction "would require the closure of two ferry berths, and ferries and ferry riders would be detoured to areas outside the actual construction area."

F-5 The District is the largest public ferry operator in California. The District has a duty to protect the public investment that has resulted in such a successful enterprise, which originally started in the 1970s with a significant investment of federal funds. There are two facets to this investment: the investment in the physical infrastructure and the investment in growing and developing a loyal ridership. Any disruption has real impacts on both facets of the prior investments to this public transit service. Any disruption that results in a reduction in the quality of the service will result in a decline in ferry ridership with a corresponding increase in automobile traffic with its various impacts (e.g. congestion and air quality).

F-6 All evidence indicates that BART will, at a minimum, disrupt and more likely demolish all of the Bridge District's physical infrastructure at the Ferry Terminal. Figure 2-10 from the EA indicates that the *Pile Array* will completely demolish our existing facilities. Later page 3.4-31 states: "Construction work would preclude the use of some of the vessel infrastructure at the Ferry Terminal."

F-7 Page 3.4-31 of the EA states that the impacts to the vessel transportation "will be prevented with implementation of the measures described in Table 3.4-7." However, the mitigating measures set forth in Table 3.4-7 are either entirely inadequate or are insufficiently described to assure that the negative impacts will be prevented. To avoid significant impacts caused by the disruption to the District's ferry operations and the associated damages, BART must demonstrate that during each phase of construction BART will ensure that replacement ferry facilities are provided that include all of the capabilities, amenities and appurtenances that currently exist. Similarly, if the BART Retrofit necessitates the demolition and replacement of our existing facility, then the EA should acknowledge the obligation to construct a "functional replacement" of this publicly owned facility consistent with Federal Highway Administration right-of-way procedures.

F-8 We describe below important characteristics of the District's ferry facilities and operations that exist today at the Ferry Terminal that are not adequately evaluated in the EA.

1. **Two Operational Berths.** The Bridge District's facilities at the Ferry Terminal include two berths that allow for the simultaneous loading and unloading of two ferries. Both berths are used simultaneously today to serve the District's Larkspur and Sausalito service. These berths, coupled with staging areas for paid passengers and wide ramps and wide walkways, provide for the rapid loading and unloading of passengers. This results in highly efficient

service wherein a ferry offloads and loads passengers with a five-minute turnaround time at the dock. If the BART Retrofit construction results in a reduction in this efficiency, it would require an additional ferry boat and an additional crew to maintain our current schedule of service. The EA does not offer sufficient detail to ascertain whether the BART Retrofit will have such an impact, nor does it commit to the requisite mitigation, which would require BART to pay for the additional boat and crew. If the BART Retrofit includes such a relocation of the District's ferry facilities, then this question and the resulting commitment needs to be addressed before, during and after the temporary relocation.

F-8

2. **Integrated Security System.** The District has a layered, integrated security system in place at the Ferry Terminal that includes, among other things, perimeter access control and surveillance (closed-circuit television cameras that are connected to our continuously manned security center at the Bridge). Additionally, the District is currently participating in a pilot project with the Department of Homeland Security (DHS) wherein ferry passengers are screened for explosives prior to boarding ferries. In the event of a heightened level of security (e.g., MARSEC Level 2) the District has the ability to fully respond to the heightened concerns. It is of the utmost importance that this functionality be maintained at all times during each phase of the BART Retrofit construction. The interruption of these safeguards has potentially significant impacts. The EA does not address how BART will ensure that the integrated security system will remain fully intact and operational during all phases of the BART Retrofit.

F-9

3. **Passenger Amenities.** The District offers a suite of amenities to our ferry customers such as a heated, covered passenger waiting area; clean, convenient available restrooms; and well-staffed opportune passenger ticketing. These amenities not only enable the District to provide efficient and safe ferry service in a secure environment, but also contribute to the quality of our service, which is essential for maintaining current ridership levels. Once again, this functionality must be maintained at all times during each phase of the BART Retrofit construction. The absence of these amenities would result in a loss of ferry ridership with a corresponding increase in vehicular traffic and associated impacts. Any loss of ridership corresponds to a loss in passenger fares. This lost ridership cannot be assumed to return upon the completion of construction, so the ridership loss could translate into longer-term economic damages and environmental impacts.

F-10

4. **Ferry Service Support Facilities.** The District's facilities at the Ferry Terminal also include amenities for our employees (e.g., restrooms and space for employee breaks), as well as communications, storage and maintenance areas and an industrial ice machine to replenish the ice supplies on the boats. The District's facilities also incorporate an emergency power generator that provides sufficient electrical power to run all of the Bridge District's operations at this location. All of these ferry service support facilities are essential to the District's existing ferry operations and must be provided for at all times during each phase of the BART Retrofit construction. The EA does not address how each of these ferry service support facilities will be provided during each phase of the BART Retrofit, including during any temporary relocation of the Ferry Terminal.

F-11

F-12

The District acknowledges that BART is extremely important to the overall transportation system in the region. Protecting BART from an earthquake is vitally important. In that same vein, in the event of an earthquake prior to the completion of the BART Retrofit construction, the existing ferry facilities will be the backbone for lifeline transportation service. This further heightens the importance of maintaining complete ferry facilities with, at a minimum, the ability to provide the same level and speed of ferry service that exists today during each phase of the BART Retrofit. Specifically, it is crucial to replicate the current passenger loading capacities at each berth during all times, including any temporary relocation of the ferry facilities.

F-13

The BART Retrofit construction at the San Francisco Ferry Terminal appears to necessitate the relocation of most, if not all, of our ongoing enterprise in order to construct the contemplated seismic enhancements. As a result, the temporary relocation of these facilities is an integral part of the BART Retrofit and must be addressed in the EA and contemplated in the resulting decision. Similarly, if the BART Retrofit necessitates the complete replacement of the Bridge District's ferry facility, then the functional replacement is also an integral part of the BART Retrofit and the impacts of that replacement should be thoroughly evaluated in the EA, along with any mitigation measures required for such impacts.

F-14

The EA states that the District's ferry operations and facilities must be relocated for at least 3 to 12 months during the BART Retrofit. But the EA only superficially, and without supplying any of the important details, mentions how these critical facilities will be relocated. For example, the EA identifies as mitigation measures that a new float will be built at Pier ½ and that schedules can be adjusted to accommodate the use of mono-hull vessels when BART removes Berth 2 from service. There is no discussion, however, about how the new float will be constructed, where the covered passenger waiting area will be located, how the integrated security system will be installed at the new berth, or where the other passenger amenities and ferry service support facilities will be located so that the District does not lose significant ridership or increase the security risk for its ferry operations during all phases of the BART Retrofit. NEPA requires that mitigation measures be "tangible and specific," so all of these critical issues must be addressed in the EA. Further, the relocation description fails to recognize that the District's Larkspur service is provided by two catamaran vessels. Because catamaran vessels are faster than mono-hull vessels, any relocation scheme that involves the use of mono-hull vessels for Larkspur service will require an additional vessel and crew to maintain the current schedule.

Attached are more specific, detailed comments regarding particular provisions of the EA.

Lack of Consultation

F-15

Section 5.0 of the EA acknowledges that BART consulted with the City of Alameda and the City of Vallejo, two ferry operators that provide service near, but not to, the Ferry Plaza where the BART Retrofit will take place, and with the San Francisco Bay Area Water Transit Authority and the Port of San Francisco, neither of which provides ferry transit service at this time. Yet it does not indicate that BART consulted with the one ferry operator whose operations are most affected by the BART Retrofit – Golden Gate Ferry. While the EA does not acknowledge it, BART did meet briefly with the District in early 2003. That meeting focused on BART's need for a right of entry permit to do testing for its preliminary engineering effort. However, we did

not discuss in any substantive fashion the details of our ferry operations and facilities. Significantly, BART did not provide any level of detail regarding the necessary relocation of our ferry operations arising from the BART Retrofit, nor did BART explore the potential impacts to our riders and the environment potentially associated with this facet of the BART Retrofit. As a result of this lack of consultation, the EA is unable to adequately analyze the impact of the BART Retrofit on the District's ferry operations. We look forward to having the opportunity to rectify this omission, since more recently BART has commenced the consultation process with renewed vigor. Through this consultation we can hopefully reach agreement regarding the requisite mitigations so that the BART Retrofit avoids significant impacts. It is unfortunate that this consultation did not occur prior to BART's release of the EA.

F-15

Conclusion

Nevertheless, the Bridge District looks forward to working cooperatively with BART and other stakeholders to bring this essential project to fruition and completion in an expeditious fashion. With greater clarity regarding the impacts of the project, along with a description of the mitigating steps, we are hopeful that all of the Bridge District's concerns can be addressed.

Sincerely,

for 
Celia Kupersmith
General Manager

Attachment

cc: JoAnn Cullom, Caltrans
Gene Fong, FHWA
Will Travis, BCDC
Kari Kilstrom, The Port of San Francisco
Steve Castleberry, Water Transit Authority
Steve Heminger, MTC
4.4.4

Attachment

- F-16 • Figure 2-3 is a schematic that depicts a plan view on top and a section view on the bottom. The section view includes “Wire Lines to Anchor” at a rather steep slope. Is this depiction correct? Typically barges place anchors such that the angle of the lines is much flatter, so that the barge can be positioned using the anchor lines, resulting in the anchor lines extending a considerable distance away from the barge. This is germane, because the anchor lines may interfere with ferries in the vicinity of the Ferry Terminal. The plan view at the top of the exhibit does not depict the anchor lines. It would be appropriate to show the anchor lines in plan view to provide the necessary detail to determine whether there is likely to be an impact.
- F-17 • Figure 2-5 does not depict the “barge work area” for the stitching location closest to the BART Transition Structure. This graphic should depict the specified “barge work area” with the potentially greatest impact to ferry operations to allow an evaluation of the potential impacts.
- F-18 • Page 2-14, line 17 states “..to the extent feasible.” This leaves open the possibility BART will use an impact hammer to install piles. Does the EA address the environmental impacts (e.g. noise impacts to ferry users and sound pressure waves in the water column) associated with using an impact hammer?
- F-19 • Page 2-14, line 29 uses the term “near.” This term needs to be defined (e.g. within 2,000 feet or with two feet) in order to determine whether significant impacts will result.
- F-20 • Page 2-16, line 2 refers to a 350 feet by 350 feet “barge work area” limit. Elsewhere the EA (page 2-48, line 34) discloses the use of 3,500 yard dump scows for dredging. Such a barge is typically about 250 feet long and 75 feet wide. In light of this, is the 350 feet by 350 feet barge work area realistic?
- F-21 • Page 2-16, line 3 uses the term “may”. This vague wording leaves open the opportunity for the barge work area to impact vessel traffic, since the anchor lines are an obstruction to navigation. At the Ferry Terminal this may have significant impacts on ferry operations. Anchor plans in the vicinity of the Ferry Terminal that may impact passenger ferries should be disclosed in the EA.
- F-22 • Page 2-23, the first paragraph (lines 1-7) discusses constructing temporary sheet piling around the construction area. What are the limits of the sheet piling? Will the sheet piling be installed around the entire perimeter of the plaza? Will the sheet piling affect the District’s ferry berths and ramps? Will the sheet piling preclude the use of the District’s hydraulic ramps? The EA refers to “using oscillation or rotating techniques”; will the sheet piling be vibrated or driven into position?
- F-23 • The location of the sheet piling is not reflected on Figure 2-10.
- F-24 • Page 2-23, the second paragraph discusses noise impacts in a very general sense, without adequate detail to determine impacts. According to the EA, conventional pile driving may be allowed during periods of ferry service, which may have significant impacts on ferry ridership. How close will conventional pile driving be to ferry patrons? This is important information that should be disclosed and contemplated in the decision making, particularly if

Attachment
BART Environmental Assessment Comments

there is a desire to avoid significant impacts. According to page 3.2-6, lines 32-37 the average noise levels at the Ferry Plaza range from 59 to 60 dBA. Elsewhere the EA discloses that pile driving noise can be 110 dBA at fifty feet. Since each 10 dBA increase in sound level is perceived as approximately a doubling of loudness, a 50 dBA increase is a significant increase in noise. The EA does not adequately describe the proposed mitigation to this increase.

F-24

- Page 2-23, the third paragraph (lines 16-19) mentions that any hardscape or landscape will be “replaced in kind after project completion.” Is this a reference to the District’s Ferry Terminal? If so, it should be more explicitly stated. The Federal Highway Administration has procedures for the “functional replacement” of publicly owned facilities. Is it BART’s intent to comply with this federal requirement?

F-25

- Page 2-24, the second paragraph states: “...and ferry terminal activities would be temporarily removed in the areas of the new pile array...” Nowhere in the EA is there a discussion of the extent of the removal, the impacts associated with the removal or the proposed mitigation. [This deficiency needs to be corrected.]

F-26

- Page 2-24, the third paragraph (lines 29 & 30) states: “Access to and from the landing dock for the Golden Gate Ferries would also be maintained.” It is not clear what is meant by “access.” Does “access” refer to the same covered, secured passenger waiting areas along with wide walkways leading to the boats? If less convenient access is contemplated, how long would that occur and how inconvenient would it be? It is anticipated that less convenient access will result in a loss of ferry ridership with its associated impacts.

F-27

- Figure 2-10 depicts the pile array. It appears to impact all facets of the District’s ongoing ferry operations. The impacts associated with the pile array on our ferry operations needs to be detailed in the EA along with all mitigating steps that BART will implement to avoid significant impacts.

F-28

- Page 2-29, the first paragraph mentions dredging at the Ferry Plaza Platform and refers to Figure 12-2. Elsewhere the EA (page 2-48, line 34) refers to 3,500 yard barges. The “supply barge” shown on figure 2-12 is less than half this size (3,500 yard barge dimensions), which is misleading. Figure 2-12 should reflect the size of the vessel that is referred to elsewhere in the EA. This exhibit understates the likely impacts.

F-29

- Page 2-48 discusses dredging. Will BART restrict dredging activities to non-ferry service hours of operations in order to avoid impacting ferry patrons?

F-30

- Page 3.0-1, lines 26-36 state that Land Use, Utility Service Systems and Energy are not addressed in the EA, since there are no impacts. If BART does not fully mitigate impacts to the District’s ferry facilities and operations then this is not correct. Our ferry customer base is not transit dependent. Any reduction in ferry ridership directly correlates to an increase in automobile traffic. An increase in automobile traffic impacts land use and energy consumption.

F-31

Attachment
BART Environmental Assessment Comments

- F-32
- Table 3.2-2 is entitled *Typical Construction Equipment Noise Emission Levels*. This table is misleading, since it states that the noise levels for typical impact pile drivers is 101 dBA at fifty feet. The BART project contemplates 6 foot diameter steel piles that are over 150 feet long. These are not typical piles. Later on page 3.2-8 line 16 it is disclosed that 110 dBA at 50 feet can be expected. This is almost a ten fold increase in the noise level highlighted in the table.
- F-33
- Page 3.2-9, lines 3 and 4 state: "The nearest receptors that could be subject to pile driver noise would be located 150 to 200 feet from the barge mounted equipment." This statement is in direct conflict with Figure 2-10 that shows pile locations ten times closer to ferry patrons than the "150 to 200 feet". Which is correct?
- F-34
- Page 3.2-9, lines 15 and 16 refer to a "hotline for noise complaints." What is the purpose of the "hotline"? Will the hotline merely maintain a record of numerous noise complaints or will the "hotline" respond and impose financial penalties on BART's Retrofit contractor for violating contractually specified noise levels?
- F-35
- Will BART contractually specify, maximum noise levels at the location of and during those hours that ferry operations are underway? If not, then how will BART guarantee that they will avoid impacts associated with the noise of construction activities?
- F-36
- Page 3.2-10, lines 8 and 9 state: "pile driving will be scheduled to avoid high public use times of the Ferry Plaza". Does the definition of "high public use times" include all of the hours of ferry operations or simply commute hours?
- F-37
- The EA needs to clearly disclose whether BART will allow pile driving during the hours of ferry operations, and it needs to disclose how close this pile driving will be to ferry passenger areas (access to the ferry terminal, paid waiting areas, boarding ramps, etc). If ferry patrons experience 110 dBA it is a significant impact.
- F-38
- Page 3.4-31, lines 21-26 state: "This impact would disrupt ferry service for approximately 5,500 ferry patrons." This is a significant impact that is not described fully with the appropriate level of detail.
- F-39
- Page 3.4-31 lines 27-29 state that mitigation measures are described in Table 3.4-7. Both the discussion on page 3.4-31 and Table 3.4-7 do not adequately discuss the impacts of the project. As presented, in the absence of further detail regarding the description of the existing facilities and the details of the proposed mitigation, the impacts are significant.
- F-40
- Table 3.4-7, references communications with *N. Demsey* in 2003 regarding potential changes to Golden Gate Ferry operations. Mr. Demsey is not and has never been employed with the District. He is an employee of the Port of San Francisco. More importantly, as BART has been previously informed, while the District's commute ferry service from Larkspur involved mono-hull vessels in 2003, it is now provided exclusively by high speed catamarans. This table does not reflect this change that occurred in July 2004.

Attachment
BART Environmental Assessment Comments

- Table 3.4-7 discusses utilizing the ferry berth at SBC (the EA refers to it as Pacific Bell Park) and the ferry berth at Pier 27. These are unacceptable alternatives for a temporary relocation of the District's ferry operations and facilities. These sites are too remote to our ferry patrons' origins and destinations. This would result in a precipitous drop in ferry ridership with a resulting increase in automobile traffic. F-41
- Table 3.4-7 refers to relocating one of the District's berths while it appears the intent is for the District to continue to utilize one of our existing two berths. There is no mention in the EA of the additional personnel, costs and passenger inconvenience associated with operating from two locations. This is a significant omission. How will passenger safety, security and the various existing infrastructure (e.g. closed circuit television security cameras, communications, electrical power including connection to the emergency generator) be addressed? F-42
- The United States Coast Guard Vessel Traffic Service (VTS), Harbor Safety Committee and the ferry operators have been discussing new and revised protocols with respect to the arrival and departure routes at the ferry plaza. How will barge traffic and construction activities affect this ongoing safety effort? F-43
- Table 3.4-7 refers to building "a new float at Pier ½". The EA incorrectly uses the term "float" interchangeably with "ferry terminal". A float is not the same as a ferry terminal. A ferry terminal includes numerous functions such as ticketing; restrooms; covered, heated passenger waiting areas; security; etc. F-44
- Table 3.4-7 refers to changing the arrival and departure times for the District's ferries by 20 minutes. This would result in inefficiencies that would necessitate the use of an additional boat and crew in order to maintain the current level of ferry service. F-45
- Page 3.4-33, lines 10-25 place some restrictions on barge movements (yet not anchoring limits). In the absence of a plan showing the limits of anchor lines for these barges, it is premature to declare that the barges will have no impact on vessel transportation. F-46
- Page 3.7-1, lines 1 and 2 state: "This section evaluates safety issues during project construction, as well as the potential for construction to increase risks during upset events (such as earthquakes...". This evaluation is incomplete, in that it does not contemplate the need for ferries to provide lifeline transportation service in the event an earthquake disables BART prior to completion of the BART Retrofit. Additionally, the evaluation does not discuss whether the existing ferry service levels and capabilities will be maintained during each phase of the BART Retrofit construction. F-47
- Page 3.7-2, lines 7-17 addresses System Security. This section does not discuss impacts that the BART Retrofit construction may have on ferry security. BART does not disclose any actions that compromise the District's existing ferry security systems. BART should explicitly state that there will be no impacts or BART should disclose the impacts so that they are contemplated as part of an informed decision. Any action that compromises safety and security should be thoroughly vetted. F-48

- F-49
- Page 3-7.4, lines 22-26 states:
“At the San Francisco Ferry Building, large construction equipment would be close to the Transbay Tube and transition structure, and it would be necessary to remove large portions of the Ferry Plaza Platform. Construction would require the closure of two ferry berths, and ferries and ferry riders would be detoured to areas outside the active construction area”
In the absence of specifically described, tangible mitigation, this is a significant impact; and it will result in the temporary and permanent reduction in ferry ridership with an increase in automobile traffic with resulting congestion and air quality impacts. This statement is inconsistent with the sketchy information referenced in Table 3.4-7.
- F-50
- Page 3.11-4, lines 36-39 states:
“Construction activity at the San Francisco Transition Structure on the Ferry Plaza Platform would occur beyond the primary pedestrian portion of the Ferry Plaza Platform used by ferry passengers.”
This is in direct conflict with the statement referenced above from page 3-7.4. They cannot both be correct. The EA contains a number of such conflicting statements.
- F-51
- Page 3.11-5, lines 2-14 and page 3.11-7, lines 22-28 understate the impacts to public access, both ferry passengers and the general public, during the construction period. Each day thousands of people enjoy this area; the BART Retrofit will disrupt this enjoyment, for thousands of people each day, for a period of several years. The EA describes this impact as negligible. This characterization does not appear to be correct.
- F-52
- Page 3.11-8, lines 22-27 highlight that berth 2 would be unavailable for at least three months to one year disrupting ferry service for 5,500 passengers. Without a tangible mitigation measure to replace the berth, this is a significant impact.
- F-53
- Pages 33 and 34 of the *Vessel Transportation Technical Study* do not correctly describe the District’s ferry service. The District’s ferry service was modified in July 2004. The Larkspur to San Francisco weekday service is provided exclusively with two high speed vessels. The schedule is published three times a year. BART can also access this information via consultations with the District or via the web at:

<http://goldengate.org/schedules.php>
- F-54
- Page 4-19 describes Social Impacts and the cumulative social impacts. This section fails to consider the impact on the neighborhood due to changes in commute patterns and public access. Additionally, the EA does not contemplate the correct neighborhoods that would be impacted by an increase in automobile traffic arising from the BART Retrofit not adequately mitigating impacts to the District’s ferry facilities and operations such that a decline in ferry ridership occurs.
- F-55
- Pages 44 and 45 from the *Noise Technical Study* discusses measure that BART will take to reduce noise levels for BART patrons and employees at its stations (such as Rockridge). For example it states: “Prohibit construction equipment that does not meet the lower BART noise

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emission limit (85 dBA at 50 feet)." This is repeated in the EA on page 3.2-11. The EA and the *Noise Technical Study* do not appear to provide the same assurance for ferry patrons. Is it BART's intent to provide a higher level of mitigation for its transit patrons and employees than that offered to our patrons and employees? The District strongly believes that same mitigation measures (e.g. prohibiting equipment that exceeds 85 dBA at 50 feet) should be provided to all transit users, both BART patrons and our ferry patrons.

↑
F-55

1 **Celia Kupersmith, Golden Gate Bridge Highway and Transportation District, September 27,**
2 **2005**

3 **F-1.** Revised EA section 2.2.3 describes updated mitigation measures proposed to minimize
4 impacts to ferry operations at the San Francisco Ferry Plaza Platform, and to ensure
5 continued operations throughout the duration of construction to avoid loss of ridership.
6 Details of the temporarily relocated Golden Gate Ferry Terminal at future Gate C and
7 reconstruction of the permanent facility at the Platform following project completion are
8 provided in revised EA section 2.2.3, and shown on Figure 8. Impacts associated with
9 implementation of the temporary terminal are discussed in revised EA section 2.2.8. See
10 also Figures 2 through 7 for construction phasing details at the Platform.

11 **F-2.** Revised EA section 2.2.3 describes updated mitigation measures for minimizing impacts
12 to ferry operations at the San Francisco Ferry Plaza Platform, including the proposed
13 temporarily relocated Golden Gate Ferry Terminal. See also Figures 2 through 7 for
14 construction phasing details at the Platform, and Figure 8 for the proposed, conceptual
15 temporary Golden Gate Ferry Terminal.

16 **F-3.** BART, in cooperation with Caltrans and FHWA, has entered into active discussions on
17 Principles of Agreement with the Golden Gate Bridge, Highway and Transportation
18 District (Golden Gate District), and has met with both Golden Gate District and Port of
19 San Francisco staff to review draft plans for the proposed temporary terminal at future
20 Gate C. The resulting Principles of Agreement will address appropriate implementation
21 of mitigation measures ensuring that functionally equivalent ferry operations and
22 infrastructure are maintained throughout the extent of construction activities at the
23 Ferry Plaza Platform, and temporary impacts from loss of ridership avoided.

24 **F-4.** BART intends to provide and maintain functionally equivalent ferry operations and
25 infrastructure throughout the extent of construction activities at the Ferry Plaza Platform
26 to avoid environmental impacts associated with loss of ridership resulting from
27 temporary disruption of ferry service operations. Please see revised EA section 2.2.3 for
28 additional information.

29 **F-5.** Revised EA section 2.2.3 describes proposed mitigation to temporarily relocate Golden
30 Gate District's facilities, including a functionally equivalent covered terminal and dual-
31 berth floating dock, to maintain ferry service and to avoid disruption of ferry operations.
32 Implementation of this mitigation would avoid substantial decreases in ferry ridership,
33 and environmental impacts associated with increased automobile use.

34 **F-6.** Revised EA section 2.1.2 describes the construction phasing plan at the Platform, which
35 identifies demolition (and replacement) of the existing Golden Gate Ferry Terminal, and
36 temporary relocation of Golden Gate District ferry operations to a terminal at future
37 Gate C. Revised EA section 2.2.3 provides further discussion of the relocated terminal,
38 and section 2.2.8 assesses potential impacts associated with implementation of the
39 temporary terminal.

1 **F-7.** To address issues raised during the public comment period, EA section 3.4.2.1 (Vessel
2 Transportation existing setting) has been updated to accurately characterize the facilities
3 and operations in place at the San Francisco Ferry Building and vicinity (see revised EA
4 section 2.2.3). In addition, EA Table 3.4-7 mitigation measures have been revised to
5 ensure continued ferry operations throughout the duration of construction at the
6 Platform to avoid environmental impacts associated with loss of ferry ridership, such as
7 increased automobile traffic and corresponding air emissions. The full text and analysis
8 of revised mitigation measures are described in revised EA section 2.2.3. Details of the
9 construction phasing plan are identified in revised EA section 2.1.2, and shown on
10 Figures 2 through 7.

11 In summary, BART will provide mitigation for impacts to the Golden Gate District's
12 facilities at the Platform, to ensure that infrastructure and operations are provided at a
13 functional equivalent to avoid impacts associated with loss of ridership. These include:

- 14 • Construction of a temporary Golden Gate Ferry Terminal at future Gate C (see
15 Figure 8); and
- 16 • Redesign and in-place reconstruction of Golden Gate District facilities at the
17 Platform.

18 Additional details regarding the conceptual design of the temporary Golden Gate Ferry
19 Terminal at future Gate C are provided in revised EA section 2.2.3, and impacts
20 associated with implementation of this mitigation are assessed in section 2.2.8. BART
21 will continue to work with the Golden Gate District and other responsible agencies
22 regarding the design and relocation of the temporary facilities at future Gate C, as well
23 as the redesign and in-place reconstruction of Golden Gate District facilities at the Ferry
24 Plaza Platform consistent with applicable regulations. All temporary and permanent
25 replacement structures will be designed to provide the functional equivalent of the
26 existing facilities, but will also be consistent with applicable current building and
27 seismic code standards.

28 Proposed mitigation for impacts to other ferry operators providing service from the
29 nearby South Terminal and North Terminal includes:

- 30 • Tying construction supply barges to northern and eastern end of Platform to
31 avoid interfering with ferry operations, or providing advanced notification prior
32 to any movement of supply barges; and,
- 33 • Making arrangements with the Port of San Francisco for access to the SBC Park
34 ferry berth or Pier 27 ferry berth in case of unscheduled maintenance or
35 emergency situations.

36 Mitigation requiring adjustment of ferry schedules is not expected to be required except
37 on an occasional basis and with the concurrence of the ferry operator.

38 It should be noted, however, that the commenter has misstated the Federal Highway
39 Administration right-of-way procedures regarding an "obligation to construct a
40 functional replacement" of the Golden Gate District's facilities. Federal Highway
41 Administration right-of-way procedures do not obligate the construction of functional

1 replacement facilities for temporary relocations. According to FHWA's *Real Estate*
2 *Acquisition Guide For Local Public Agencies*, functional replacement as an alternative
3 method of acquisition is a complex undertaking with limited applicability.³

4 **F-8.** Please see response to Comment F-7. Revised EA section 2.2.3 includes a discussion of
5 the important characteristics of Golden Gate District's ferry facilities and operations that
6 currently exist at the Platform, and provides revised vessel transportation mitigation
7 measures. As described in revised EA section 2.2.3 and depicted on Figure 8, BART will
8 provide a temporary, relocated Golden Gate Ferry terminal and dual-berth floating dock
9 that includes functionally equivalent infrastructure, security, and amenities to maintain
10 continued operations throughout the duration of project construction to avoid impacts
11 associated with loss of ridership. Therefore, an additional ferry boat and crew is not
12 expected to be required to maintain service.

13 **F-9.** Please see response to Comment F-7. The EA has been revised to clarify that BART will
14 provide a comparable security system at the temporary Golden Gate Ferry Terminal that
15 will remain in place throughout the duration of construction activities (see section 2.2.3).

16 **F-10.** Please see response to Comment F-7. The EA has been revised to clarify that BART will
17 provide temporary passenger amenities functionally equivalent to existing Golden Gate
18 Ferry Terminal infrastructure, including a covered passenger waiting area and walkway,
19 restrooms, ticket booth, and other appropriate facilities to avoid impacts associated with
20 loss of ridership (see section 2.2.3).

21 **F-11.** Please see response to Comment F-7. The EA has been revised to clarify that BART will
22 provide temporary ferry service support facilities functionally equivalent to existing
23 Golden Gate Ferry Terminal infrastructure, including a supervisor's office, employee
24 lunch/break room with janitor room, a mechanics shop, and other appropriate facilities
25 to avoid impacts associated with loss of ridership (see section 2.2.3).

26 **F-12.** Please see response to Comment F-7.

27 **F-13.** Please see response to Comment F-7. Proposed retrofit techniques at the San Francisco
28 Ferry Plaza have been redesigned and mitigation measures clarified to ensure continued
29 ferry terminal operations throughout the duration of construction. Impacts associated
30 with the proposed temporary Golden Gate Ferry Terminal are discussed in section 2.2.8.

31 **F-14.** Please see response to Comments F-7 and F-8. Construction phasing at the Platform,
32 including proposed construction and relocation of the Golden Gate ferry terminal to
33 future Gate C, is depicted on Figures 2 through 7. Additional details of the relocated
34 terminal are described in revised EA section 2.2.3, and are shown on Figure 8. EA
35 Section 2.2.3 has also been revised to clarify that Golden Gate District's Larkspur ferry
36 service is provided by two high-speed catamarans that can be accommodated at the
37 proposed dual-berth floating dock. Therefore, an additional vessel and crew to maintain
38 the current schedule would not be expected.

³ FHWA's definition of Function Replacement is available at: <http://www.fhwa.dot.gov/realestate/lpaguide/ch6.htm>.

1 **F-15.** Please see response to Comment F-3.

2 **F-16.** Additional details regarding vibro-replacement activities at the San Francisco end have
3 been integrated into Figure 1, including the full extent of anchor wire rope lines and
4 barge work area limits. Figure 1 demonstrates that the length and depth of the anchor
5 lines would not interfere with ferry operations in the project vicinity. Furthermore,
6 spud anchors would be used in lieu of anchor wire rope in water depths up to 50 feet to
7 avoid interfering with ferry movement.

8 **F-17.** Based on further design analysis, BART has determined that stitching the Tube is not a
9 viable retrofit technique for preventing longitudinal movement at the seismic joints.
10 Therefore, potential impacts associated with stitching the Tube such as barge work area
11 and anchor line interference will not occur. EA Figure 2-5 is therefore no longer
12 applicable. Please see revised EA section 2.1.1 for additional details.

13 **F-18.** Based on further design analysis, BART has determined that stitching the Tube, as
14 referenced in this comment, is not a viable retrofit technique and will not be
15 implemented. Therefore, noise impacts associated with this retrofit technique will not
16 occur.

17 However, pile installation is expected as part of other retrofit techniques. EA section
18 3.2.2.2 identifies environmental impacts and standard construction noise control
19 measures to be implemented as part of the project to reduce noise levels on sensitive
20 receptors located within 200 feet of the San Francisco Transition Structure. EA section
21 3.9.2.2 identifies environmental impacts and mitigation measures to reduce or avoid
22 underwater noise impacts on fish and marine mammals.

23 Further design review indicates an estimated 6 of the total 116 steel pipe piles associated
24 with Pile Array installation at the San Francisco Transition Structure may require use of
25 a conventional impact hammer due to difficult soil conditions. The remainder of these
26 piles would be installed by rotating or oscillating techniques that are not expected to
27 produce noise levels or vibration in excess of BART construction control noise criteria.
28 All tubular sheet piles associated with the Containment Structures would be installed
29 using the hydraulic push method that would result in negligible noise levels. Therefore,
30 potential noise impacts from conventional impact pile driving will be considerably less
31 than previously described in EA section 3.2.2.2. Please see revised EA Section 2.2.1 for
32 additional details.

33 **F-19.** In this context, the term “near” refers to all construction activities proposed at the San
34 Francisco Ferry Plaza Platform that would occur within 200 feet of the San Francisco
35 Transition Structure.

36 **F-20.** See response to Comment F-17. The barge size anticipated for storage and transportation
37 of dredged material has been revised to 1,500 cy, as depicted in revised EA section 2.1.3
38 and depicted on Figures 2 through 8.

39 **F-21.** See response to Comment F-17. Construction supply and dredged material barges will
40 be tied town to the northern and eastern ends of the Platform throughout the duration of

1 construction at the San Francisco Transition Structure to avoid interfering with ongoing
2 ferry operations in the project vicinity. This is shown in Figures 2 through 8 and
3 discussed in revised EA section 2.1.2.

4 **F-22.** Because Golden Gate District’s existing facilities and support services would be
5 relocated to a temporary ferry terminal at future Gate C, installation of temporary sheet
6 piling would not preclude the use of any existing vessel infrastructure. Furthermore, as
7 project design now indicates that project dredging activities will be limited to
8 installation of the two containment structures (50 feet by 80 feet) located east and west of
9 the San Francisco Transition Structure, temporary sheet piling will only be required at
10 these two locations to limit turbidity impacts (see EA Figure 2-10). The temporary sheet
11 piling will be installed using hydraulic push methods.

12 **F-23.** The temporary sheet piles are identified on EA Figures 2-10 and 2-11.

13 **F-24.** Please see response to Comment F-18. Use of an impact hammer may occur during ferry
14 service hours of operation. However, the proposed, temporary Golden Gate Ferry
15 Terminal at future Gate C would be located a minimum of 150 feet away from
16 construction at the Platform. In addition, project noise reduction measures have been
17 revised as described in revised EA section 2.2.1, and would ensure noise levels during
18 all construction activities at the Platform will meet BART construction noise control
19 criteria (described in EA Appendix C, Table C-1).

20 **F-25.** The hardscape or landscape materials discussed in EA section 2.2.2.1 do not include the
21 Golden Gate Ferry Terminal. Furthermore, the referenced “functional replacement”
22 requirement applies only to permanent displacements, as described in response to
23 Comment F-7. Nevertheless, BART does intend to temporarily relocate and replace
24 Golden Gate District’s facilities as a result of project activities at the Platform, as described
25 in revised EA section 2.2.3.

26 **F-26.** Please see response to Comment F-7. BART has refined vessel transportation mitigation
27 measures to ensure continual ferry operations throughout the duration of construction.
28 Additional details regarding the conceptual design of the temporary Golden Gate Ferry
29 Terminal at future Gate C are provided in revised EA section 2.2.3, and impacts
30 associated with implementation of this mitigation are assessed in section 2.2.8.

31 **F-27.** Please see response to Comment F-7. To ensure adequate access is provided for the
32 Golden Gate District’s ferry operations and a comparable level of service is maintained
33 throughout construction to avoid loss of ridership, Golden Gate District’s vessel
34 infrastructure and support services will be relocated to a temporary, dual-berth ferry
35 terminal as described in revised EA section 2.2.3. Impacts associated with
36 implementation of this mitigation are assessed in section 2.2.8.

37 **F-28.** Please see response to Comment F-7. As a result of project retrofits at the Platform
38 precluding access to vessel infrastructure, BART proposes to relocate the Golden Gate
39 Ferry Terminal to a temporary terminal to ensure continual ferry operations throughout
40 the duration of activities, as described in revised EA section 2.2.3. Impacts associated
41 with implementation of this mitigation are assessed in section 2.2.8.

- 1 **F-29.** Based on further design review, the Piles and Collar Anchorage retrofit technique
2 referenced in this comment will not be implemented. Revised EA Figures 2 through 8
3 depict the size (approximately 120 feet by 40 feet) and number of construction supply
4 barges expected at the Platform during dredging and other construction activities.
5 Barges would be tied off to the northern and eastern end of the Platform to avoid
6 interfering with ferry operations. Impacts associated with dredged material storage and
7 hauling of the approximately 5,000 cy of material associated with the containment
8 structures are described in revised EA sections 2.1.3 and 2.2.3.
- 9 **F-30.** Based on further design review, Stitching the Tube and dredged material reuse within
10 the project, which this comment references, will not be implemented. Therefore, impacts
11 associated with these dredging activities will not occur.
- 12 Dredging activities associated with implementation of the containment structures at the
13 San Francisco Transition Structure would, however, occur during ferry service hours of
14 operation. Impacts and mitigations associated with dredged material storage and hauling
15 of the approximately 5,000 cy of material associated with the containment structures are
16 described in revised EA sections 2.1.3 and 2.2.3. As Golden Gate District's operations
17 would be relocated to a temporary ferry terminal at future Gate C, outside of the active
18 construction area, impacts of dredging on ferry patrons would be negligible.
- 19 **F-31.** Please see response to Comment F-7. Because ferry operations will be maintained
20 throughout the duration of construction at the Platform, as described in revised EA
21 section 2.2.3, loss in ridership resulting from disruption of ferry service operations is not
22 expected. Therefore, increased automobile traffic as a result of the project that could
23 result in greater air quality, land use, and energy impacts is not anticipated.
- 24 **F-32.** Revised EA Section 2.2.1 clarifies that proposed project piles are not typical, and as
25 indicated in the EA (page 3.2-8, lines 13-18), noise levels generated by pile driving
26 activities are expected to reach 110 dBA. This does not change the analysis or
27 conclusions provided within the EA, which used the higher noise level to assess impacts.
- 28 **F-33.** Since Golden Gate Ferry operations would be temporarily relocated from the Platform
29 to nearby future Gate C, as described in revised EA section 2.2.3, the distance of 150 to
30 200 feet is correct.
- 31 **F-34.** Revised EA Section 2.2.1 includes noise mitigation measures that were proposed for the
32 San Francisco Downtown Ferry Terminal Project and successfully implemented during
33 construction of the San Francisco Muni Project. Thus, BART will appoint a Disturbance
34 Coordinator, who will have the authority to respond to complaints made either in
35 person or by hotline, and will monitor the effectiveness of noise reduction measures to
36 ensure construction noise is reduced to meet BART criteria.
- 37 **F-35.** Construction contracts will include specifications with which contractors must comply,
38 including noise specifications, as well as procedures for responding with
39 noncompliance. The Disturbance Coordinator will be responsible for monitoring and
40 responding to noise complaints, and for maintaining proper installation of noise
41 measures (e.g., noise barriers need to completely shroud the equipment), which will

1 reduce noise levels to within acceptable BART criteria levels (BART's maximum
2 allowable limits for construction noise are identified in EA Appendix C, Table C-1).
3 Please see Section 2.2.1 for additional details.

4 **F-36.** BART does intend to complete construction during ferry service hours of operation.
5 Therefore, consistent with mitigation proposed for the Downtown San Francisco Ferry
6 Terminal Project and implemented successfully during construction of the San Francisco
7 Muni Project, "high public use times" is defined for this project as the lunch and dinner
8 hours. Pile driving activities will be limited to between the hours of 7:00 A.M. and 12:00
9 noon, and between 1:30 P.M. and 3:30 P.M. to reduce the impact on the restaurant patrons
10 and other people using the public outdoor and indoor spaces at the San Francisco Ferry
11 Plaza.

12 Implementation of project noise reduction measures and temporary relocation of the
13 Golden Gate Ferry Terminal to future Gate C, a minimum of 150 feet away (see Figure
14 8), would ensure noise levels experienced by ferry patrons and other nearby sensitive
15 receptors meet BART's construction noise criteria levels throughout the duration of
16 construction at the Platform. This would result in a negligible impact. Please see
17 Section 2.2.1 for additional information.

18 **F-37.** Pile driving would occur during ferry service hours of operation, but will be limited to
19 those hours described in response to Comment F-36.

20 **F-38.** Please see response to Comment F-7.

21 **F-39.** Please see response to Comment F-7.

22 **F-40.** Please see response to Comment F-7. Reference to Mr. Nic Dempsey, with the Port of
23 San Francisco, is correctly identified in EA Chapter 7, References. Mr. Dempsey verified
24 in February, 2003 that a ferry berth at SBC Park and/or Pier 27 could be made available
25 for unscheduled maintenance.

26 Revised EA section 2.2.3 has been revised to accurately depict ferry services provided at
27 the Ferry Building and Ferry Plaza Platform, including Golden Gate District's use of
28 high speed catamarans for the Larkspur service.

29 **F-41.** The ferry berths at SBC Park and/or Pier 27 will only be used in the event of
30 unscheduled maintenance or emergency situations; these berths will not be used for
31 commuter services or as a relocation option for Golden Gate District facilities or
32 operations.

33 **F-42.** Please see response to Comment F-7.

34 **F-43.** BART would be pleased to join discussions with the USCG Vessel Traffic Service,
35 Harbor Safety Committee, and ferry operators to ensure that construction activities,
36 including barge traffic, do not affect the ongoing safety effort. Project construction
37 activities are not expected to interfere with potential new and revised protocols. In
38 addition, mitigation proposed within EA section 3.4.2.2.2 requires BART to acquire an

- 1 Anchorage Waiver Permit from the USCG, which will facilitate further project
2 coordination with the USCG.
- 3 **F-44.** Please see response to Comment F-7. BART proposes to construct a wood plank deck
4 (with a continuous smooth surface to minimize trip and fall hazards) to accommodate a
5 functionally equivalent terminal, as well as a dual-berth floating dock to ensure
6 continual ferry operations throughout the duration of construction at the Platform.
- 7 **F-45.** Based on recent consultations with the Golden Gate District and other affected agencies
8 (e.g., Port of San Francisco, BCDC, and WTA), the need to adjust ferry schedules is not
9 expected. BART does not anticipate altering ferry service times to accommodate project
10 construction, although ferry operators may determine that occasional time changes are
11 warranted. The proposed relocation of Golden Gate District's existing facilities to a
12 temporary ferry terminal at future Gate C, as well as tying off construction supply
13 barges to the north and east ends of the Platform (see response to Comment F-7) would
14 ensure continual ferry operations throughout the duration of construction at the
15 Platform.
- 16 **F-46.** Based on further design review, stitching the Tube and dredged material reuse within
17 the project, as referenced in this comment, will not be implemented. Please also see
18 response to Comments F-17 and F-30.
- 19 **F-47.** Please see response to Comment F-7. Ferry service levels and capabilities will be
20 maintained during each construction phase at the Ferry Plaza Platform. Therefore, the
21 proposed project would not interfere with the ability of ferry operators to maintain
22 service in the event of an emergency.
- 23 **F-48.** Please see response to Comment F-7. The EA has been revised to clarify that BART will
24 provide a comparable security system at the temporary Golden Gate Ferry Terminal that
25 will remain in place throughout the duration of construction activities at the Platform
26 (see revised EA section 2.2.3).
- 27 **F-49.** Please see response to Comment F-7.
- 28 **F-50.** The statement (summarized) that construction activity at the San Francisco Transition
29 Structure would require removal of large portions of the Platform, closure of two ferry
30 berths, and detour of ferries and ferry patrons to an area outside the active construction
31 area (EA page 3.7-4, lines 22-26) is correct. Accordingly, revised EA section 2.2.7 (Social
32 Impacts) accurately depicts the impact of Platform construction on ferry patrons,
33 consistent with revised EA section 2.2.3 (Vessel Transportation).
- 34 **F-51.** See response to Comment C-5. Revised EA section 2.2.7 accurately describes the public
35 access improvements and uses at the Ferry Plaza Platform and vicinity, as well as
36 potential impacts and mitigations proposed to offset the temporary loss of public access
37 viewing space and improvements.
- 38 **F-52.** Please see response to Comment F-7.

- 1 **F-53.** Revised EA Section 2.2.2 is now consistent with this comment.
- 2 **F-54.** Please see response to Comment F-7. Golden Gate District's ferry operations would be
3 maintained throughout the duration of project construction at the Platform to minimize
4 disruption of service or impacts associated with loss of ridership.
- 5 **F-55.** BART standards are applied uniformly to protect ferry patrons, BART patrons, and
6 other sensitive receptors. However, BART standards as applied at the Rockridge and
7 West Oakland stations result in more stringent noise restrictions due to the proximity of
8 residents.

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